Reg.No.:

Code No. 10179E

Sub.Code: SACR31

B.Com., (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER CORPORATE SECRETARYSHIP - ALLIED COMPANY SECRETARIAL PRACTICE (for those who joined in July 2017 onwards)

Time: Three hours

Maximum: 75 marks

PART ~ A (10X1=10 marks)

Answer all the Questions Choose the Correct answer

- 1. The company secretary as an officer of the company is liable for various Acts of omission or commission in the administration and management of the company. These liabilities are called as a. Contractual Liabilities
- c. Unlimited Liabilities b. Limited Liabilities d. Statutory Liabilities 2. _____ Liability of a company secretary to the company arise out of his / her service
 - agreement. a. Contractual

 - b. Limited d. Statutory
- 3. Shares surrendered by a member can be accepted by a company only when
- a. The Shares are fully paid-up The shares are partly paid-up and are not liable c. b. The Shares are partly paid-up and are liable to to be forfeited. be forfeited d. All of the above 4. The right of a company to have lien on shares is conferred by

 - a. The Companies Act 1956 b. The Articles
 - d. The Contract with shareholders 5. A company can reissue the same debentures if _____ a. The debenture-holders so desire c. There is no provision to the contrary in the
 - b. The Registrar of Companies gives such direction
 - 6. Debenture holders of a company are its _____.
 - a. Creditors c. Customers b. Owners
 - d. Members
- 7. The Central Government has power to call
- a. An Annual General Meeting

b. Speak

- c. An extraordinary meeting b. A statutory meeting d. None of the above
- 8. A Proxy can attend the meeting but cannot _____ a. Vote
 - c. Vote and Speak

c. Unlimited

c. The Memorandum

d. All of the above

Articles or the conditions of the issue

- d. Participate in decision making
- 9. An Official Liquidator who becomes liquidator in a compulsory winding up of a company is appointed by the a. Central Government
- c. Court b. Registrar d. Creditors
- 10. A voluntary winding up is deemed to commence from the date _____
- a. Of passing resolution c. Endorser b. Liquidator takes charge
 - d. Endorsee

Page No.

Continuation Sheet

PART – B (5X5=25 marks) Answer all the Questions Choosing either (a) or (b) Answer should not exceed 250 words

11. (a) Comment on "Any individual, firm or body corporate can act as a company secretary".

OR

(b) Comment on "The secretary of a company has unrestricted power".

12. (a) What is interim dividend? How it differs from final dividend?

OR

(b) What is a share certificate? How it differs from the share warrant?

13. (a) What is a fixed charge? How it differs from floating charge.

OR

(b) Comment on "Debentures can be allotted only after the minimum subscription has been subscribed."

14. (a) Distinguish between ordinary business and special business.

OR

(b) Distinguish between annual general meeting and extraordinary general meeting.

15. (a) Write a note on "winding up of unregistered companies".

OR

(b) When is declaration of solvency of a company made in voluntary winding up?

PART – C	(5X8=40	marks)	

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words

16. (a) The duties of a company secretary are said to be limited and somewhat humble in nature. Do you agree? Explain the statement, stating his powers and duties.

OR

(b) Describe the role of a secretary in a company organization and qualities which he is expected to possess.

17. (a) Describe the procedure that has to be followed in connection with final dividend.

OR

(b) Enumerate the formalities required to be observed by the secretary of a public company in connection with allotment of shares.

18. (a) Brief on the consequences of non-registration of a floating charge with the Registrar.

OR

(b) Define the term 'Debenture' and bring out the difference between a share and a debenture.

19. (a) Explain the nature and scope of different kinds of meeting.

OR

(b) Draft a notice for an extraordinary general meeting convened by the Board requisition.

20. (a) What are the circumstances under which the Registrar of Companies is competent to file an application for the winding up of a company?

OR

(b) Explain the procedure for winding up of a company.

Reg. No. :

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B.COM. (CBCS) DEGREE EXAMINATION, APRIL 2021.

First Semester

Commerce – Main

FINANCIAL ACCOUNTING - I

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

1. Bad debt amount should be credited to _____.

- (a) Debtors account (b) Bad debts account
- (c) Sales account (d) Creditors account
- 2. Sales made to Mahesh for cash should be debited to _____.
 - (a) Cash account (b) Mahesh Account
 - (c) Sales account (d) Purchase account

- 3. On the bank statement, cash deposited by the company is known as _____.
 - (a) Credit (b) Debit
 - (c) Liability (d) Expenses
- 4. An unadjusted balance in cash book is because of the result of which error?
 - (a) Deposit in transit
 - (b) The omission of Bank charges
 - (c) Outstanding cheques
 - (d) Unpresented cheques
- 5. What type of cheques is that which is issued by a firm but not deposited to the bank
 - (a) Uncredited cheques (b) Outstanding cheques
 - (c) Uncollected cheques (d) Bounced cheques
- 6. Which bill is drawn and accepted in the same country?
 - (a) Trade Bill (b) Foreign Bill
 - (c) Inland Bill (d) Accommodation Bill
- 7. Which of the following is not a method of depreciation?
 - (a) Revaluation
 - (b) Reducing balance
 - (c) Replacement method
 - (d) Straight line

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- 8. In Straight line method of depreciation, which is excluded?
 - (a) Useful life of the assets
 - (b) Cost of the assets
 - (c) Annual cost of repairs
 - (d) Expected salvage value
- 9. What should be added in closing capital for calculating opening capital?
 - (a) Loss and drawing (b) Profit and drawing
 - (c) Profit only (d) Loss only
- 10. Single entry systems are maintained by _____.
 - (a) Company
 - (b) Income tax authorities
 - (c) Government
 - (d) Sole trader

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) in about 250 words.

 (a) Who are the users of accounting information? Briefly explain.

Or

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(b) Prepare Trial Balance from the following balances extracted from Mr.Bharath, a sole proprietor as on 30th June 2020:

	_		
Particulars	Rs.	Particulars	Rs.
Purchases	75,000	Capital	60,000
Returns inward	2,000	Creditors	30,000
Opening stock	10,000	Sales	1,20,000
Freight inwards	4,000	Returns outward	1,000
Wages	2,000	Machinery	30,000
Investments	10,000	Building	25,000
Bank charges	1,000	Cash at bank	18,000
Land	30,000	Cash in hand	4,000

12. (a) What do you mean by noting charges? Give example.

Or

- (b) The bank passbook of M/s. Boos & Co. showed a balance of Rs.45,000 on May 31, 2020.
 - (i) Cheques issued before May 31, 2020, amounting to Rs.25,940 had not been presented for encashment.

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- (ii) Two cheques of Rs.3,900 and Rs.2,350 were deposited into the bank on May 31 but the bank gave credit for the same in June 8, 2020.
- (iii) There was also a debit in the passbook of Rs.2,500 in respect of a cheque dishonoured on 31.5.2020.

Prepare a bank reconciliation statement as on May 31, 2020.

13. (a) What is meant by retiring the bill? Give example.

Or

(b) Vishal sold goods for Rs.7,000 to Manju on Jan 05, 2020 and drew upon her a bill of exchange payable after 2 months. Manju accepted Vishal's draft and handed over the same to Vishal after acceptance. Vishal immediately discounted the bill with his bank @ 12% p.a. On the due date Manju met her acceptance.

Journalize the above transactions in the books of Vishal and Manju.

14. (a) Differentiate between sinking fund method and insurance policy method of treating depreciation.

Or

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(b) On 1st April, 2007, a limited company purchased a Machine for Rs.1,90,000 and spent Rs.10,000 on its installation. At the date of purchase, it was estimated that the scrap value of the machine would be Rs.50,000 at the end of sixth year.

Give Machine Account and Depreciation A/c in the books of the Company for 4 years after providing depreciation by Fixed Installation Method. The books are closed on 31st March every year.

15. (a) Brief about the methods employed under single entry system to find out the profit / loss.

Or

(b) Krishan started his business on 1st April, 2019 with a Capital of Rs.1,00,000. On 31st March, 2020, his assets were:

Details	Rs.
Cash	3,200
Stock	34,800
Debtors	31,000
Plant	85,000

He owed Rs.12,000 to sundry creditors and Rs.10,000 to his brother on that date. He withdrew Rs.2,000 per month for the private expenses. Ascertain his profit.

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PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) in about 600 words.

16. (a) Draw the branches of accounting and explain the functions of financial accounting.

Or

(b) Consider the following balances extracted from the books of Jain as on 31st December, 2019. Prepare the final accounts.

Particulars	Rs.	Particulars	Rs.
Capital	20,000	Office salaries	6,600
Debtors	8,000	Establishment	4,500
		expenses	
Creditors	10,500	Selling	2,300
		expenses	
Purchases	60,000	Furniture	10,000
Sales	80,000	Cash at bank	2,400
Income tax	500	Miscellaneous	600
of Mr.Jain		receipts	
paid			
Opening	12,000	Drawings	4,800
stock			

Adjustments:

- (i) Salaries outstanding for December, 2019 amounted to Rs.600
- (ii) Provide depreciation on furniture @ 10% p.a.

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- (iii) Provide interest on capital for the year @ 5% p.a.
- (iv) Stock on 31st December, 2019 Rs.14,000.
- 17. (a) What is suspense account? How do you clear the suspense account? Explain.

Or

- (b) From the following particulars, prepare the bank reconciliation statement of Shri Krishan as on March 31, 2020.
 - (i) Balance as per passbook is Rs.10,000
 - (ii) Bank collected a cheque of Rs.500 on behalf of Shri Krishan but wrongly credited it to Shri Krishan's account.
 - (iii) Bank recorded a cash book deposit of Rs.1,589 as Rs.1,598.
 - (iv) Withdrawal column of the passbook under cast by Rs.100.
 - (v) The credit balance of Rs.1,500 as on the pass-book was recorded in the debit balance.
 - (vi) The payment of a cheque of Rs.350 was recorded twice in the passbook.
 - (vii) The pass-book showed a credit balance for a cheque of Rs.1,000 deposited by Shri Kishan.

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18. (a) Explain the accounting treatment to handle insolvency case in Bills of Exchange.

Or

(b) On 12th May, 2020 C sold to D goods for Rs.36,470 and drew upon the latter two bills of exchange; one for Rs.16,470 at one month and the other for Rs.20,000 at three months. D accepted both the bills.

On 5th June, 2020 C sent both the bills to his bank for collection on due dates. The first bill was duly met. But due to some temporary financial difficulties, C failed to honour his acceptance for Rs.20,000 on the due date and the bank had to pay Rs.20 as noting charges.

However, on 16th August, 2020 it was agreed between C and D that D would immediately pay Rs.8,020 in cash and accept a new bill at three months for Rs.12,480 which included interest for postponement of part payment of the dishonored bill. C immediately sent the new acceptance to its bank for collection on due date. On 1st October, 2020 D approached C offering Rs.12,240 for retirement of his acceptance. C accepted to the request.

Pass journal entries for all the abovementioned transactions and prepare ledger accounts in the books of C.

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 (a) Differentiate between straight line method and written down value method.

Or

(b) On 1st July, 2008 a company purchased a machine for Rs.3,90,000 and spent Rs.10,000 on its installation. It decided to provide depreciation @ 15% per annum, using written down value method. On 30th November, 2011 the machine was dismantled at a cost of Rs.5,000 and then sold for Rs.1,00,000.

On 1st December, 2011 the company acquired and put into operation a new machine at a total cost of Rs.7,60,000. Depreciation was provided on the new machine on the same basis as had been used in the case of the earlier machine. The company closes its books of account every year on 31st March.

Prepare Machinery Account and Depreciation Account for four accounting years ended 31st March 2012.

20. (a) What is single entry system? How it differs from double entry system of book-keeping.

Or Page 10 Code No. : 10170E (b) C maintains his books according to Single Entry System. Following figures were available from the books for the six months ended 31st December 2019.

Particulars	1st July, 2019 (Rs.)	31st Dec. 2019 (Rs.)
Plant and Machinery	1,50,000	1,40,000
Debtors	65,000	60,000
Cash and Bank Balances	25,000	31,000
Stock	40,000	45,000
Creditors	9,000	10,000

Adjustments:

- (i) He had withdrawn Rs.200 in the begining of every month for household purposes.
- (ii) Depreciation on Plant and Machinery @ 10% p.a.
- (iii) Further Bad Debts Rs.5,000 and Provision for Doubtful Debts to be created @ 2%

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- (iv) During the period, salaries have been prepaid by Rs.500 while wages outstanding were Rs.1,000.
- (v) Interest on drawings to be reckoned @ 6% p.a.

You are required to prepare the Statement of Profit or Loss for the half year ended 31st December, 2019, followed by Revised Statement of Affairs as on that date.

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B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Corporate Secretaryship – Allied

CORPORATE FINANCE

(For those who joined in July 2017 onwards)

Time : Three hours

(6 pages)

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Corporate finance relates to _____ and utilization of finance
 - (a) Allocation
 - (b) Mobilization
 - (c) Appropriation
 - (d) Investment

- 2. Allocation of financial resources is based on
 - (a) Profitability
 - (b) Government assistance
 - (c) Priority and profitability
 - (d) Need for finance
- 3. The leverage ratios exclude
 - (a) Debt to capital ratio
 - (b) Debt to EBITDA ratio
 - (c) Interest cover ratio
 - (d) Total assets to turnover ratio
- 4. Shortage of working capital result in
 - (a) Higher productivity
 - (b) Fall in short term cost
 - (c) Difficulty to meet day to day expenses
 - (d) Increase in debtors
- 5. Over capitalization can be overcome by
 - (a) Increasing value of assets
 - (b) Implementing capital reduction scheme
 - (c) Take more borrowings
 - (d) Provide lesser depreciation

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- 6. Capital gearing exhibits relations between
 - (a) Equity share capital and debentures
 - (b) Equity capital and preference capital
 - (c) Equity share holders funds and fixed income bearing funds
 - (d) Capital and bank loan
- 7. Under net working capital concept working capital indicates
 - (a) Current assets
 - (b) Current liabilities
 - (c) Current assets-current liabilities
 - (d) Current assets -bank overdraft
- 8. Working capital needs of a company is not significantly influenced by
 - (a) Inventory turnover
 - (b) Terms of purchase and sale
 - (c) Number of god owns
 - (d) Size of business
- 9. The money market instruments exclude
 - (a) Treasury bills (b) Certificate of deposit
 - (c) Commercial bills (d) Debentures

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- 10. Capital market is regulated by
 - (a) RBI (b) SEBI
 - (c) UTI (d) ECGC

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the concept and nature of corporate finance.

Or

- (b) Compare short term and long term capital needs of a corporate body.
- 12. (a) Describe the methods of finding financial leverage operating leverage.

Or

- (b) List out the sources of obtaining long term capital.
- 13. (a) Describe the effects of high gearing of capital structure.

 \mathbf{Or}

(b) Explain the reasons for under capitalization.

Page 4 Code No. : 10188 E [P.T.O.] 14. (a) Narrate the need for providing adequate working capital.

Or

- (b) Examine the concept and components of fluctuating working capital.
- 15. (a) State the different instruments used in money market.

Or

(b) Explain the need for foreign funds in capital markets.

PART C — $(5 \times 8 = 40 \text{ marks})$

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Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.
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16. (a) Discuss the scope and importance of corporate finance.

\mathbf{Or}

- (b) Examine the nature of different decisions made in finance function.
- 17. (a) Compare the features of shares with debentures.

Or

(b) Enumerate the advantages of using long term and short term sources of capital.

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18. (a) Explain the effects of low and high gearing of capital structure.

\mathbf{Or}

- (b) Discuss the effects of over and under capitalization.
- 19. (a) Examine the methods of managing amount invested in inventory.

Or

- (b) Describe the principles and methods of managing accounts receivables.
- 20. (a) Explain the instruments and players of capital market.

 \mathbf{Or}

(b) 'The recent trends in Indian capital market is unforeseen and challenging'. Comment.

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(6 pages)

Code No. : 10171 E Sub. Code : SMCO 12/ AMCO 12

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

First Semester

Commerce - Main

BUSINESS ORGANIZATION

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Which of the following is not an economic activity?
 - (a) Production
 - (b) Social service
 - (c) Professional
 - (d) Trading in goods

- 2. The structure in which there is separation of ownership and management is called
 - (a) Sole proprietorship
 - (b) Partnership
 - (c) Company
 - (d) All business organizations
- 3. Provision of residential accommodation to the members at reasonable rates is the objective of
 - (a) Producer's cooperative
 - (b) Consumer's cooperative
 - (c) Housing cooperative
 - (d) Credit cooperative
- 4. The capital of a company is divided into number of parts each one of which are called
 - (a) Share (b) Dividend
 - (c) Profit (d) Interest
- 5. A _____ provides for the greatest degree of continuity:
 - (a) General partnership (b) Joint venture
 - (c) Corporation (d) Sole proprietorship
- 6. In case of _____ Registration is compulsory
 - (a) Sole Proprietorship (b) Partnership
 - (c) None of these (d) Company

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- 7. The most effective form of business organization for raising capital is the:
 - (a) Joint venture (b) Partnership
 - (c) Corporation (d) Proprietorship
- 8. The simplest form of business ownership is a:
 - (a) Proprietorship (b) Partnership
 - (c) Corporation (d) Cooperative.
- 9. Share premium money can be used for:
 - (a) Issue of fully paid bonus shares
 - (b) Payment of debentures
 - (c) Payment of dividend
 - (d) Writing of good will
- 10. Minimum number of members to form a private company is
 - (a) 2 (b) 3
 - (c) 5 (d) 7

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) in about 250 words.

11. (a) Differentiate between profession and employment.

Or

(b) Classify and present the different kind of human occupations? Brief.

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12. (a) What are public utilities? Bring out its importance.

Or

- (b) What is meant by NGO? Bring out its significance for development.
- 13. (a) Define the term partnership. Bring out its characteristics.

Or

- (b) Write a note on "Dormant Partner". Give examples.
- 14. (a) What is One Person Company (OPC)? Bring out its characteristics.

Or

- (b) Differentiate between company and partnership firm.
- 15. (a) Brief explain the Societies Registration Act.

Or

(b) Differentiate between cooperatives and company.

Page 4 Code No. : 10171 E [P.T.O.] PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) in about 600 words.

16. (a) Define the term business. Explain the essentials of successful business.

 \mathbf{Or}

- (b) Elaborately discuss the concept of business.
- 17. (a) Explain the different types of business organizations.

Or

- (b) Explicate the merits and demerits of Joint Stock Company.
- 18. (a) Explain the different kinds of partnership firms.

 \mathbf{Or}

- (b) Enlighten on the basic legal requirements in registration of partnership firm.
- 19. (a) Differentiate between private limited company and public limited company.

Or

(b) Explain the advantages and disadvantages of Multi-National Companies.

Page 5 Code No. : 10171 E

20. (a) Illustrate and explain the principles of cooperative organization.

 \mathbf{Or}

(b) Explain the impact of various cooperative movements in India.

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Code No. 10172E

Reg.No.:

Sub.Code: SMCO32

B.Com., (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER COMMERCE - MAIN BUSINESS STATISTICS (for those who joined in July 2017 onwards)

Time: Three hours

Maximum : 75 marks

PART – A (10X1=10 marks) Answer all the Questions Choose the Correct answer

 A study based on complete enumeration is known a a. Sample survey. 	b. Pilot survey.
c. Census survey.	d. None of above.
2.Statistical results are	
a. Absolutely correct.	b. Not true.
c. True on average.	d. Universally true.
3. The median of the variant values 11, 7, 6, 9, 12, 15	, 19 is
a. 9.	b. 12.
c. 15.	d. 11.
4. Which mean is most affected by extreme values?	
a. Geometric mean.	b. Harmonic mean.
c. Arithmetic mean.	d. Trimmed mean.
5. Mean deviation is Minimum when deviations are t	aken from
a. Mean.	b. Median.
c. Mode.	d. Zero.
6. Which measure of dispersion ensures highest degree	ee of reliability?
a. Range.	b. Mean deviation.
c. Quartile deviation.	d. Standard deviation.
7. Rank correlation method was developed by	
a. Karl Pearson.	b. R.A. Fisher.
c. Spearman.	d. Croxten and cowden.
8. Correlation between the number of children born a	nd the number of train accident is
a. Positive correction.	b. Spurious correlation.
c. Negative correlation.	d. Rank correlation.
0. In day, much as in a	
9. Index number is a	
a. Measure of relative changes.	b. A special type of an average.
c. A percentage relative.	d. All the above.
10. An appropriate method for working out consumer	
a. Weighted aggregate expenditure method.	b. Family budget method.
c. Price relative's method.	d. None of the above.
PART – B (5X Answer all the Questions Choosing either (a)	
11.a. What are the merits and demerits of primary da	ta?
(or) b. Describe the characters of statistics?	

1

b.If in a moderately asymmetrical frequency distribution, the vaues o me lan and arithmetic mean are 72 and 78 respectively, estimate the value of the mode.

13.a. What are the merits and demerits of mean deviation.

(or)b.Calculate Karl - Pearson' s coefficient of skewness for the following data. 25, 15, 23, 40, 27, 25, 23, 25, 20

14.a. What are the properties of correlation.

b. Explain the uses of regression analysis.

15.a.Calculate cost of living index number using Family Budget method from the following

Items	Weight	Price in	Price in
	<u></u>	Base year	Current year
Food	10	150	225
House Rent	5	50	150
Clothing	2	30	60
Fuel	3	30	75
Others	5	50	75

(or)

(or)

b Mention the steps used in the construction of index number.

PART - C (5X8=40 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words

(or)

16.a. Discuss the functions of statistics.

b. Discuss the methods of sampling.

17.a.Calculate arithmetic mean from the following data.

Temp. C	No. of days
- 40 lo - 30	10
- 30 to - 20	28
-20 to - 10	30
- 10 to 0	42
0 to 10	65
10 to 20	180
20 to 30	10

(or)

b. An aero plane flies, along the four sides of a square at speeds ot 100, 200,300 and 400 kilometers per hour respectively. What is the average speed of the plane in its flight around the square.

18.a. The table below gives the marks obtained by 10 students in statistics. Calculate standard

No.				0	1	8	9	10
Marks 43	48	65	57	 60	27	48	70	59

2

b. Calculate Standard deviation from the following data.

<u> </u>					-			
X:	20	22	25	31	35	40	42	45
f:	5	12	15	20	25	14	10	6

19.a.In an evaluation of answer script the following marks are awarded by the examiners.

1 st	88	95	70	60	50	80	75	85
2 nd	84	90	88	55	48	85	82	72

Find rank correlation coefficient?

(or) b. In a correlation study, the following values are obtained

		Y
Mean	65	67
S.D	2.5	3.5

Co-efficient of correlation = 0.8

Find the two regression equations that are associated with the above values.

20.a.Construct price index number from the following data by applying

1. Laspeyere's Method

2. Paasche' s Method

3. Fisher's ideal Method

Commodity –	2000		2001	
	Price	Qty	Price	Qty
A	2	8	4	5
В	5	12	6	10
С	4	15	5	12
D	2	18	4	20

1	1	
10	nr i	
11	,,,,	

b. Construct price index number from the following data by applying

1. Laspeyere's Method, 2. Paasche's Method. 3. Fisher's ideal Method

Commodity –	2000		2001	
	Price	Qty	Price	Oty
A	2	8	4	5
В	5	12	6	10
<u> </u>	4	15	5	12
D	2	18	4	20

(6 pages) **Reg. No. :**

Code No. : 10173 E Sub. Code : SMCO 33

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Third Semester

Commerce - Main

BANKING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Which of the following types of crossing act as a caution to the holder and the collecting banker in the case of a negotiable instrument?
 - (a) special crossing
 - (b) general crossing
 - (c) account payee crossing
 - (d) non-negotiable crossing

- 2. A type of an endorsement that negates the liability of the endorser is called
 - (a) conditional endorsement
 - (b) special endorsement
 - (c) blank endorsement
 - (d) general endorsement
- 3. The functions of the agricultural credit department and the rural planning and credit cell have been taken over by the _____.
 - (a) IDBI
 - (b) NABARD
 - (c) EXIM
 - (d) Land Development Bank
- 4. For ancient times, <u>bankers</u> lend money, act as money changer and finance internal trade by means of internal bill of exchange.
 - (a) commercial (b) co-operative
 - (c) indigenous (d) development
- 5. The best suited deposit for a trading community is
 - (a) Recurring deposit
 - (b) Fixed deposits
 - (c) Savings deposit
 - (d) Current deposit

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- 6. ——— is the right of a creditor to retain the properties belonging to the debtor until the debt due to him is repaid.
 - (a) Pledge (b) Lien
 - (c) Mortgage (d) Assignment
- 7. The acronym ATM stands for
 - (a) Any Time Money
 - (b) Any Time Machine
 - (c) Automated Teller Machine
 - (d) All the above
- 8. Electronic fund transfer system allows for instantaneous transfer of funds
 - (a) Between and among shops
 - (b) Between and among buyers
 - (c) Between and among e-shoppers
 - (d) Between and among banks
- 9. Which of the following enactments does not govern the working of RBI?
 - (a) The Indian Contract Act of 1872
 - (b) The FEMA of 1999
 - (c) The Banking Regulations Act of 1949
 - (d) The RBI Act of 1934

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- 10. The department of the RBI that is vested with the responsibility of printing and issuing currency notes and coinsts :
 - (a) The department of banking operations
 - (b) The department of currency management
 - (c) Urban bank department
 - (d) The department of banking supervision

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Distinguish between bill of exchange and promissory note.

Or

- (b) Explain the banker's statutory obligations to honour cheques.
- 12. (a) What are the functions of NABARD?

Or

(b) How are co-operative banks different from commercial banks?

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[P.T.O.]

13. (a) What are the different forms of banker's advances?

 \mathbf{Or}

- (b) Discuss the different forms of mortgages.
- 14. (a) What are the features of mobile banking? Explain.

Or

- (b) Write a note on the security aspects of smart cards.
- 15. (a) State the types of selective credit control.

Or

(b) Explain the objects, constitution and working of the RBI.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Elaborate the functions rendered by modern commercial banking.

Or

(b) Examine the effect of endorsement with regard to the nature of endorsement done by the endorser.

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17. (a) Describe the relationship between the bankers and the customer.

 \mathbf{Or}

- (b) What are the fundamental principles of co-operation? State the structure of co-operative banking in India.
- 18. (a) What are the factors influencing bank lending?

Or

- (b) Discuss the formalities which a banker has to observe before opening a new account.
- 19. (a) What are the benefits accruing from EFT system? Describe the steps involved in EFT system.

 \mathbf{Or}

- (b) Discuss the major issues governing internal banking in India. Explain in detail.
- 20. (a) Discuss the main functions of RBI.

 \mathbf{Or}

(b) What are the several kinds of weapons of credit control at the disposal of a RBI?

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Sub.Code: SMCO34

B.Com., (CBCS) DEGREE EXAMINATION, APRIL 2021

THIRD SEMESTER

COMMERCE - MAIN

HUMAN RESOURCE MANAGEMENT

(for those who joined in July 2017 onwards)

Time: Three hours

Maximum : 75 marks

PART - A (10X1=10 marks)

Answer all the Questions Choose the Correct answer

- 1. Human resource management is a a) Management process b) Organisational process c) Work force Management d) None of these
- 2. The skill and capability of employees lead to
- a) Commitment b) Hard work c) Performance d) None of these 3. Human resource planning eliminates the risk of
- a) Surplus manpower b) Deficit manpower c) Both a & b d) None of these 4. Human resource management ultimately aim at
 - a) Recruitment & Selection b) Training & Development c) Right men for right job d) All of these
- 5. The process of finding suitable candidates to job is
- a) Selection b) Recruitment c) Both a & b d) None of these
- 6. The selection of candidates for job from within the existing employees is
- a) Internal source b) External source c) Government source d) None of these 7. Imparting skill and knowledge to a person is called
- a) Training b) Development c) Skill development d) All of these 8. The all round progress of executives is aimed through
- a) Training b) Development c) Skill development d) All of these 9. Payment made to employee usually at the end of the day's work is
- a) Wage b) Compensation c) Salary d) None of these
- 10. Payment of remuneration is in accordance with the
- a) Company's policy b) Job requirements c) Government guidance d) All of these

Part B (5 x 5 = 25 Marks) Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 250 words

11.a) Write on the characteristics of HRM. $()_{r}$

.b) Describe the qualities of HR manager.

12.a) Write the importance of Human resource planning.

Or

...b) What are the limitations of HR planning?

13.a) Explain various sources of internal recruitments.

Or

.b) What is Test? State it various kinds.

14.a) Explain the process of training. Or

. b) Write on the need for promotion.

15.a) What are the objectives of wage and salary administration?

Or

. • b) What are the merits of incentives?

Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 600 words

16. a) Explain the functions of Human resource management.

Or

. , b) Bringout the importance of Human Resource Management.

17. Lay the chart and explain the various factors influencing Human Resource Plan.

....b) What are the merits and demerits of job evaluation?

18. a) Explain various sources of external recruitments.

Or

b) What are the various methods of performance appraisal?

Or

19. a) Discuss the various methods of training followed in organizations.

Or

b) Explain various causes of indiscipline in the organization.

20.a) What are the objectives of labour welfare in organizations?

Or

b)Bring-out the meaning and features of labour welfare in organsiations.

Page No.

Reg.No.:

Sub.Code: SACO31

B.Com., (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER COMMERCE - ALLIED COMPANY ORGANISATION

(for those who joined in July 2017 onwards)

Time: Three hours

Code No. 10175E

Maximum : 75 marks

PART – A (10X1=10 marks)

Answer all the Questions Choose the Correct answer

1.The ______defines the scope of a companys activities.

A. prospectus

B. statutory declaration D. articles of association

C. memorandum of association

2. Which of the following companies must file a statement in lieu of prospectus?

A. A private limited company . B. A cooperative society .

C. A company that has issued a prospectus.

D. A public company that has not issued a prospectus.

3. How many directors of a public company, unless the articles provide otherwise, must be appointed by the company in general meeting

A. All the directors .

C. Two-thirds of the directors .

B. One half of the directors.

D. Three-fourths of the directors .

4. The _____ constitute the top administrative organ of the company. .

A. general manager . C. board of directors .

B. shareholders. D. advisory panel .

B. 15 days.

D. 30 days.

5. The notice of general meeting of a company must be given at least_____

- A. 7 days . C. 21 days.
 - C. 21 days.

6. Register of member is a ______ A. statutory book.

C. official book

B. statistical book. D. registered book

7._____ meeting given an opportunity to the member to know discuss on promotion & formation of the company.

A. General

C. Statutory

B. EGM D. None of the above

Page No. 🔎

Continuation Sheet

8. In the given below who are not required to hold Statutory General Meeting						
A. Private company C. Public company	B. Government Company D. Both (a) & (b)					
 Who can appoint a company secretary us A. Share holders C. Board of directors 	nder the companies Act 2013? B. Managing director D. Registrar of companies					
 10. Proxy need not be a of the compa A. Shareholders C. Both a and b 	B. Members					
Part B (5 x 5 = 25 Marks) Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 250 words						
11.a. What are the role of promoters?						
b. What are the documents to be submitted	(or) b. What are the documents to be submitted at the time of registration?					
12.a. Explain the reasons for the separation of ownership and management. (or)						
b. Explain the provisions relating to DIN						
13.a What are the objectives of statutory me	eeting?					
(or) b.What are the various kinds of company meetings?						
14.a. Briefly explain the term class meeting:	S.					
b. What are the contents of a notice?	(or)					
15.a. What is the quorum for general meetin	g?					
b. What are the salient features of creditors i	(or) meeting					
Part C (5 x 8 = 4 Answer all Questions, Choosing either (a) or (b),						
16.a.Explain the steps in incorporation of a company.						
b. List the Steps to register Private Limited	(or)					

Page No. 3

Continuation Sheet

- 17.a. Who can become a member of a company?.
- (or) b. Explain the legal position of directors in a company.
- 18.a. Discuss the provisions relating to holding of statutory meeting.
 - (or)

(or)

- b. Explain the provisions with regard to extraordinary general meeting.
- 19.a.Explain the statutory provisions relating to proxy
- b. Enumerate the matters that require sanction by ordinary resolution

20.a.Explain the powers of board at meetings.

(or) b. Enumerate the restrictions on the boards powers.

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021

THIRD SEMESTER COMMERCE Non Major Elective – CONSUMER AWARNESS (For those who joined in July 2017 onwards)

Time: 3 Hours

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Maximum: 75 Marks

PART A - (10 X 1 = 10 marks) Answer All Questions, Choose the correct answer.

1.	is slowly growing in ou	r country		
	(a) Consumer movement b) Consum	er Awareness c) Public d) Technology		
	கீழ்வருவனவற்றில் எது நமது நாட்டில்	மெதுவாக வளர்ந்து வருகிறது.		
	அ) நுகர்வோர் இயக்கம் ஆ) நுகர்	வார் இ) மக்கள்தொகை ஈ) தொழில்நுட்பம்.		
		(i) (i) sative fort k. Fris preserve		
2.	Buying motives may be broadly classified	l into forces.		
	a) Two b) Five	c) Four d) Three		
	வாங்கும் நோக்கங்கள் சக்த			
	அ) இரண்டு ஆ) ஐந்த	இ) நான்கு ஈ) மூன்று		
3.	What is the full form of MRB?			
	a) Minimum Retail Price	b) Maximum Retail Price		
	c) Minimum Rental Price	d) Maximum Rental Price		
	MRP யின் விரிவாக்கம் என்ன?	oy waxinan kentar mee		
	அ) குறைந்தபட்ச சில்லறை விலை	ஆ) அதிகபட்ச சில்லறை விலை		
	இ) குறைந்தபட்ச வாடகை விலை	∉) அதிகபட்ச வாடகை விலை		
4.	Ais one who consumes goods n	nanufactured and sold by others		
		c) Consumer d) Producer		
		பாரிக்கப்பட்டு விறகப்படும் பொருட்களை		
	வாங்கி நுகாவர் ஆவார்.			
	அ) விற்பனையாளர் ஆ) வாங்குபல	in இ) நுகர்வோர் ஈ) தயாரிப்பாளர்		
5.	is an outcome of suffering	and exploitation of consumers		
		on c) Black marketing d) Hoarding		
	என்பகு நகர்வோரின் குன்	பம் மற்றும் சுரண்டலின் விளைவு ஆகும்.		
	அ) நுகர்வோர்வியல் ஆ) கலப்படப	் இ) கருப்பு சந்தைப்படுத்தல் ஈ) பதுக்கல்		
6.	Consumer Protection Act 1986 enacted			
	a) 15 th June 1986 b) 24 th October	1986 c) 24 th December 1986 d) 1 st January 1986		
	நுகர்வோர் பாதுகாப்புச் சட்டம்	இல் இயற்றப்பட்டது.		
	அ) ക്രൗസെ 15, 1986			
	இ) டிசம்பர் 24, 1986 ஈ) ஜன	வரி1, 1986.		
7.	The consumer protection council was wo	rking to promote and protect the rights of		
	a) Wholesaler b) Retailer			
	a wholesaler of netaller	c) Consumer d) All of these		
இன் உரிமைகளை மேம்படுத்துவதற்கும் பாதுகாப்பதற்கும் நுகர்வோர் பாதுகாப்பு கவுன்சில் செயல்பட்டு வருகிறது.				
	இ) நுகர்வோர்	ஈ) இவை அனைத்தும்		

- 8. Complainant means ----
 - a) Consumer b) Any voluntary consumer association registered under the companies act 1956.
 - c) The Central Government or any State Government d) All the above.

புகார் என்றால் -----

- அ) நுகர்வோர்
- ஆ) 1956ஆம் ஆண்டு சட்டத்தின்படி பதிவுசெய்யப்பட்ட எந்ததொரு தன்னனார்வ நுகர்வோர் சங்கம்.
- இ) மத்திய அரசு அல்லது மாநில அரசு
- ஈ) மேலே உள்ள அனைத்தும்.
- 9. The Redressal Agencies comes under which consumer protection Act?
 - a) National commission b) State commission c) District forum d) All of these நிவாரண முகவர் நிறுவனங்கள் எந்த நுகர்வோர் பாதுகாப்புச் சட்டத்தின் கீழ் வருகின்றன? அ) தேசிய ஆணையம் ஆ) மாநில ஆணையம் இ) மாவட்ட மன்றம் இ) இவை
 - அனைத்தும்
- 10. -----provides the adequate and accurate information about quality, quantity, purity, Standard and the price of the goods and services.
 - a) Right to choose b) Right to heard c) Right to be informed d) Right to safety ------ என்பது தரம், அளவு, தூய்மை, தரநிலை மற்றும் பொருட்கள் மற்றும் சேவைகளின் நிலை பற்றிய போதுமான மற்றும் துல்லியமான தகவல்களை வழங்குகிறது.
 - அ) தேர்ந்தெடுக்கும் உரிமை
- ஆ) கேட்கும் உரிமை க) பாதுகள் உரிமை
- இ) தெரிவிக்கப்படுவதற்கான உரிமை 👘 н) பாதுகாப்பதற்கான உரிமை

PART B - (5 X 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b), Each answer should not exceed 250 words

11. a) Explain he buying decision process. வாங்கும் முடிவு செயல்முறையை விளக்குங்கள்

(OR)

- b) Explain the basic need of consumer behaviour நுகர்வோர் நடத்தையின் அடிப்படை தேவையை விளக்குங்கள்
- a) What information one should check before buying packed medicines? பேக் செய்யப்பட்ட மருந்து பொருட்களை வாங்குவதற்கு முன் என்ன தகவல்களை சரிபார்க்க வேண்டும், விளக்குக

(OR)

- b) Why are rules and regulations required in the market place? Explain. சந்தை இடத்தில் விதிகள் மற்றும் ஒழுங்குமுறைகள் ஏன் தேவைப்படுகின்றன? விளக்குக
- 13. a) Explain the how one can exercise the right to choose. ஒருவர் தேர்ந்தெடுக்கும் உரிமையை உவ்வாறு பயன்படுத்தலாம் என்பதை விளக்குங்கள்.

(OR)

- b) How does right to safety help consumer? Explain with an example. பாதுகாப்பதற்கான உரிமை நுகர்வோர்க்கு எவ்வாறு உதவுகிறது? எடுத்துக்காட்டுடன் விளக்குக.
- a) Explain the District Forum of Consumer Protection Act. நுகர்வோர் பாதுகாப்பு சட்டத்தின் படி மாவட்ட மன்றத்தை விளக்கவும்.

(OR)

b) How to Consumer Protection Councils help consumer? Explain. நுகர்வோர் பாதுகாப்பு கவுன்சில்கள் நுகர்வோர்க்கு எவ்வாறு உதவுகின்றன? 15. a) How a consumer can be protected?

ஒரு நுகர்வோரை எவ்வாறு காதுகாக்க முடியும்?

(OR)

 b) Explain the detail about the consumer protection Act, 1986. நுகர்வோர் பாதுகாப்புச்சட்டம், 1986 பற்றிய விபரங்களை விளக்குக.

PART C - $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b), Each answer should not exceed 600 words

- 16. a) What are the various types of consumers? நுகாவோரின் பல்வேறு வகைகளை விவரி? (OR)
 - b) State the importance of buying motives. வாங்குவதன் நோக்கத்தின் முக்கியத்துவத்தை கூறுக.
- 17. a) Why is there a great need for consumer awareness? நுகர்வோர் விழிப்புணர்வு ஏன் தேவை?

(OR)

- b) In how many ways, the consumers are exploited? எத்தனை வழிகளில் நுகர்வோர் சுரண்டப்படுகிறார்.
- a) Explain the functions of Consumer Protection Councils. நுகாவோர் பாதுகாப்பு கவுண்கிலின் பணிகளை விளக்குக.

(OR)

- b) How does 'Right to the informed' help consumers? Explain, தகவல் அறியும் உரிமை எவ்வாறு நுகர்வோருக்கு உதவுகிறது? விளக்குக
- a) How has three tier quasi-judicial machinery been set up for redressal consumer disputes? Explain. நுகர்வோர் தகராறுகளைத் தீர்ப்பதற்கான மூன்று அடுக்கு அரை-நீதித்துறை

இயந்திரங்கள் எவ்வாறு அமைக்கப்பட்டுள்ளது? விளக்குக

(OR)

- b) Comment on the need of consumer protection in a free market economy. ஒரு சந்தை பொருளாதாரத்தில் நுகர்வோர் பாதுகாப்பு தேவை பற்றி கூறுக.
- 20. a) What are the objects of the Central Consumer Protection Council? மத்திய நுகர்வோர் பாதுகாப்பு கவுன்சிலின் நோக்கங்களை விவரி. (OR)
 - b) Explain the Redressal Forums functioning under he Act. நுகர்வோர் பாதுகாப்புச் சட்டடத்தின்படி செயல்படும் நிவாரண மன்றங்களை விளக்குக.

Reg.No.: Code No. 10177E Sub.Code: SSCO3A B.COM., (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER COMMERCE - MAIN SKILL BASED SUBJECT - BUSINESS COMMUNICATION (For those who joined in July 2017 Only) Time: Three hours Maximum : 75 marks PART - A (10X1=10 marks) Answer all the Questions Choose the Correct answer 1. Telephonic conversation is a a) Verbal communication. b) Non-verbal communication. c) Visual communication. d) Written. 2. In the communication cycle, the process of retranslation of signals into ideas is called a) Encoding. b) Decoding c) Response d) Feedback 3. Complementary close or subscription always be with salutation a) Different b) Opposite c) Consistent d) Parallel 4. The information the receiver gets is called a) Message b) Output c) Input d) Source. 5. The participants of a board meeting are a) Member b) Directors c) Member and directors d) Outsiders 6. Colours also have a _____ effect a) Psychological b) Physiological c) Sociological d) Socio psychological 7. Face-to-face question-answer type of interview is a) Patterned interview b) Direct interview c) In-Depth interview d) Group interview 8. An interview free to speak on any subject comes under a) Panel interview b) Non-directive interview c) In-Depth interview d) Direct interview 9. _ systems process data resulting from business transactions a) Transaction processing b) Office Automation c) DSS d) MIS 10. accommodates the main message a) Subject Title b) Address Bar c) Body PART- B — (5X5=25 marks) d) Closing of email Answer ALL questions, choosing either (a) or (b) Answer should not exceed 250 words 11. (A). Point out the characteristics of communication. (OR) (B). Briefly explain the process of communication. 12. (A). What are the points to be remembered while writing replies to letters of enquiry? (OR) (B). State the types of enquiry letters. 13. (A). What are the points to be remember while writing the covering letter for job application? (OR). (B). What are the points to be remember while preparing resume. 14. (A). What are the points should be looked into at the time of an interview? (OR)

(B). Specify the qualities of an interviewer.

.

15. (A). State the implications of modern communication technology to the business world. (OR)

(B). Mention the advantages of internet to business world.

PART - C (5X8=40 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words

(OR)

(B). What do you mean by downward communication and elaborate on its merits and demerits.

17. (A). Explain the features of a good business letter.

(B). Write a letter to National Textiles asking for quotation for kids wear. 18. (A). What are the points to be covered in an effective application.

(OR)

(B). Draft an application in response to the following advertisement:

Wanted an Accountant with knowledge of Tally ERP 9. Salary Rs.35,000 per month. Apply within five days to Box.No. 1368, The Maxwell India Pvt Ltd., New Delhi. 19. (A). Explain the various stages involved in an interview.

(OR)

(B). Describe the various types of an interview.

20. (A). State the procedure of formatting an e-mail message.

(OR)

(B). Explain the impact of technology – aided communication of business enterprises.

Reg.No.:

Code No. 10178E

Sub.Code: SAPA31

B.Com., (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER PROFESSIONAL ACCOUNTING - ALLIED

COMPANY LAW - I

(for those who joined in July 2017 onwards)

Time: Three hours

Maximum : 75 marks

PART ~ A (10X1=10 marks)

Answer all the Questions Choose the Correct answer

1. Which of the following is NOT a characteristic of a company? a. Unlimited liability c. Separate property b. Common seal d. Capacity to sue 2. The capital of the company is divided into parts, called a. Debentures c. Loans b. Shares d. Capital 3. Chronologically, the first persons who control a company's affairs are its a. Managing Director c. Managers b. Promoters d. Board of Directors 4. Which of the following is NOT a consequence of registration of company? a. Becomes distinct legal entity c. Property is not the property of shareholders b. Acquires a perpetual succession d. None of the above 5. The contents of Memorandum of Association is described under Section ______ of the Companies Act, 2013. a. 3 c. 12 h 4 d. 13 6. is meant for internal management of the affairs of a company. a. Memorandum of Association c. Doctrine of Ultra Vires b. Articles of Association d. All of the above 7. is a document issued by the company when it does not offer its securities for public subscription. a. Prospectus c. Shelf Prospectus b. Statement in Lieu of Prospectus d. Red herring Prospectus means the gain by unlawful means of property to which the person gaining is 8. not legally entitled. a. Wrongful gain c. Fraud b. Wrongful loss d. All of the above though 9. can vote at the meeting even not member. a a. Body Corporate c. Governor d. All of the above b. President 10. Which of the following is NOT a right of the members of a company? c. Right to appoint auditor a. Right to have shares d. Right to appoint the promoter b. Right to appoint director

Page No.

)

PART – B (5X5=25 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 250 words

11. (a) Define the term 'Company' and State the meaning of 'Subsidiary Company'.

OR

(b) Write a short note on: (i) Corporate Veil and (ii) Perpetual succession.

12. (a) Comment on "Promoters stand in a fiduciary relationship with the company they promote".

OR

(b) What are the documents to be filed with the Registrar of the Companies prior to incorporation?

13. (a) Brief on the contents of Articles of Association

OR

(b) Differentiate between Memorandum of Association and Articles of Association.

14. (a) When is a company not required to issue a prospectus? Brief.

OR

(b) What is a prospectus? How can be a prospectus misstated for public issue? Give an example.

15. (a) Who is called as members? How the member differs from shareholder?

OR

(b) Who can become as a member of a company? How?

PART - C (5X8=40 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words

16. (a) Explain the c __acteristics of a company.

OR

(b) Classify and explain the different kinds of companies.

17. (a) What are the role of Promoter in Commencement of Business? Explain.

OR

(b) Explain the process of formation of company.

18. (a) In what case, in what mode and to what extent can a company alter the contents of Articles of Association? Explain.

OR

(b) "The Memorandum of Association is the fundamental law or a charter defining the objects and limiting the powers of a company." Explain.

19. (a) Explain the extent of civil and criminal liability for the misstatements in Prospectus.

OR

(b) Enlist and explain the contents of a Prospectus.

20. (a) When does the liability of a member of a limited company become unlimited? Illustrate.

OR

(b) "Every shareholder of a company is also known as a members, while every member may not be known as a shareholder." Comment.

(6 pages) **Reg. No. :**

Code No. : 10180 E Sub. Code : SMCO 42

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Commerce

BUSINESS MATHEMATICS

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Difference of two even numbers is always even
 - (a) True (b) Not true
 - (c) ill defined (d) none

2. Natural number start from

- (a) 1 (b) 0
- (c) -1 (d) none of the above

	(a)	75 ^m	(b)	25 ^m
	(c)	50 ^m	(d)	105 ^m
4.	$\frac{11^7}{11^6}$	is equal to		
	(a)	11	(b)	6
	(c)	1	(d)	7
5.	If a pair of linear equation is consistent, ther these lines will be			
	(a)	parallel		
	(b)	always coincident		
	(c)	intersecting or coinc	iden	t
	(d)	always intersecting		
6.	Find the distance between (1,3) and (9,18) on the coordinate plane			
	(a)	17	(b)	32
	(c)	46	(d)	12
7.	The $\begin{bmatrix} 7\\ 2 \end{bmatrix}$	e determinant value $\begin{bmatrix} 1\\7 \end{bmatrix}$ is	e of	the following matrix
	(a)	47	(b)	40
	(c)	57	(d)	-57

Page 2 Code No. : 10180 E

8. $(3 \ 8 \ 9 \ -2)$ is a row matrix of order _____

(a)	4×4	(b)	1×4

- (c) 1×1 (d) 4×1
- 9. The compound interest on Rs.30,000 for 3 years at 10% is
 - (a) 9,930 (b) 9,000
 - (c) 39,930 (d) 42,000
- 10. For a face value of a bill Rs.7,000 drawn for 6 months at 6% per annum interest the true discount is
 - (a) 204 (b) 210
 - (c) 420 (d) 620

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

(a) Find the LCM and HCF of the following pair of integer and verify that LCM ×HCF = product of the two numbers 26 and 91.

Or

(b) The cost of 2kg apples and 1kg of grapes on a day was found to be Rs.160. After a month the cost of 4kg of apples and 2kg of grapes is Rs.300. Represent the situation algebraically.

Page 3 Code No. : 10180 E

12. (a) Simplify $(-243)^{-2/5}$

Or

(b) Find the value of x is
$$3 \times 5^x = \frac{3}{125}$$

13. (a) Find the distance between two points (8, 2, 6) and (3, 5, 7).

Or

(b) What is the distance between the points (0,0) and (6,8) plotted on a graph.

14. (a) If
$$A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 1 & 5 \end{bmatrix}$$
 and $B = \begin{bmatrix} 2 & 1 \\ 1 & 2 \\ 0 & -1 \end{bmatrix}$ find AB.

$$\mathbf{Or}$$

(b) Write down the transpose of the following matrices $A = \begin{bmatrix} 2 & 3 \\ 7 & 5 \\ 1 & 2 \end{bmatrix}$ $B = \begin{bmatrix} 3 & 5 & -2 & 1 \\ 2 & 3 & 1 & 0 \end{bmatrix}$ $C = \begin{bmatrix} 4 & -2 & 1 & 5 \end{bmatrix}$

Page 4 Code No. : 10180 E [P.T.O.]

15. (a) Find the principal sum which yields simple interest of Rs.77 in 8 years at 3.5% per annum.

Or

(b) The population of a city increases at the rate of 15 per thousand. What will be the population at the end of 5 years if present population is 69360?

PART C — $(5 \times 8 = 40 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.
- 16. (a) Find the roots of the following quadratic equation. $x^2 3x 10 = 0$.

Or

- (b) Find the two numbers whose sum is 27 and product is 182.
- 17. (a) If a,b,c are 3 consecutive integers prove that $\log(1 + ac) = 2\log b$.

Or

(b) Simplify
$$\frac{\log 72 - \log 3}{\frac{1}{3}\log 27 + \frac{1}{2}\log 64}$$

Page 5 Code No. : 10180 E

18. (a) The point (4, 8) lies on a circle centered at (12, 14). What is the radius of the circle.

 \mathbf{Or}

(b) Find out the point of intersection of two lines $x^2 + 2x + 1 = 0$ and $2x^2 + 3x + 5 = 0$.

19. (a) If
$$A = \begin{bmatrix} 1 & -2 & -3 \\ -4 & 2 & 5 \end{bmatrix}$$
 and $B = \begin{bmatrix} 2 & 3 \\ 4 & 5 \\ 2 & 1 \end{bmatrix}$. Find

AB and show that $AB \neq BA$.

Or

(b) Using matrices, Calculate the values of *x* and *y* for the following equation.

2x - 2y - 3 = 08y = 7x + 2

20. (a) Find the bankers gain on a bill of Rs.3750 due in 8 months at 8% per annum.

Or

(b) A sum of money inverted at compound interest amounts to Rs.21,632 at the end of second year and Rs.22,497.28 at the end of third year. Find the rate of interest and the sum invested.

Page 6 Code No. : 10180 E

(6 pages) **Reg. No. :**

Code No. : 10181 E Sub. Code : SMCO 43

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

 $\operatorname{Commerce}-\operatorname{Main}$

CAPITAL MARKET

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. TIPS stand for
 - (a) Tradin In Preferential Securities
 - (b) Treasury Inflation Protected Securities
 - (c) True Inflation Protected Shares
 - (d) Top Industry Protection Scheme

- 2. Capital market deals with the _____ term funds.
 - (a) Short (b) Medium
 - (c) Long (d) Fluctuating
- 3. Offer for sale issue shares to
 - (a) Shareholders (b) Public
 - (c) Creditors (d) None
- 4. Underwriting _____ the subscription of shares issued using prospectus
 - (a) Make (b) Guaranttees
 - (c) Offers (d) Acquirs
- 5. Speculation is
 - (a) Calculated risk taking
 - (b) Gaming
 - (c) Gambling
 - (d) Buying and selling
- 6. The commodity derivative exchanges in India includes.
 - (a) NSE
 - (b) Indian Commodity Exchange Limited
 - (c) BSE
 - (d) Metropolitan Commodities and Stock Exchange Limited.

Page 2 Code No. : 10181 E

- 7. Depositories in India are regulated by Depositories act,
 - (a) 1985 (b) 1996
 - (c) 2000 (d) 1990
- 8. Major advantage of derivative is
 - (a) More returns
 - (b) Reduce risk
 - (c) Manage risk
 - (d) Varieties in offer
- 9. SEBI was established in the year
 - (a) 1986 (b) 1990
 - (c) 1982 (d) 1988
- 10. The purpose of Investor Protection Fund includes.
 - (a) To direct procedure for stock trading
 - (b) To regulate stock brokers
 - (c) To compensate clients of trading members
 - (d) To regulate stock exchanges.

Page 3 Code No. : 10181 E

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

11. (a) Examine the concept of capital market.

 \mathbf{Or}

- (b) Discuss the different players in primary market.
- 12. (a) Explain the features of primary market.

Or

- (b) Describe the concept of FPO.
- 13. (a) Narrate the advantages of dematerialization of securities.

Or

- (b) Compare investment with speculation.
- 14. (a) Explain the trading mechanism under derivatives market.

Or

(b) Compare financial and commodity derivatives.

Page 4 Code No. : 10181 E [P.T.O.] 15. (a) Describe any four important provisions of Securities Contract Regulation Act.

Or

(b) List out investor protection measures of SEBI.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.

16. (a) Critically examine the functioning of Indian securities market.

Or

- (b) Review the nature, types and method of trading in government securities market.
- 17. (a) Discuss the process, involved in the public issue of shares by a company.

 \mathbf{Or}

- (b) Enumerate the process, uses and challenges of private placement.
- 18. (a) Describe the functions of NSE.

Or

(b) Explaint the process and benefits of listing of securities.

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19. (a) Elaborate the process of transacting under futures.

 \mathbf{Or}

- (b) Describe significance and forms of options trading.
- 20. (a) Discuss the regulatory and development functions SEBI.

Or

(b) Narrate the operations of investor protection fund.

Page 6 Code No. : 10181 E

Reg. No. :

Code No. : 10182 E Sub. Code : SMCO 44

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Commerce - Main

IMPORT AND EXPORT PROCEDURES

(For those who joined in July 2017 onwards)

Time : Three hours Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. International trade takes place due to the following main reason
 - (a) Technical development
 - (b) Tradition

(6 pages)

- (c) Geographical specialisation
- (d) Political needs

- 2. The commercial policy of safeguarding the national interest through restrictions on international traded is known
 - (a) Free trade (b) Protection
 - (c) Incentives (d) duty drawback
- 3. The <u>denotes</u> the difference between merchandise exports and merchandise imports of a country.
 - (a) Balance of payments
 - (b) Balance of trade
 - (c) Foreign exchange
 - (d) Fiscal deficit
- 4. ____ means the government controls the rate of exchange and also controls the purchase and sale of foreign currencies in the foreign exchange market.
 - (a) Depletion
 - (b) Exchange depreciation
 - (c) Devaluation
 - (d) Exchange control
- 5. The main document which is required for getting customs clearance is the _____
 - (a) Bill of entry (b) Shipping bill
 - (c) letter of credit (d) invoice

Page 2 Code No. : 10182 E

- 6. For export, carting order is issued by _____
 - (a) Income tax authorities
 - (b) Customs authorities
 - (c) Port trust authorities
 - (d) Forwarding agents
- 7. When delivery order is presented Gate pass is issued by _____
 - (a) shipping company (b) Dock officer
 - (c) Exporter (d) Importer
- 8. Under _____ method of payment the importer first receives goods and then arranges for the payment.
 - (a) payment in advance
 - (b) Open account
 - (c) Documentary collection
 - (d) Letter of credit
- 9. The Export promotion council can get financial assistance from
 - (a) RBI
 - (b) Central Government
 - (c) Regional licensing Authority
 - (d) IFC

Page 3 Code No. : 10182 E

- 10. Imports and Exports Act 1947 came into force with affect from
 - (a) March 25, 1947 (b) April 25, 1947
 - (c) August 15, 1947 (d) January 26, 1947

PART B — $(5 \times 5 = 25 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.
- 11. (a) What is meant by International Trade? State its features.

Or

- (b) What are the problems of international trade?
- 12. (a) What is meant by Balance of payments? List out the debit and credit items of unilateral payments accounts.

Or

- (b) What are the merits and demerits of multiple exchange rate?
- 13. (a) What is meant by shipping bill? State its contents.

Or

(b) What are the export incentives available to the exporter?

Page 4 Code No. : 10182 E [P.T.O.] 14. (a) What is an indent? Draw its specimen form.

Or

- (b) How to get IEC number?
- 15. (a) Explain the functions of Export promotion council.

\mathbf{Or}

(b) What are the tax exemption available to Indian exporter?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

16. (a) What are the merits and demerits of international trade?

Or

- (b) Analyse the factors which influence international trade.
- 17. (a) Analyse the components of Balance of payments.

\mathbf{Or}

(b) Explain the different methods used to correct disequilibrium.

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18. (a) Enumerate the export procedure involved in pre-shipment stage.

Or

- (b) What is meant by letter of credit? Explain its types.
- 19. (a) Briefly explain the procedure to import goods.

 \mathbf{Or}

- (b) Explain the kinds of customs duties.
- 20. (a) Analyse the functions of and operations of EXIM bank.

Or

(b) Discuss the problems of Indian exporters.

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) **Reg. No. :**

Code No. : 10183 E Sub. Code : SACO 41

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Commerce - Allied

COMPUTER APPLICATION IN BUSINESS

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. The computer that is not considered as a portable computer is _____.
 - (a) Laptop
 - (b) PDA
 - (c) Minicomputer
 - (d) None of these

(6 pages)

- 2. The CPU stands for _____.
 - (a) Central protection unit
 - (b) Central processing unit
 - (c) Central power unit
 - (d) Central prerogative unit
- 3. The primary source of financing during the early years of e-commerce was _____.
 - (a) Bank loans
 - (b) Large retail firms
 - (c) Venture capital funds
 - (d) Initial public offerings
- 4. Which of the following is not considered to be one of the three phases of e-commerce?
 - (a) Innovation (b) Consolidation
 - (c) Preservation (d) Reinvention
- 5. The best products to sell in B2C e-commerce are:
 - (a) Small products (b) Digital products
 - (c) Specialty products (d) Fresh products
- 6. Which is a function of E-Commerce
 - (a) Marketing (b) Advertising
 - (c) Warehousing (d) All of the above

Page 2 Code No. : 10183 E

- 7. Most individuals are familiar with which form of e-commerce?
 - (a) B2B (b) B2C
 - (c) C2B (d) C2C
- 8. Which of the following is not related to security mechanism
 - (a) Encryption (b) Decryption
 - (c) E-Cash (d) All of the above
- 9. How the transactions occur in e-commerce?
 - (a) Using e-medias
 - (b) Using computers only
 - (c) Using mobile phones only
 - (d) None of the above
- 10. Which type of add appears on a web page?
 - (a) Pop- under ad
 - (b) Pop-up ad
 - (c) Banner ad
 - (d) Discount ad

Page 3 Code No. : 10183 E

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) How does a computer work?

 \mathbf{Or}

- (b) Describe the characteristics of computers.
- 12. (a) State the benefits of E-Commerce for the consumers.

Or

- (b) Explain the differences between E-Commerce and E-Business.
- 13. (a) Explain the features of electronic payment system.

 \mathbf{Or}

- (b) What are the disadvantages in E-Payment System?
- 14. (a) What do you understand by EDI? Explain the components of EDI.

 \mathbf{Or}

(b) Differentiate EDI and Email.

Page 4 Code No. : 10183 E [P.T.O.] 15. (a) Write a short note on: (i) Internet advertising and (ii) Internet Marketing Mix.

Or

(b) Why people are interested to buy the products in online?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 600 words.

16. (a) List out various applications of computers.

 \mathbf{Or}

- (b) Discuss various types of computers in detail.
- 17. (a) "E-Commerce means buying and selling of goods and services across the internet". Discuss the statement.

Or

- (b) Define E-Commerce and explain the different types of E-Commerce systems.
- 18. (a) Discuss the steps involved in mercantile process model.

Or

(b) What is smart card and explain different categories of smart cards.

Page 5 Code No. : 10183 E

19. (a) What are the benefits of EDI to wards manufacturing sector?

Or

- (b) What is Non-EDI system explain in detail.
- 20. (a) "Product, Price, Place Promotion are the P's marketing". Are they applicable to internet marketing also? Explain.

 \mathbf{Or}

(b) Discuss the recent E-Advertisement techniques in India.

Page 6 Code No. : 10183 E

(6 pages) **Reg. No. :**

Code No. : 10186 E Sub. Code : SSCO 4 A

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Commerce - Main

ENTERPRENEURSHIP DEVELOPMENT

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. The hallmark of an entrepreneur is _____.
 - (a) Innovation (b) Risk taking
 - (c) Capitalist (d) Decision making
- 2. Innovation and invention are two sides of the same coin
 - (a) True (b) False
 - (c) Party true (d) None of the above

- 3. Innovation is considered as seal for an entrepreneur is the view held by;
 - (a) Richard cantillon
 - (b) Peter Drucker
 - (c) Joseph A Schumpeter
 - (d) David C Mc Clelland
- 4. The employee who is entrusted with the responsibility to make innovation in the organization is called
 - (a) Innovative
 - (b) Intrepreneur
 - (c) Corporate entrepreneur
 - (d) None of the above
- 5. The most suitable type of entrepreneur for a developing economy like Malaysia is:
 - (a) Innovative (b) Imitative
 - (c) Fabian (d) Drone
- 6. _____ is the process of creating something and assuming the risks and rewards out of it.
 - (a) Entrepreneur
 - (b) Entrepreneurship
 - (c) Intrepreneur
 - (d) Corporate entrepreneur

Page 2 Code No. : 10186 E

- 7. What one can do is called _____ and how one does is called _____.
 - (a) Competence, competency
 - (b) Competence, creativity
 - (c) Skill, competency
 - (d) Knowledge, experience
- 8. The basic objective of EDP is to
 - (a) Introduce about entrepreneurship
 - (b) Induce N' Ach
 - (c) Provide funds
 - (d) Create awareness
- 9. Selecting a project out of projects identified is called
 - (a) Selecting in process (b) Arranging in process
 - (c) Zeroing in process (d) (a) and (b)
- 10. Project section starts from where project _____ ends.
 - (a) Information (b) Identification
 - (c) Internal (d) Idea Generation

Page 3 Code No. : 10186 E

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

11. (a) Differentiate between Entrepreneur and Intrepreneur.

Or

- (b) Bring out the qualities of an Intrepreneur.
- 12. (a) Who is called as successful entrepreneur? Enlist their characteristics.

 \mathbf{Or}

- (b) Brief the economic factors that influences entrepreneur.
- 13. (a) What is Project Appraisal? Brief its significance.

Or

- (b) Briefly state the procedure of conducting market analysis.
- 14. (a) Give an outline on the method of brainstorming in generating business ideas.

 \mathbf{Or}

(b) Outline the importance of reverse brainstorming.

Page 4 Code No. : 10186 E [P.T.O.] 15. (a) Bring out the characteristics of a small enterprise.

 \mathbf{Or}

(b) What are the factors in flouncing the choice of ownership?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 600 words.

16. (a) Classify and explain the different types of entrepreneurs.

Or

- (b) Examine the qualities of a successful entrepreneur.
- 17. (a) Explain the need of rural entrepreneurship in India.

Or

- (b) Why the entrepreneurs do requires training and other support mechanism? Discuss.
- (a) Make a detailed note on Feasibility Analysis while launching an enterprise.

Or

(b) Explain the components of Economic Appraisal for a project.

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19. (a) What are the factors determines the choice of ownership? Explain.

 \mathbf{Or}

- (b) Draft a detailed business plan for marketing the organic vegetables in Chennai city as a small business.
- 20. (a) What are called as industrial sickness? Explain the factors influencing sickness of business.

Or

(b) What are rehabilitation strategies available for sick business unit? Explain.

Page 6 Code No. : 10186 E

ode No. 10189E

Reg.No.:

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021

FIFTH SEMESTER

COMMERCE - MAIN

CORPORATE ACCOUNTING - I

(For those who joined in July 2017 Onwards)

Time: Three hours

Part-A (10 X 1 = 10 marks)

Maximum : 75 marks

Answer all questions, choose the correct answer 1. When the fresh issue is offered at first to the existing share holders it is a) Rights issue b) Sweat issue c) Bonus issue d) None of these 2. The shortages in the redemption of debentures are adjusted with -----a) Premium account b) P/L account c) c) Both A & B d) None of these 3. Pre acquisition profit is considered as a) Revenue profit b) Capital profit c) Super profit d) None of these 4. Pre acquisition profit is transferred to General reserve a/c b) Capital reserve a c c) Profit & Loss a/c d) None of these 5. When two companies go into liquidation and form another it results in -----a) Merger b) acquisition c) Both A & B d) None of these 6. When one existing company takes over the business of another existing company it leads 10 ----a) Merger b) Acquisition c) Both A & B d) None of these 7. The following is the method of valuation of goodwill. a) Super profit method b) Average profit method c) Both A & B d) None of these 8. Gross profit, bad debts and advertising expenses are usually allocated on a) Time ratio b) Sales ratio c) Direct proportion d) Any of these 9. Increase in the value of the company leads to a) Creation of goodwill b) Increase in the value of assets c) increase in profit d) Decrease in the value of liabilities 10. Net asset basis of valuing shares is otherwise called a) Yield basis b) Market value c) Intrinsic value d) None of these PART – B (5X5=25 marks). Answer all the Questions Choosing either (a) or (b) Answer should not exceed 250 words 11. a) What are calls in arrears and calls in advance? Or ::.b) King Ltd forfeited 2,000 equity shares of Rs.10 each fully called up for nonpayment of final call at Rs.2.00 per share. These shares were originally issued at a discount of 10%. The application, allotment and first call money per share at Rs.2.00, Rs.3.00 and Rs.2.00 respectively were received in time. Give journal entry for the forfeiture. 12.a) Draft a pro-forma of Balance sheet of Company. Or

...b) What are pre and post incorporation profits?

13. a) A Co. Ltd and B. Co. Ltd whose businesses are similar in nature, decided to amalgamate and a new company called C. Ltd is formed to take over their assets and liabilities. The following are their balance sheets

Liabilities	A. Co	B. Co	Assets	 A. Co	B. Co

Share capital of 10 each Creditors Reserves Profit & Loss	-	75.000 3.300 4.200 800	2.000	Goodwill Premises Machinery Stock Debtors	30,000 10,000 18,300 16,000 7,500	20.000
Calculate the purchase	 pric	83.300	52.000 	Cash	 1.500 83.300	$\frac{1.000}{52.000}$

Or

...b) What are the various method of amalgamation?

14.a) What are marked and unmarked applications?

Or

.b) A company issued 1.00.000 shares of Rs.10 each. These shares were underwritten as follows; X Rs.30,000 shares and Y Rs. 50,000 shares. The public applied for Rs.70,000 which included marked applications as follows X 1.000 shares and Y 200 shares. Determine the liability of X & Y.

15. a) What are the various methods of valuation of goodwill?

Or

b) Calculate the amount of goodwill on the basis of three years purchase of the last five year's average profits. The profit for the last five years

S.No	Year	Profit Loss	21 N 22	
1	2014	() Particular solution (Procession Con- tingent)	48.000) :) :
2	2015		72,000	i
_3	2016	and the second s	00.000	- 4
4	2017		30.000	5 - 10 A
5	2018		50,000) [

PART - C (5X8=40 marks)

Answer ALL the Questions Choosing either (a) or (b) Answer should not exceed 600 words.

16.a) Smith Ltd invited applications for 5.00,000 equity shares of Rs.10 each payable as follows: on application Rs.2.50, on allotment Rs.3.50, on first call Rs.2.00 and on final call Rs. 2.00. Applications totaled 4.70,000 shares. All the applications were received and all money due were received in time. Pass journal entries: prepare ledger accounts and balance sheet.

Or

...b) Juli Ltd., issued for subscription 5,000 debentures of 100 each at a discount of 3%. The whole of the issue was underwritten by Infant & Co, commission being 2.5% on nominal value. The public subscribed 4,00,000 worth of debentures balance being allotted to Infant & Co who on subsequent date released their holdings in the market. The company took power to issue additional debentures worth Rs.50,000 which were issued to its bank as collateral security against a loan of Rs.40,000. Show ledger accounts and balance sheet.

17.a) A Ltd. was registered with an authorized capital of Rs. 6. 00.000 in equity shares of Rs. 10 each. The following is its Trial Balance on 31st March 2008.

Trial Balance of 'A' Ltd		
	Debit Balance	Credit Balance
	Rs.	Rs.
Goodwill	25,000	
Cash	750	
Bank	39,900	
Purchases	1.85.000	
Preliminary expenses	5,000	
Share capital		4.00.000
12% debentures	:	3.00.000
P & L A/c (Cr)		26.250
Calls-in-arrears	7.500 }	
Premises	$3.00.000^{-1}$	
Plant & Machinery	3,30,000 (
Interim dividend	39.250	
Sales		4.15.000
Stock (1.4.2007)	75,000 ¹	
Furniture & fixtures	7.200	
Sundry debtors	87.000	/
Wages	84,865	
General expenses	6.835	
Freight and carriage	13,115	
Salaries	14.500	
Directors' fees	5.725	
Bad debts	2.110	
Debenture interest paid	18,000	
Bills payable		37.000
Sundry creditors		40,000
General reserve		25,000
Provision for bad debts		3,500

Prepare Profit & Loss Account. Profit & Loss Appropriation account and Balance sheet in proper form after making the following adjustments:

1) Depreciation plant and machinery by 15%

2) Write off Rs. 500 from preliminary expenses

3) Provide for 6 months interest on debentures

4) Leave bad and doubtful debts provision at 5% on sundry debtors

5) Provide for income tax at 50%

6) Stock on 31.3.2008 was Rs. 95,000

Or

17.b) Rearrange the following items under the three heads namely a) Fixed assets. b) Current assets and c) Loans and advances

1. Live stock	11, loose tools
2. Good will	12. trade marks
3. Bills receivable	13. debtors
4. land	14. leasehold

5. Stock in trade	15. stores and spares	
6. furniture	16. vehicles	
7. advances to subsidiary	17. cash at bank	
8. cash in hand	18. work in progress	
9. plant	19. interest accrued	
10. deposit with electricity company		

Liabilities [*]	Amount	Assets	Amount
Issued share capital 10.000 equity share capital of Rs 10 each	1.00.000	Goodwill	10.000
1.00.000 7% preference of Rs 10	1.00,000	Fixed asset	90,000
each			
		Stock in trade	25,000
to activity of the second s		Debtors	30,000
	82	Profit & loss a/c	45,000
	2.00.000		2,00,000

It was resolved that shares of Rs 10 each be reduced to fully paid shares of Rs 6 each and 7% preference shares of Rs 10 each be reduced to 7.5% fully paid preference shares of Rs 7 each. Number of shares in each case remained same, it was further resolved that amount available to be used for writing off the debt balance of profit and loss account, goodwill account completely and other fixed assets as for as possible. There were arrears of preference dividend for the last three years and it was decided that be cancelled. You are required to make journal entries and prepare the revised balance sheet.

Or

(a,b) On 31st March, 2009. Thin Ltd, was absorbed by Thick Ltd., the later taking over all the assets and liabilities of the former at book values. The consideration for the business was fixed at Rs. 4,00,000 to be discharged by the transferee company in the form of its fully paid equity shares of Rs 10 each, to be distributed among the shareholders of the transferor company, each shareholders getting two shares for every share held in the transferor company. The balance sheets of the two companies as on 31st March, 2009 stood as under: (Rs. *000)

Liabilities	Thick Ltd.	Thin Ltd.	Assets	Thick Ltd.	Thin Ltd.
Share capital: authorized			Goodwill	2,00,000	60.000
Issued and Subscribed:	15.00.000	5,00,000	Plant and Machinery	4.12.000	1,00,000
Equity shares of Rs. 10 each,			Furniture	80.000	30.000
fully paid	9,00,000	2.00.000			
General Reserve	1,80,000	50,000	Income Tax Refund		6,000
Profit and Loss Account	20.502	12,900	Stock in Trade	2.65.500	60,000
Workmen's Compensation fund	12.000	9,000	Sundry Debtors	2.21.200	46.000
Sundry Creditors	58.567	30.456	Prepaid Insurance		700
Staff Provident Fund	10.200	4.000	Cash in Hand	869	356
Provision for Taxation	12.300	5,000	Cash at Bank	14.000	8,300
	11.93.569	3.11.356	•	11.93.569	3.11.356

Amalgamation expenses amounting to Rs. 1,000 were paid by Thick Ltd. You are required to: Prepare realization account and equity shareholders account in the books of Thin Ltd. Pass the necessary journal entries in the nooks of Thick Ltd. and Prepare the balance sheet of Thick Ltd. after the amalgamation in the nature of merger.

19.a) Australia Company issued 20.000 shares of Rs.10 each at par which were underwritten as follows: X 4.000 shares: Y 2.000 shares and Z 10.000 shares. Applications were received for 18.000 shares which include marked applications as follows: X 4.000: Y 2.000 and Z 10.000 shares. You are required to prepare a statement showing how many more shares underwriters will have to take.

 ∞ .b) The business carried on by Hussain Bolt was taken over as a running business with effect from 1st July 2016 by North East Ltd., which was incorporated on 1st October 2016. The same set of books was continued since there was no change in the type of business and the following particulars of profit for the year ended June 2017 were available

Particulars	Amount	Amount
Company period sales	40,000	50.000
Prior period sales	10.000	
Selling price	2.000	
Preliminary expenses written off	1,200	
Salaries	3.600	
Directors fee	1.200	
Interest upto 30 th sep 2016	- 700	ł
Variable expenses	1.500	*
Depreciation	-2.800	:
Rent	4.800	
Purchases	25.000	1
Carriage inward	1.019	43.819
Net profit		6.181

The purchase price (including carriage inward) for the company period had increased by 10 percent as compared to pre-incorporation period. No stocks were carried either at the beginning or at the end. You are required to draw up a statement showing the amount of pre and post incorporation profits stating the basis of allocation of expenses.

20.a) The following is the balance sheet of Aswin Ltd as on 31st December 2006

Liabilities	Amount	Assets	Amount
Share capital shares of Rs.5 each	5,00.000	Land & Building	3.00.000
General reserve	1,50,000	Plant & Machinery	3.00.000
Profit & Loss account	80,000	Trade marks	50,000
Workmen savings account	75.000	Stock	1.20,000
Creditors	2.45.000	Debtors	2,00.000
Taxation reserve	1.00.000	Cash at bank	1.50,000
		Preliminary expenses	30,000
	11,50,000		11,50,000

The Land & Building have been valued at Rs.6.50.000 and the Plant & Machinery is worth Rs.2.50.000. Debtors to the extent of Rs.20,000 are to be considered bad. The profit of the company for the last three years have been 2004 - Rs.2.20.000, 2005 - Rs.2.30.000 and 2006 Rs.2.60.000. It is the practice of the company to transfer 25% of the profits to reserve. Ignoring taxation, find out the value of shares. Similar companies give a yield of 10% on the market value of their shares. Goodwill is taken to be of value at Rs.4.00,000.

Or

20.b) The following information is given for a business carried on by Haisan:

- a) Capital employed Rs.1,50,000
- b) Normal rate of profit 10%
- c) Present value of annuity of rupce 1 for five years at 10% 3.78 and
- d) Net profit for five years 2008 Rs.14.400; 2009 15.400; 2010 16.900; 2011 = 17.400 and 2012 17.900.

The profit included the non recurring profits on an average basis of Rs.1.000 out of which it was deemed that even non recurring profits had a tendency of appearing at the rate of Rs.600 per annum. You are required to calculate goodwill (a) as per annuity method, (b) as per five years purchase of super profit and (c) as per capitalization of super profit method.

Reg.No.: Sub.Code: SMC052 de No. 10190E B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021 FIFTH SEMESTER **COMMERCE - MAIN** COST ACCOUNTING (For those who joined in July 2017 Onwards) Maximum: 75 marks Time: Three hours PART - A (10X1=10 marks) Answer all the Questions Choose the Correct answer 1. Overhead cost is the total of All Indirect costs (B) All direct costs (A) Specific costs Direct and Indirect costs (D) (C)2. Operating costing is suitable for Job order businesses (B) Contractors (A) Sugar Industry (D)Service Industries (C)3. Major purpose of ascertained equivalent production is (A) To ascertain cost of output (B) To find profit or loss To control and reduce cost (D)None of these (C)4. Process costing is suitable to industries where Production is carried on in two or more consecutive stages (A) Production is as per customer specification (B) (C) Specialised services are rendered Contracts are undertaken (D)5. P/V Ratio is (B) Price variance ratio Price volume ratio (A) (D) Total cost to sales ratio Contribution to sales ratio (C)6. A key factor is Budget factor (B) Limiting factor (A) None of these Cost factor (D)(C)7. Performance budget is (A) Laying down of objectives Measurement of output in relation to input (B) Fixed Budget Flexible Budgeting (C)(D) 8. Budgeting is a method of costing a Technique (B) (A) Maintainng ledger accounts (D) None of the above (C) Types of standards are 9. 2 (A) 1 (B) (D)3 4 (C)10. Types of direct labour cost 2 (A)(B) (D)3 4 (C)Part B $(5 \times 5 = 25 \text{ Marks})$

Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 250 words

11 (A). M/s. Maha Industries Ltd., are the manufacturing of moonlight torches. The following data relate to manufacture of torches during the month of March 2018.

Raw material consumed Direct wages Machine hours worked Machine hour rate Office overheads Selling overheads Units produced Units sold Prepare cost sheet showi Rs.20,000 Rs.12,000 9,500 hours Rs. 2 20% of works cost 50 paise per unit 20,000 units 18,000 @ Rs. 5 per unit

Prepare cost sheet showing the cost and the profit per unit and the total profits earned. (C) 3 (D) 4

Or

(B). Briefly explain the methods of costing.

12 (A). The following expenses were incurred for the production of 1,500 units of a durable products.

Rose materials institut 2019	Rs.
Materials	3,50,000
Wages	1,20,000
Overheads	80,000

Continuation Sheet

Normal wastage in the process is 2% of the input and the scrap value is Rs.300 per unit. You are required to prepare process account, assuming there was no abnormal loss or gain.

(OR)

12 (B). State the advantages of process costing.

13 (A). Agustus Ltd., presents the following results for one year. Calculate the P/V ratio, BEP and Margin of safety.

in ormation and	RS.
Sales	2,00,000
Variable costs	1,20,000
Fixed costs	50,000
Net profit	30,000

(OR)

(B). What are the limitations of Break Even Chart?

14 (A). The following overhead expenses relate to a cost Centre operating at 50% of normal activity. Draw up a flexible budgeted for the cost centre for operating at 75%, 100% and 125% of normal capacity.

Indicate the basis upon which you have estimated each item of expenses for the different operating level. Rs.

	10
Foreman	60
Assistant foreman	40
Inspectors	65
Shop labourers	40
Machinery repairs	100
Defective works	25
Consumable stores	20
Overtime bonus	-
Machine depreciation	110

(OR)

(B). Enumerate what are the steps involved in preparing flexible budget. 15 (A). From the following data, calculate materials yield variance.

Such per that the	Standard Mix	Actual Mix
Material A	200 units @ Rs.12	160 units @ Rs. 13
Material B	100 units @ Rs.10	140 units @ Rs. 10
Standard loss a	llowed is 10% of output. Ac	tual output is 275 units.

⁽OR)

		(~)	States and the states of the states of the		
(B) Differentiate	between star	ndard costing and	estimated costing.	11 act avceed 600	words
$Part C (3 \times 8 - 40 \text{ thank})$	ounts depart	ment of a compar	iy has supplies the f	following data for	
the supply of 2,000	units of proc	luct.			
Direct materials	40.00)0 tons at Ks. 5 pe	r ton		11
Direct wages	8,000 labou	r hours at Rs. 50 p	ber hour		
Overheads			the products and		1
Variable	factory Rs.1	10 per labour hou	r		
	Selling Rs.	20 per unit	se inter budystudis		
Fixed	factory Rs.				
	Office Rs. 2	2,00,000	1 11 Linkshop	profit of 25% on	
Prepare s statemer	nt showing th	ne price to be fixed	d which will fetch a	pront of 20% of	14
cost.					1. A. S.
		(OR)		de of Aditva	
(B). Following	information h	has been obtained	from the cost record	us of Nullya	
Chemicals Ltd., fo	or 2018.				
Finished goods or	1.1.2018 n	50,000	A SO TO A CONTRACT OF S		
Raw materials on	1.1.2018	10,000	S. A. S. States		
Work in progress	1.1.2018	14,000	1 ×		
Direct labour		1,60,000			
· · · · · · · · · · · · · · · · · · ·	. Lawiala	98.000			

Purchase of raw materials

1,60,000 98,000

		Continua	lion Sheer
	Indirect labour	40,000	
	Heat, light and power	20,000	
	Factory insurance and taxes	5,000	
-	Repairs to plant	3,000	
	Factory supplies	5,000	
	Depreciation – factory building	6,000	
	Depreciation - Plant	10,000	le l
	Other information		
	Factory cost of goods produced i	n 2018	Rs. 2,80,000
	Raw material consumed in 2018		Rs. 95,000
	Cost of goods sold in 2018		Rs. 1,60,000
	No office and a desiriate the		

No office and administrative expenses were incurred during the year 2018. Prepare a statement of cost for the year ending 2018 giving maximum possible information and its break-up.

17 (A). A product passes through three processes 'X', 'Y' and 'Z' to its completion. During September 2018, 5,000 units of finished product were produced and the following expenses were incurred.

Destruction 3	Process X Rs	Process Y Rs	Process Z Rs
Material	5,000	10,000	5,000
Direct wages	25,000	20,000	15,000
Direct expenses	2,500	3,000	5,000

Indirect expenses amount Rs.30,000 which are to be apportioned to the processes on the basis of direct wages. Raw materials worth Rs.30,000 were issued to process 'X. ignore the quotation of process stocks and prepare the process accounts, showing cost per unit in each process.

(OR)

(B). The product of company passes through three distinct processes to completion. They are known as A, B, and C. from past experience it is ascertained that loss is incurred in each process. process A – 20%, Process B – 5% and Process C – 10%. The loss of each process possesses a scrap value. The loss of processes A and B is sold at Rs, 5 per 100 units and that of process C at Rs.20 per 100 units.

The output of each process passes immediately to the next process and the finished units are passes from process C into stock.

Material consumed	6,000	4,000	2,000
Direct labour	8,000	6,000	3,000
Manufacturing expenses	1,000	1,000	1,500

20,000 units have been issued to process A at a cost of Rs.10,000. The output of each process has been as under.

Process A 19,500; Process B 18,800 and Process C 16,000

There is no work in progress in any process.

Prepare Process Accounts. Calculations should be made to the nearest rupee.

18 (A). Selvi Ltd., manufacturing and sells four types of products under the brand name of A, B, C and D. the sales mix in value comprises 331/3%, 412/3%, 162/3% and

8 1/3 % of products A, B, C, and D respectively. The total budgeted sales (100%) are Rs.

60,000 per month.

Operating costs are

Variable cost:

Product A 60% of selling price

B 68% of selling price

C 80% of selling price

D 40% of selling price

Fixed cost: Rs. 14,700 per month. Calculate the BEP for the products on an overall basis and also the B.E. sales of individual products.

(OR)

Continuation Sneet

18 (B). Kumar Itd., presents the following results for one year. Calculate the P/V Ratio, BEP and Margin of Safety.

11.0.
2,00,000
1,20,000
50,000
30,000

19 (A). Angel & Co., uses two materials 'X' and 'Y' to produces a product. For the year 2018, they have planned to sell 2000 units of the product. Production department informs that after providing for normal loss, etc., 5kgs per unit of material 'X' and 2 kgs per unit of material 'Y' are needed for the product.

The stores incharge, after a study of his records and orders placed to the vendors, provides the following details.

provides the following details:	Finished product units	Material X (Kgs)	Material Y (Kgs)
Estimated stock on 1.1.2018	400	1,800	700
Materials on order 1.1.2018		2,000	500
Desired stock on 31.12.2018	600	2,200	800
Estimated materials on order on 31.12.2018	-	1,800	600
Estimated average purchase price during 2018		Rs. 8 per kg	Rs.15 per kg

You are required to prepare a purchase budget for the materials, clearly showing the total cost of estimated purchases.

(OR)

(B). Draw up a flexible budget for production at 75% and 100% capacity on the basis of the following data for a 50% activity. Durinit (DC

	Per unit (KS.)
Materials	100
Labour	50
Variable expenses (direct)	10
Administrative expenses (50% fixed)	40,000
Selling and distribution expenses (60% fixed)	50,000
Present production (50% activity)	1,000 units
A TANALLE DEPENDENT () /	

20 (A). A gang of workers usually consists of 10 men, 5 women and 5 boys in a factory. They are paid at standard hourly rates of Rs. 1.25, Rs. 0.80 and Rs. 0.701 respectively. In a normal working week of 40 hours the gang is expected to produce 1000 units of output. In a certain week, the gang consists of 13 men, 4 women and 3 boys. Actual wages were paid at the rates of Rs. 1.20, Rs. 0.85 and Rs. 0.65 respectively. Two hours per week were lost due to abnormal idle time and 960 units of output were produced. Calculate various labour variances.

(OR)

(B). The standard cost of a chemical mixture is as under:

8 tons of material A at Rs. 40 per ton

12 tons of material B at Rs. 60 per ton

Standard yield is 90% of output

Actual cost for a period is as under:

10 tons of material A at Rs. 30 per ton

20 tons of material B at Rs. 68 per ton

Actual yield is 26.5 tons

Compute all materials variances.

			Reg.No.:
Code No. 10191			Sub.Code: SMCO54
05		EGREE EXAMINATIO	DN, APRIL 2021
OF		FIFTH SEMESTER	
		ARCH METHODOLO	GY
	(For those who	o joined in July 201	7 Onwards)
Time: Thr	ee hours		Maximum : 75 marks
	(Question to be	estarted here)	
Alswer all qu		- A	$(10 \times 1 = 10 \text{ marks})$
Choose the correct an	iswers		
1. Research basically is	S		
a) A point of vi	ew	b) An attitude of	enquiry
c) A step-wise-	step exploration	d) All the above	
2 is a way to	systematically solve the	research problem.	
a) Research me		b) Research desig	gn
c) Research pro	ocess	d) Research oper	
3 is a bl	ue print of action.	01	
a) Research ima	ige	b) Research desig	2n-
c) Research pro	cess	d) Research build	
4is 1	the principle of an experi		
a) Local country		b) Reference	
c) Cost sheet		d) Randomization	1
5 is the part o	of the population or unive		
investigation.		-XO, H.	
a) Research		b) Sample	
c) Research desi	ign	d) Research proce	255
6. Convenience samplin	ng is also called as the	sampling.	
a) Sunk	and an internet	b) Tank	
c) Chunk		d) Multi stage	
7. Data which is collected	ed by someone other than		s
a) Primary data		b) group data	5 <u> </u>
c) raw data		d) secondary data	
8. Face to face interview	v is also called as	a) secondary data	
a) clinical intervi		b) telephone interv	view
c) personal interv			
	not proceed without analy		
a) Interpretation	i i i i i i i i i i i i i i i i i i i	b) Tabulation	
c) Classification		d) Generalisation	
	an integral part of a resea		
a) Classification	an integrar part of a resea		
c) Interpretation		b) Report writing	
protection		212VINIA II A	

$(5 \times 5 = 25 \text{ marks})$

Answer ALL the Questions Choosing either (a) or (b) Answer should not exceed 250 words.

11. a) Distinguish between pure research and applied research.

(Or)

b) Define "research". Why is it necessary?

12. a) What are the factors affecting the research design?

(Or)

b) Explain the advantages of the research design.

13. a) Examine the factors which determine the sample size.

(Or)

b) Explain the needs for sampling.

14. a) What do you mean by unstructured interview?

(Or)

b) Distinguish between questionnaire and schedule.

15. a) Explain the techniques of interpretation.

(Or)

b) What is the purpose of a research report?

PART - C (5X8=40 marks)

Answer ALL the Questions Choosing either (a) or (b) Answer should not exceed 600 words.

16. a) Explain the stages involved in the formulation of research process.

(Or)

b) What are the essential qualities of a good researcher?

17. a) Elaborate the different types of research design.

(Or)

b) What are the features of good research design?

18. a) Write the merits and demerits of sampling.

(Or)

b) Explain the techniques and usefulness of multistage sampling.

19. a) Mention the sources of secondary data.

(Or)

b) Explain the steps that you would adopt to make interview a success.

20. a) What are the precaution to taken during interpretation

(Or)

b) What are steps to be followed in writing a research report?

JEC.	FIFTH SEMESTER			-
	(Quest	ion to be started here		
	Answer all question.	Part – A	(10 × 1 = 10 marks)	
	Choose the correct answers			
•	1. The definition of income is			
	a) inclusive	b) exhaus	tive	
	c) complex	d) simply		
	2. Sec.2 (1A) of Income Tax Act, 196	1 defines income		
	a) casual	b) agricul	tural	
•	c) total	d) gross to	otal	
	3. Sec of the Income tax act exp	plains exempted income		
	a) Sec.80	b) Sec.88		
	c) sec.2	d) sec. 10		
	4. Residential status of an assessee is a	ascertained as per the pro-	ovision of	
	a) sec.6	b) sec.7		
	c) sec.9	d) sec.11		
	5. Notified amount as exemption on g	ratuity is	in the second	
	a) Rs. 10,00,000	b) Rs. 3,0	0,000	
	c) Rs, 3,50,000	d) Rs, 4,0	0,000	
	6. Employer's contribution to RPF is a	exempt upto		
	a) 10% salary	b) 9.5 Sal	ary	
	c) 12% salary	d) 9% sal	ary	
	7. Goss annual value of self occupied	house is		
	a) municipal valuation	b) fair ren	nt	
	c) zero	d) which	ever is less	
	8. Local taxes are generally calculated	d on		
	a) fair rent		pal value	
	c) standard rent	d) minim	um rent	
	9. U/S 44 AB Specified date means		Alera and a second	
	a) 30 th November	b) 30 th Se	ptember	
	c) 31 st July	d) 30 th Ju		
	10. Rate of depreciation on furniture i	is		
	a) 10%	b) 20%		
	c) 15%	d) 25%		

C) 1370

-) -- . -

Part - B

 $(5 \times 5 = 25 \text{ marks})$

Answers ALL questions choosing either (a) or (b) in about 250 words-

11. a) Distinguish between gross total income and total income.

(Or)

b) Define (i) Assessment year (ii) Previous year

12. a) Mr. Laurel, an American citizen comes to India for the first time in the last 25 years on June 15,2018. On oct.20, 2018 he leaves India for Japan. Decide his residential status.

(Or)

b) Mr. Sennappan earns the following incomes during the financial year 2018-19

i. Income from business in USA, controlled from Chennai Rs.1,20,000.

- ii. Income from business in Hyderabad, controlled from USA Rs.1,80,000
- iii. Interest from deposit with an Indian company, received in USA Rs.20,000. Calculate his gross total income for the AY 2019-20 if he is not ordinarily resident.

13. a) Mr. Ramesh retired on 30.06.2018 from a private Ltd., Co., his pension has been fixed on Rs. 4,800 p.m. He got half of his pension commuted and there by receives Rs. 1,50,000. He got his pension commuted during January 2019. Pension is payable on the first day of each month. He received gratuity also. Compute the taxability of pension.

(Or)

b) What are the features of salary?

14. a) Explain the incomes form house property that are fully exempted from tax.

(Or)

 b) Me. Vijay owns a house in Kolkata, which was let out to a tenant during pervious year 2018 - 2019. He submits the following details to you.

Municipal value Rs.1,08,000

Fair rental value Rs. 1,20,000

Standard rent as per rent control Act Rs. 1,02,000

Compute gross annual value.

15. a) Compute business income from the following particulars.

Profit	and	Loss	Account	

Particulars	Rs.	Particulars	Rs.
To General expenses	10,000	By Gross profit	1,00,000
To Salary to staff	12,000	By Commission	10,000
To Purchase of typewritter	10,000	By Rent received	50,000
To Advertisement (in cash)	2,50,000	The investigation press	la de Contaci
To Interest on capital	3,000		
To Net profit	1,00,000	and white Rev \$5,000 [ci-	ner el sans
RY out Sundar sent Res Paul	1,60,000	Least had by died 44 L	1,60,000

(Or)

b) Discuss about general deduction allowed u/s 37.

Part - C

(5 × 8 = 40 marks)

Answers ALL questions choosing either (a) or (b) in about 600 words. 16. a) Define the term Income under the Income tax Act 1961.

(Or)

(01) b) What are the instances of agricultural and Non- agricultural income? 17. a) Mr. Narasiman has received the following income during the P.Y. 2018-2019.

Salary received in India for five months	Rs
Income from house property in India (computed)	15,000
Interest on savings bank deposit in SBI	12,350
Amount brought to India out of most of a start of a	5,000
Amount brought to India out of past untaxed profit earned in France Income from Agriculture in Malaysia being invested in India	25,000
Income from business in Singapore being controlled from India	10,000
Dividend received in Germany from From From From India	35,000
Dividend received in Germany from French companies, of which Rs.5,000 was remitted to India	50,000

You are required to compute total income of Mr. Narasiman for the A.Y.2019-20, if he is

- Resident and ordinarily resident
- ii. Resident but not ordinarily resident
- iii. Non-resident

(Or)

b) Mr. Vijai, a foreigner, came to India from Poland for the first time on 1st April 2012.He stayed here continuously for 3 years and went to France on 1st April 2015.He however, returned to India on 1st July 2015 and went Poland on 1st December 2016. He again came back to India on 25th January 2019 on service in India. Find out his residential status for the assessment year 2019-20.

18. a) From the following particulars, compute salary income

- Basic salary Rs. 13,000 p.m. 1.
- Dearness allowance Rs. 900 p.m. of which Rs. 500 p.m. enters into pay for service
- ii. benefits.
- Bonus Rs.8,400 iii.
- Salary in lieu of leave Rs. 3,000 iv.
- Entertainment allowance Rs. 1,500 p.m.
- Reimbursement of conveyance expenditure incurred for performing duties Rs. 200. V.
- vi.

 - Furnished house at concessional rent of Rs. 800 p.m. in Chennai. Fair rental value Rs.
- 2,500 p.m. Cost of furniture Rs. 35,000. Salary of Gardener Rs. 1,000 p.m. vii.
- Club bills paid by employer Rs. 2,200 p.a. Contribution by employer and employee to R.P.F - 13% (each) of salary viii.
- ix.
- Reimbursement of medical expenses Rs. 2,600 Х.
- Life insurance premium paid by employee: Own life Rs.3,000 p.a. Wife's life xi.
 - Rs.4,000 p.a. Major Son Rs. 2,000 p.a.
- Amount deposited in ELSS 2017 Rs.2,400 xii.
- Contribution to public provident fund Rs.2,000 xiii.

(Or)

- b) What is provident fund? Explain its types. 19. a) Compute the income from house property of Mr. Fransis for the assessment year
 - - 2020 from the following particulars.

Rent received Rs. 90,000; Municipal value Rs. 86,000; Fair rental value Rs. 87,000; Standard rent Rs. 96,000; Municipal taxes paid by tenant Rs. 1,500; Fire insurance premium Rs. 500; Ground rent Rs. 600; Repairs Rs. 12,000; Interest on housing loan Rs. 10,000

1

(Or)

b) What are the factor determining the Gross Annual Value.

When a house property is let our for full year -self occupied during whole of the previous year -let for a part of the year and self occupied for remaining part of the year-let out a part of the year because it is either purchased or constructed during the previous year-self occupied and a part is let out-let out with vacancy-let out with unrealized rent

20. a) Mr. Saravanan is a leading lawyer in Tamil Nadu, who maintains books of account on cash basis. He has furnished the following information regarding his income for the year ending on 31.03.2019. Determine his taxable income for the P.Y. 2018-2019

Receipts	Service of	Rs.	Expenditures	Rs.
To Balance b/d		25,000	-	7,000
To Fees from clients			By Salary to staff	18,000
2017-18	34,000		By Purchase of law books	6,000
2018-19	18,000	52,000	By Office rent	0,000
To Special commission fees	S	22,000	2017-18 12,000	
To Presents from clients		8,000	2018-19 8,000	
To Dividend		5,000	By Income tax	27,000
	6 9/13		By Office repairs	10,000
			By Purchase of a typewriter	5,000
		and the second second	By Balance c/d	1,90,000
A 11/2 11 A		1,12,000		1,12,000

Additional information

i) Depreciation of car is Rs. 5,000 (50% used for personal purposes)

ii) Typewriter was purchased on 31.12.2018

·-- (Or)

b) What are the admissible expenses under profit and gains?

Code No. 10194E

Reg.No.:

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021 FIFTH SEMESTER COMMERCE - Main MAJOR ELECTIVE - LOGISTICS MANAGEMENT (For those who joined in July 2017 Onwards)

Time: Three hours

Maximum: 75 marks

1

Sub.Code: SEC05C

PART – A (10X1=10 marks) Answer all the Questions Choose the Correct answer

1. Which includes design and administration of systems to control the flow of materials,

WIP and finished inventory to support business unit strategy?

- (a) Materials Management
- (b) Supply Chain Management
- (c) Logistics Management
- (d) Bill of Materials

2.

and physical distribution are the two major operations of logistics.

- (a) Supply Chain Management
- (b) Materials Management
- (c) Logistics Management
- (d) Bill of Materials
- 3. Warehouses are used by
 - (a) Manufacturers
 - (b) Wholesalers
 - (c) Suppliers
 - (d) All of the Above
- 4. ______ is the secured area in which dutiable goods may be stored, manipulated, or undergo manufacturing operations without payment of duty.
 - (a) Co-Operative Storage
 - (b) Bonded Storage
 - (c) Public Storage
 - (d) Private Storage

- is any unexpected event that disrupts Logistics System.
- (a) Breakdown
- (b) Variance

5.

- (c) Natural Calamity
- (d) External Uncertainty
- 6. Minimum Inventory Level can also be called as
 - (a) Minimum Goods level
 - (b) Minimum Stock level
 - (c) Minimum Product level
 - (d) Minimum Order level
- helps in electronic transmission of data between your company and the businesses partners with whom you are working
 - (a) Electronic Data Interchange
 - (b) Electronic Data Interrupt
 - (c) Electronic Data Intercept
 - (d) Electronic Data Information
- 8. The Lead Time Demand + Safety Stock is equal to
 - (a) Restore Point
 - (b) Order Point
 - (c) Reorder Point
 - (d) Safety Point

 a software application, designed to support and optimize storage functionality and distribution centre management

- (a) Logistics Management System
- (b) Warehouse Management System
- (c) Network Management System
- (d) Storage Management System

10. _________ supervise incoming goods, storage of goods and the preparation and shipment of orders.

- (a) Inventory Manager
- (b) Warehouse Manager
- (c) Logistics Manager
- (d) Distribution Manager

PART B - (5 X 5 = 25 Marks)

Answer ALL Questions, Choosing either (a) or (b)

Answer Should Not Exceed 250 Words

11. (a) Give a short note on Logistics Management.

Or

(b) Briefly explain the objectives of Logistics Management.

12. (a) Explain briefly about the Integrated Logistics Management.

Or

(b) State the importance of Logistics Network Design.

13. (a) Write a short note on Rapid Response Logistics.

Or

(b) How to minimize the variance in the Logistical Services?

14. (a) How to determine the Inventory Order Point in Logistics?

Or

(b) Briefly explain about the application of New Information Technologies in Logistics Industry.

15. (a) What are the Functions of Transportation in Logistics Services?

Or

(b) How to develop Warehouse Resource Management?

PART C - (5 X 8 = 40 Marks)

Answer ALL Questions, Choosing either (a) or (b) Answer Should Not Exceed 600 Words

16. (a) Elaborate the scope and functions of Logistics Operations.

Or

(b) Explain the development of Logistics Development in the context of IT Development.

17. (a) Enumerate the functions of Transportation in Logistics Management.

Or

(b) Discuss the evolution of transportation and packaging.

18. (a) Discuss in detail about the various barriers to internal integration in Organisational Structure.

Or

(b) Enumerate the steps involved in minimizing the Inventory Costs in Logistical Services.

19. (a) Discuss in detail about the Principles of Logistics Information System.

Or

(b) Enumerate the importance of Logistics Information Flow in Business.

20. (a) Explain in detail about the Principles of Transportation Infrastructure.

Or

(b) Explain in details about the ways of Strategic Storage in Logistics Management.

4

Code No.10197E

Reg No : ___

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021 Sub.Code: SMCO64 SIXTH SEMESTER COMMERCE-MAIN AUDITING

(For those who joined in July 2017 onwards) Time: Three hours

Maximum: 75 marks PART-A (10X1=10 marks)

Answer all the Questions Choose the Correct answer

1. Auditing is the process of _____.

b. Vouching c. Verification of items in Balance sheet d. All of the above a. Checking

2. _____ is one of the essential qualities of good working paper.

a. Completeness b. Coherence c. Connectivity d. Conciseness

3. Internal check is one of the modes of executing _____.

a. Internal audit b. Internal Control c. Interim audit d. Audit programming 4. Internal control and internal check are the parts of ______.

a. Internal audit b. Internal Control c. Interim audit d. Audit programming

5. Testing the truth of the items appearing in the books of accounting is called _____

a. Vouching b. Valuation c. Verification d. Voucher

6. Vouching is done _____.

a. Throughout the year b. once a month c. Once in six month d. End of year 7. The assets purchased for permanent equipment not for resale is called _____

a. Current asset b. Fixed asset c. Deferred assets d. Liquid asset

8. The whole of the stock is valued at the rate of latest purchases made under _____ method of stock taking.

a. FIFO(First In First Out) c. Base stock

b. LIFO(Last In First Out) d. Average.

9. Auditor of Government companies appointed by _____

a. President c. Comptroller of Auditor General

b. Prime Minister d. Judge of High Court

10. If the auditor is dissatisfied with the accounts presented, he issued ______ report.

a. Qualified report b. unqualified report c. Negative report

d. Formal report

PART - B (5X5=25 marks) Answer all the Questions Choosing either (a) or (b) Answer should not exceed 250 words

11.a. Give the meaning and definition of Working Papers.

(or)

b. What are the advantages of audit programme?

12.a. Bring out the objectives of Internal Check.

(or)

b. State the meaning and types of Internal Control.

13.a. What are the types of Vouchers?

(or)

b. Write a short note on Vouching?

14.a. Point out the objectives of Verification.

(or)

b. Write about the valuation of assets and liabilities.

15.a. Who appoints the first auditors of a company?

(or)

b. State the procedure for removal of an auditor.

PART ~ C (5X8=40 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words 16.a. As an auditor discuss the preliminary steps taken before auditing.

(or)

b. State the characteristics of a Good working papers.

17.a. Give a scheme of internal check with regard to payment of wages.

(or)

b. Point out the scope of internal control.

18.a. Mention the points borne in mind while vouching of cash book.

b. Describe the objectives of vouching.

19.a. Discuss the verification of different types of liabilities.

(or)

b. Elucidate the schemes of valuation of stock.

20.a. Discuss the duties of the company auditor.

(or)

b. Explain the contents of auditor's Report.

Code No.10198E

MAJOR ELECTIVE - INCOME TAX LAW AND PRACTICE - I (For those who joined in July 2017 onwards)

Time: Three hours

Maximum : 75 marks

PART-A (10X1=10 marks) Answer all the Questions Choose the Correct answer

1. Which of the following is not a capital asset ?

a) agriculture land b)jewellery c) stock-in-trade d) goodwill

2.Exemption u/s 54B is allowed for investment in

a) shares b) agricultural land c) non-agricultural land d) residential house

3. Rate of TDS on unlisted company securities is :

a) 30% b) 12% c) 10% d) 11%

4.Income from maintenance of race horses is taxable under the head :

a) salaries b) income from business c) income from other sources d) capital gain

5.Loss from house property can be carried forward for

a) unlimited period b) 4 years c) 5 years d) 8 years

6.Unabsorbed depreciation can be carried forward for

a) unlimited period b) 4 years c) 5 years d) 8 years

7. Which of the following donations is eligible for 100% deduction ?

a) Indira Gandhi memorial fund b) J.N Memorial fund c) National cultural fund

d) PM National drought relief fund

8. How much is allowed as deduction u/s 80 DD for severe disability ?

a) Rs.10,000 b) Rs.50,000 c) Rs.1,25,000 d) none of these

9.An individual resident in India aged 80 years or more is exempted to pay income tax on his total income upto

a) Rs.1,80,000 b) Rs.2,00,000 c) Rs.2,50,000 d) Rs.5,00,000

10. Rate of income tax on winning from lottery , horse races is

a) 10% b) 15% c) 20% d) 30%

PART-B (5X5=25 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 250 words

11. a) Calculate the taxable capital gain from the particulars given below:

(a) Net consideration of a residential house Rs.10,00,000 (2.6.2019) [CII:289] (b) Cost of acquisition of the house Rs.3,00,000 (1.5.2007) [CII:129]

(c) New house acquired on 1.9.2019 for Rs.2,00,000.

b) What is LTCG ?

12. a) Mr. Kumaran's investments during the year ended 31st March 2020 Consisted of the following: (a) Rs.25,000, 7% Government securities.

(b) Rs.15,000, 8% Agra Municipal Bonds.

(c) Rs.10,000, 7 year post office National savings certificates.

(d) Rs.10,000, 6% securities issued by a foreign government.

Find out his income from other sources.

b) Compute "income from other sources" (の) (の) 2019-20 :

Amount won from Lottery	Rs.
13	80,000
Betting on horse racing	8,000
Amount received from Lottery	63,000
Betting on horse racing received	42,000
Income from Lottery	
Betting on horse racing	1,800
	1,000

(Or)

13. a) Calculate the total income of Ms.Priya from the following :

	Rs.
House property loss	70,000
Long term capital loss	15,000
Short term capital gain	40,000
Other sources income	30,000
	50,000

b) From the following particulars, compute gross total income:

	Rs.
Gain from Asset 'A' (Short-term)	3,12,000
Loss from Asset 'A' (Short-term)	80,000
Gain from Asset 'A' (Long-term)	5,56,000
Loss from Asset 'A' (Long-term)	5.90.000
	5.50.000

14. a) The gross total income of Mr.Babu is Rs.7,50,000. He has made the following donations. Calculate his net income.

	Rs.
(a) National foundation for communal harmony(b) National children's Fund(c) National Defence Fund	15,000 30,000 37,500
(M)	

b) Calculate the deduction allowable u/s 80GG to an assessee having the following incomes for the previous year 2019-20.

Rusinose in a	Rs.
Business income	1,10,000
Interest from Bank	10,000

Rent paid by him for a house occupied by him for the purpose of his residence is Rs.1,250 per month.

15. a) Compute the total income of Mr. Rahim from the particulars given below:

		Rs.
(a) Business income	(+) :	1,50,000
(b) Loss from self-occupied house	(-)	30,000
(c) Short term capital gain from Jewellery	(+)	8,000
(d) Short term capital gain from shares which are		
subject to securities transaction tax	(+)	65,000
b) Balu, a teacher in a college affiliated to Madurai Kamarai	1'7	

particulars on the basis of which compute his total income for the AY 2020-2021.

(a) Salary @ Rs.8,000 p.m: Rs.96,000

81 43

(b) Wardenship allowance Rs.1,000 p.m: Rs.12,000

- (c) Examinership remuneration from the university Rs.5,400
- (d) Royalty from books and articles Rs.18,000
- (e) Winning from card games in a club Rs.6,400
- (f) Winning from state lotteries Rs.20,000
- (g) Expenditure on purchase of lottery tickets Rs.10,000

PART-C (5X8=40 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words

16.a) Mr. H submits the following particulars about sale of assets during the year 2019-20.

Particulars	T		
	Jewellery Rs.	Plot Rs.	Gold Rs.
Sale price	2,40,000	5,24,000	- <u></u>
Expenses on sale	-		3,00,000
Cost of acquisition	64.000	24,000	-
Year of acquisition	64,000	2,10,000	1,00,000
	2007-08	2004-05	2009-10
C.I.I	129	113	148
			1.00

the bas purchases a trause to RSA 2,00,000 are 232020. Calculate the amount of taxable capital gain if C.I.I for 2019-20 is 289. (OY)

b) Which assets are not included in capital assets ?

17.a) Sri Anand has the following investments for the previous year ended 31-3-2020:

(a) 10% Rs.30,000 Govt. securities

- (b) 10% Rs.40,000 Karnataka Govt. Ioan
- (c) 10% Rs.30,020 tax free debentures of a company
- (d) 10% Rs.20,000 Debentures (listed) of a tea company
- (e)Rs.7,110 received as interest on debentures of an unlisted company
- (f) Received Rs.18,000 as interest on tax free debentures of a (listed) company

He paid commission to his bank Rs.500 for collecting the above amounts. Find out his taxable Income from 'other sources' for the AY 2020-2021.

(N)

b) What is casual income ? Give examples .

18. a) Following are the details relating to Srivatsan, a resident Indian, aged 57, relating to the year

Income from salary	Rs.
	2,20,000
Loss from HP	1,90,000
Loss from cloth business	
Income from speculation business	2,40,000
Loss from specified business covered u/s 35AD	30,000
LTCG on sale of urban land	20,000
LTCG on sale of listed shares (STT paid)	2,50,000
	1,10,000
Loss from card games	32,000
Income from betting	
Life insurance premium paid	45,000
life the total in-	1,20,000

Compute the total income and show the items eligible to carry forward.

U.

b) From the following information submitted to you, compute the total income of A for the assessment year 2020-2021 assuming he is not allowed any deduction under sections 80C to 80U.

	Rs.
Income from salary	1,80,000
Income from house property	
Business loss	40,000
Loss from a second state	(-) 1,90,000
Loss from a specified business	
referred to in section 35AD	(-) 60,000
Short-term capital loss	
Long-term capital gain	(-) 60,000
Ar. X's gross total income is Rs.6.00.000 for the province	2,40,000
Bross total income is Rs.6,00,000 for the proving	

19.a) M ne is Rs.6,00,000 for the previous year 2019-20. He paid for the following items: Rs. (i) He contributed towards medical in

insurance premium by cheque	16,000
(ii) He contributed towards pension fund of LIC of India	10,000
(iii) He paid interest on loap taken for pure in the second filling	12,000
(iii) He paid interest on loan taken for pursuing his higher study in management	15,000
(iv) He donated to National Defence Fund	10,000
Compute his total income.	10,000

(OY)

b) Write a brief note on TDS.

•

•

20.a) From the following particulars, work out the tax payable by Mrs. Pinto, aged 70 years in respect of AY 2020-2021:

Family pension (Gross)	Rs.2,25,000	
Income from HP (Net)	Rs.5,22,000	
Income from other sources :		
Interest on bank deposits	Rs.45,000	
Income from horse racing	Rs.60,000	
Capital gain on transfer of land-long term		
Agricultural income	Rs.45,000	
	Rs.75,000	

b) State the rates of income tax for individuals.

Code No.10199E

Reg.No.	•
1201	

Sub.Code: SECO6B

B.Com. (CBCS) DEGREE EXAMINATION, APRIL 2021

SIXTH SEMESTER

COMMERCE-MAIN

MAJOR ELECTIVE - RETAIL MANAGEMENT

(For those who joined in July 2017 onwards)

Time: Three hours

Maximum : 75 marks

PART-A (10X1=10 marks)

Answer all the Questions Choose the Correct answer

1	 All activities involved in selling goods or ser 	vices directly to final consumers for their personal
	non-business use are called	and an easily to find consumers for their personal
	(a) Retailing	(c) distribution
	(b) Wholesaling	(d) processing and maintaining
2.	Retailers are referred to as	() processing and manifesting
	(a) Intermediaries	(c)competitors
	(b) Prospects	(d) marketing consultants
3.	Hyper market originated from	, a marketing consultants
	(a) U.S.A	- (c) U.K
	(b) Germany	(d) Franco
4.	Retailers who sell leftover goods, overruns a	nd irregulars obtained from manufacturers are
	'	numegulars obtained from manufacturers are
	(a) Off price retailers (c) hyper markets	
	(b) Super stores (d) catalogue showroom	
5.	The store format which is more spacious	
	(a) Super store (c) metro store	 ^
	(b) Compact superstore (d) express store	
6.	It would involve a large section of the countr	
	(a) Market area	
	(b) Primary trading zone(d) secondary zone	(c) region
7.	Brands which carry the retailers name are kn	
	(b) intellectual	
8.	Store brands are sold	erics
	(a) Exclusively within their own chain stores	
	(b) Anywhere	
9.	There should be a particular level of inventory	(d) grey market
	(a) Basic stock method (c) week'	available at all times.
	(b) Porcontage units	s supply method
10.	"It is the lowering of the prices of the manual	stock to sales method
	(a) Markdowns (c) shrinkage	ndise so that the reduction acts as a promotion".
	(b) Employee discounts (c) sinnikage (d) scrap valu	
		Je la

PART-B (5X5=25 marks)

Answer all the Questions Choosing either (a) or (b) Answer should not exceed 250 words

- 11. (a)What is unorganised retailing? (or) (b)Trace out the growth of retailing in India.
- 12. (a)State the characteristics of chain stores. (or)

(b)Mention the features of departmental stores.

13. (a)What do you mean by tertiary zone? (or)

(b)Distinguish between a retail park and shopping mall.

14. (a) What are the objectives of promotion? (or)

(b)What is in-store layout?

15. (a)Specify the retailers response to the changing customers. (or)

(b)What is the purpose of information gathering?

PART-C (5X8=40 marks) Answer all the Questions Choosing either (a) or (b) Answer should not exceed 600 words

- 16. (a)Write a note on contemporary retailing in India. (or) (b)How can you manage the business?
- 17. (a)Compare traditional retailing with modern retailing. (or) (b)Write a note on vertical marketing system?
- 18. (a)Enumerate the impact of IT on the modern retail business. (or) (b)Discuss the issues to be considered in site selection.
- 19. (a)Analyse the key areas in merchandisemanagement. (or) (b)What are the factors influencing retail pricing?
- 20. (a)What are the tools available for information gathering? (or) (b)How do you understand your customers?

(6 pages)

Reg. No. :

Code No. : 10058 E Sub. Code : JMCO 53/ SMCO 53

> B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021.

> > Fifth Semester

 $\operatorname{Commerce}-\operatorname{Main}$

BUSINESS LAW

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

1. An offer can be communicated

(a) Any time

(b) Before it can be accepted

(c) After acceptance

(d) None of the above

- 2. An acceptance is said to be general when it is made
 - (a) To a definite person
 - (b) To the public at large
 - (c) To a group of persons
 - (d) None of the above
- 3. The limitation of the period for recovery of money in India is
 - (a) 2 years (b) 3 years
 - (c) 4 years (d) 8 years
- 4. The limitation period to file a suit to enforce payment of money secured by a mortgage is
 - (a) 6 years (b) 12 years
 - (c) 18 years (d) 20 years
- 5. The legal relationship between the middlemen and the business person is governed by
 - (a) Law of surety (b) Law of business
 - (c) Law of agency (d) None of the above Page 2 Code No.: 10058 E

- 6. The person who is represented by the agent is called the
 - (a) Principal (b) Principle
 - (c) Middlemen (d) None of the above
- 7. Delivery of goods by one person to another as security for repayment of a debt is known as
 - (a) Pledge (b) Bailment
 - (c) Installment (d) Hire Purchase
- 8. Transfer of ownership of goods by one person to another for some specific purpose is called as
 - (a) Pledge (b) Bailment
 - (c) Mortgage (d) None of the above
- 9. A contract for the sale of 'future goods' is
 - (a) Sale (b) Agree to sell
 - (c) Void (d) Voidable
- 10. In a hire-purchase agreement, the hirer
 - (a) Has an option to buy the goods
 - (b) Must buy the goods
 - (c) Must return the goods
 - (d) Is not given the possession of the goods

Page 3 Code No. : 10058 E

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What is acceptance?

 \mathbf{Or}

- (b) What is consideration?
- 12. (a) Who must perform a contract?

Or

- (b) What is Quasi contracts?
- 13. (a) What do you mean by Contract of Guarantee?

Or

- (b) What are the essentials of contract of agency?
- 14. (a) What are the rights of an agent?

Or

(b) What are the duties of an agent?

Page 4 Code No. : 10058 E [P.T.O.] 15. (a) What are the rights of an unpaid seller?

 \mathbf{Or}

(b) Who is an unpaid seller?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain (i) Valid (ii) Void (iii) Voidable (iv) Illegal.

\mathbf{Or}

- (b) What are the kinds of offer?
- 17. (a) What are the remedies available for breach of contract?

 \mathbf{Or}

- (b) Explain about the Discharge of Contract.
- 18. (a) What are the rights to surety?

Or

(b) Distinction between a contract of indemnity and a contract of guarantee.

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19. (a) What are the kinds of agents?

Or

- (b) What are the Different ways of creating an agency?
- 20. (a) What are the various types of goods?

\mathbf{Or}

(b) Distinction between the condition and warranty.

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(6 pages) **Reg. No. :**

Code No. : 20468 E Sub. Code : SACR 41

B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2020.

Fourth Semester

Corporate Secretaryship – Allied

CORPORATE FINANCE

(For those who joined in July 2017 onwards)

Time : Three hours Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Corporate finance relates to mobilization and ______ of finance.
 - (a) pooling
 - (b) managing
 - (c) utilization
 - (d) contracting

- 2. Internal source of financing corporate bodies include
 - (a) share holders
 - (b) debenture holders
 - (c) ploughing back of profit
 - (d) public deposits
- 3. Financial leverage is the relation between
 - (a) Assets and liabilities
 - (b) Debt and capital
 - (c) Debt and liabilities
 - (d) Capital and surplus
- 4. Fixed capital needs are to be preferably met by
 - (a) bank credit (b) trade credit
 - (c) shares (d) cash credit

5. Over capitalization is caused due to

- (a) under valuation of assets
- (b) Excessive depreciation
- (c) Idle funds
- (d) Increasing value of fixed assets

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- 6. Under capitalization refers to depend on
 - (a) owners capital
 - (b) ploughing back of profit
 - (c) borrowed capital
 - (d) reserves and surplus
- 7. Working capital is also called as ______ capital.
 - (a) Earning (b) Invested
 - (c) Hidden (d) Circulating
- 8. Fluctuating working capital can be well financed by
 - (a) Term loans (b) Short term funds
 - (c) share capital (d) long term funds
- 9. Money market is characterized by
 - (a) low return in interest
 - (b) extends more than one year
 - (c) low safety
 - (d) high risk
- 10. Capital market consists of
 - (a) trade credit (b) bank credit
 - (c) secondary market (d) black market

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain nature of corporate finance.

Or

- (b) Describe the nature of long term financial needs.
- 12. (a) Discuss the need for financial leverage.

Or

- (b) State the different kinds of short term capital needs of an organization.
- 13. (a) Narrate the significance of studying capitalization.

 \mathbf{Or}

- (b) Describe the causes for under capitalization.
- 14. (a) Explain the concepts of regular and fluctuating working capital.

Or

(b) Discuss the importance of working capital.

Page 4 Code No. : 20468 E [P.T.O.] 15. (a) State the nature of capital market.

Or

(b) What are hybrid securities?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Enumerate scope of corporate finance.

Or

- (b) Explain the various functions of finance.
- 17. (a) Describe the significance and methods of effecting operating leverage.

Or

- (b) Discuss the pros and cons of using different sources of providing long term capital.
- 18. (a) Examine the causes and effects of over capitalization.

Or

(b) Narrate the effects and remedies for under capitalization.

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19. (a) Describe the various determinants of working capital.

 \mathbf{Or}

- (b) Explain various sources of financing regular working capital in an organization.
- 20. (a) Examine the role of different players of money market.

Or

(b) Review the recent trends in Indian capital market.

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Reg. No. :

Code No. : 10097 E Sub. Code : SECO5A

B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

Commerce — Main

Major Elective — INCOME TAX LAW AND PRACTICE -I

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL the questions.

Choose the correct answer :

1. Income Tax Act currently in force is

(a)	IT Act 1922	(b)	IT Act 1944

- (c) IT Act 1956 (d) IT Act 1961
- 2. The term income includes ______.
 - (a) Legal income only
 - (b) Legal and illegal incomes
 - (c) Illegal income only
 - (d) None of the above

3.	Income	accrued	and	received	outside	India	is
	taxable	in the hai	nds of	?	·		

- (a) Non-resident
- (b) Resident and ordinarily resident
- (c) Resident and not ordinarily resident
- (d) None of these
- 4. Allowances of MP/MLA or MLC are
 - (a) Fully exempted (b) Fully taxable
 - (c) Partly exempted (d) None of these
- 5. Statutory limit of exemption of leave encashment is _____.
 - (a) Rs. 3,50,000 (b) Rs. 3,00,000
 - (c) Rs. 5,00,000 (d) Rs. 2,50,000
- 6. House rent allowance is _____.
 - (a) Fully exempted
 - (b) Partly taxable
 - (c) Fully taxable
 - (d) Actual rent paid alone is taxable

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- 7. Expected rent cannot exceed ______.
 - (a) Municipal rent
 - (b) Fair rental value
 - (c) Actual rental value
 - (d) Standard rental value
- 8. Maximum loss possible on self occupied property is
 - (a) Rs. 10,000 or Rs. 50,000
 - (b) Rs. 20,000 or Rs. 1,00,000
 - (c) Rs. 30,000 or Rs. 2,00,000
 - (d) Rs. 1,00,000 or Rs 3,00,000
- 9. Contribution made to an approved scientific research association is eligible for deduction upto
 - (a) 50% (b) 80%
 - (c) 100% (d) 175%
- 10. Gifts from clients are _____.
 - (a) Professional income
 - (b) Income from other sources
 - (c) Non taxable item
 - (d) None of these

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Define the term 'Income' under the income tax Act 1961.

Or

- (b) Define (i) Assessment year (ii) Previous year
- 12. (a) Show how the following incomes are to be assessed in the hands of an assessee who is (i) Resident (ii) Non- Resident and (iii) Not-ordinarily resident.
 - (1) Salary drawn during the year for employment outside India from Government of India Rs. 93,500.
 - (2) Salary drawn for employment in London office of an Indian company for three months Rs. 18,000.
 - (3) Profits earned abroad and received in India Rs. 25,000.
 - (4) Profit earned from business transactions outside India and kept in bank there Rs. 18,000.
 - (5) Dividend received from an Indian company Rs. 3,000.

Or

(b) Define 'Resident of India' and 'Non Resident of India.'

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(a) What do you mean by perquisite? Give any four examples.

Or

- (b) Compute gross salary from information given below.
 - (i) Salary @ Rs. 25,000 p.m.
 - (ii) D.A. @ Rs. 5,000 p.m (Rs. 2,500 p.m. enters into pay for service benefits)
 - (iii) Advance salary for two months Rs. 55,000.
 - (iv) Employer's contribution to R.P.F. Rs. 3,500 p.m. .
- 14. (a) Compute Net Annual Value from the following:

Actual rent received Rs. 72,000

Municipal rental value Rs. 60,000

Fair rental value Rs. 66,000

Municipal tax paid 10% of MRV.

Or

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	(b)	Calcu below		GAV fro	om the	particular	rs given
		MRV Rs. 60,000 p.a. FRV Rs. 66,000.					
		(i)				. 72,000 j 69,000 p.a	
		(ii)				. 63,000 j 69,000 p.a	
15.	(a)				g profit ess incon	and loss ane.	account,
	Parti	culars	3	Rs.	Parti	iculars	Rs.
To O	ffice s	alary		6,500	By Gros	ss profit	40,000
To provision for bad 3,000 H debts			By Com	mission	5,000		
To interest on capital 2,000			2,000	By Rent building		500	
To Depreciation 1,200							
To Advertisement 2,000							
	ire ins ding)	suranc	e	3,000			
To Sa	ales ta	ax		1,000			
To N	et pro	fit		26,800			
			_	45,500			45,500
				Or			

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	-	s and payments	for the
previous Recein	•	o-19. Payments Accoun	ts
neeerp	Rs.	uyments needun	Rs.
To Balance b/d	6,540	By Rent	2,400
To Legal fees	84,400	By Telephone	3,000
To Salary (as a part time Lecturer)	3,600	By Salaries	2,400
To Interest on debentures	2,700	By Subscription to law journal	240
To Gift from clients	10,000	By Travelling	560
To Rent	6,000	By Office expenses	600
To Interest on foreign security	8,000	By Purchases of stamp paper	1,600
To Refund from compulsory deposit	2,000	By Interest on loan	870
		By Donation to a school	5,000
		By Income tax paid	8,420
		By Municipal tax	600
		By LIC premium	6,000
		By Wealth tax	1,600
_		By Balance c/d	89,950
	1,23,240		1,23,240
	Pag	e 7 Code No. :	10097 E

Mr. Kedambi, an Advocate, furnishes the

(b)

- (i) The loan was borrowed for construction his residential house. Its rental value is Rs. 300 per month.
- (ii) School is recognized for I.T. Purposes.
- (iii) Gift from clients includes Rs. 2,000 received from his father.

Compute the professional income.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Distinction between Direct tax and Indirect tax.

\mathbf{Or}

- (b) What are 'Total income' and 'Gross total income'?
- 17. (a) Explain any eight exempted incomes.

Or

(b) On 1-6-2016 'B' a Malaysian citizen left India after a continuous stay of 10 years. During the financial year 2017-18, he came back to India and stayed for a period of 46 days and

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left. In the previous year 2018-19, he came back to India on 10-10-2018 and stayed here thereafter for one year.

Determine 'B' s residential status for the assessment year 2019-20.

- 18. (a) Compute gross salary from information given below for each situation separately :
 - (i) Salary @ Rs. 30,000 p.m.
 - (ii) D.A. @ Rs. 6,000 p.m.
 - (iii) C.C.A. @ Rs. 1,000 p.m.
 - (iv) House Rent Allowance @ Rs. 8,000 p.m.
 - (v) Commission on turnover achieved by him is Rs. 40,000.

Situation

- (1) Living in own house.
- (2) Living in rented house at Delhi as D.A. enters into pay for retirement benefits and rent paid is Rs. 7,000 p.m.
- (3) Living in rented house in Chandigarh and D.A. does not enter into pay retirement benefits and rent paid is Rs. 10,000 p.m.

Or

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(b) Dr. GS is employed in Anjana Software (P) Ltd., as Chief Secretary at Hyderabad.

She gives the following details for the previous year.

Pay	Rs. 1,80,000 p.a.
DA	Rs. 80,000 p.a.
CCA	Rs. 15,000 p.a.
HRA	Rs. 25,000 p.a. (she
	pays Rs. 1,250 per
	month as rent)

Academic research

allowance	Rs. 2,000 p.m.
Uniform allowance	Rs. 1,000 p.m.
Conveyance allowance	Rs. 1,500 p.m.
Education allowance	Rs. 7,200 p.a. [Rs. 300 per child per month for her two children]
Hostel allowance	Rs. 4,800 p.a. (Rs. 200 per child per month for her two children)

Calculate Gross Salary.

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19. (a) Mr. B owns a house proconsists of 3 independent of a bout the below :	endent units and			
UNIT 1 : Own residence				
UNIT 2 : Let out				
UNIT 3 : Own business				
MRV	1,20,000 p.a.			
FRV	1,32,000 p.a.			
Standard Rent	1,08,000 p.a.			
Rent	3,500 p.m.			
Unrealised rent	For three months			
Repairs	10,000			
Insurance	2,000			
Interest on money borrowed for the construction of property	96,000			
Municipal Taxes	14,400			
Date of completion	01.11.2013			

Compute income from house property.

Or

(b) Compute ARV from particulars given below :

MRV Rs. 60,000 p.a., FRV Rs. 66,000 p.a., SRV Rs. 63,000 p.a., Real Rent Rs. 6,000 p.m., Date of completion 31.05.2018, Date of letting 01.08.2018.

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20.	(a)	Dr. Narayanan is a medical practitioner in	
		Chennai. From the following calculate his	
		income from profession for the A.Y. 2019-20.	

	Rs.
Gross receipts from dispensary	2,35,000
Gross receipts from consultancy	1,65,000
Operation fees	2,50,000
Visiting fees	50,000
Gift from patients	30,000
Medicines purchased	1,25,000
Closing stock of medicine	35,000
Opening stock of medicine	10,000
Salary to employees	1,50,000

Dr. Narayanan went to attend a medical seminar in Germany to update knowledge and spent Rs. 65,000 on it

Medical books	purchased	20,000
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Rate of depreciation on books in 40%. (Not being Annual Publication)

\mathbf{Or}

(b) Explain the method of computing income from business.

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B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

 $\operatorname{Commerce}-\operatorname{Main}$

Major Elective — LOGISTIC MANAGEMENT

(For those who joined in July 2017 onwards)

Time : Three hours Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

1. _____ controls the time and place values in products mainly through transportation, information flows and inventories.

- (a) Supply chain Management
- (b) Logistic Management
- (c) International Marketing Management
- (d) Enterprise Resource Planning

- 2. The time that goods remain in the transportation equipment during delivery is known as
 - (a) lease space (b) field warehousing
 - (c) bonding (d) storage transit
- 3. Checking and loading orders into transportation vehicles
 - (a) replenishment (b) towlines
 - (c) instorage (d) shipping
- 4. This refers to the movement of the product from are location to another
 - (a) Storage (b) Packaging
 - (c) Transportation (d) Material Handling
- 5. Consumer packaging focuses on
 - (a) Marketing emphasis
 - (b) Logistic emphasis
 - (c) Material disposal
 - (d) Unitisation

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- 6. It is a network of PC's that use phone lines or cable to communicate and share resources such as storage and printers.
 - (a) LAN (b) WAN
 - (c) PAN (d) TIN
- 7. Cube minimisation is most important for
 - (a) light weight products
 - (b) heavy products
 - (c) perishable products
 - (d) liquid products
- 8. It allows quicker and more customized logistic response to customer needs
 - (a) centralisation
 - (b) decentralisation
 - (c) information sharing
 - (d) information distortion
- 9. Sum of the inventory, transportation and facility costs are
 - (a) factors costs (b) logistic costs
 - (c) production costs (d) variable costs

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- 10. Selection of more than one order on a single pass through the stock
 - (a) Batching (b) Sequencing
 - (c) Order picking (d) Unitization

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Define and explain the function of logistic management.

Or

- (b) Explain the push and pull views of supply chain process.
- 12. (a) Discuss logical service alliances.

Or

- (b) Explain the function of public warehouses.
- 13. (a) Narrate basic material handling consideration.

 \mathbf{Or}

(b) Why is motor carrier freight transportation the most preferred method of product shipment?

> Page 4 Code No. : 10099 E [P.T.O.]

14. (a) How do master carton stocking patterns influence package design?

Or

- (b) Explain the motion of exception based LIC capability.
- 15. (a) Distinguish between formal and informal organizational structures.

Or

(b) How do strategic factors influence network design decision?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Explain the importance and objectives of Logistic Management.

 \mathbf{Or}

(b) Describe the modes of transportation identifying the most significant characteristics.

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17. (a) Explain the recent trends in logical packaging methods.

\mathbf{Or}

- (b) What are the factors that influence material handling efficiency?
- 18. (a) Review alternative materials used for logistic packaging.

\mathbf{Or}

- (b) What are the benefits of EDI?
- 19. (a) What do you mean by Committee Organisation? Explain its merits and demerits.

\mathbf{Or}

- (b) Develop a framework for making network design decision.
- 20. (a) Summarize the basic steps in decision tree analysis.

Or

(b) Describe the importance of fourth party logistic providers.

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Reg. No. :

Code No.: 10094 E Sub. Code: SMCO 51

B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

Commerce — Main

CORPORATE ACCOUNTING — I

(For those who joined in July 2017 onwards)

Time : Three hours Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. When shares issued at premium which of the following account is credited?
 - (a) Securitas premium account
 - (b) Share first call account
 - (c) Share allotment account
 - (d) Share forfeited account

- 2. The minimum share Application money is
 - (a) 5% of the face value of shares
 - (b) 10% of the issue price of shares
 - (c) Re. 1 per share
 - (d) 15% of the face value of shares
- 3. Gain on sale of fixed assets as shown in the statement of profit and loss as
 - (a) other income
 - (b) revenue from operations
 - (c) any of the above
 - (d) one of the above
- 4. Carriage outwards is shown in the statement of profit and loss under
 - (a) employees benefit expenses
 - (b) other expenses
 - (c) finance costs
 - (d) deprecation and amortisation expenses

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- 5. When liquidation expenses is paid and borne by seller company then it is debited to
 - (a) Bank A/c (b) Goodwill A/c
 - (c) Realisation A/c (d) Capital Reserve A/c
- If the market price of the shares to be given for Purchase Consideration at the time of absorption, _______ of the share is to be determined.
 - (a) Fair Value (b) Face value
 - (c) Intrinsic Value (d) Yield Value
- 7. Gross profit to the appropriation between Pre and Post incorporation periods in
 - (a) Time ratio (b) Adjusted time ratio
 - (c) Sale ratio (d) None of the above
- 8. If a part of the issue of shares or debentures is underwritten, it is termed as
 - (a) partial underwriting
 - (b) incomplete underwriting
 - (c) complete underwriting
 - (d) none of the above

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- 9. Fair value of a share is equal to _____.
 - (a) intrinsic value only
 - (b) yield value only
 - (c) average of intrinsic and yield value
 - (d) none of the above
- 10. Super profit is _____.
 - (a) excess of average profit over normal profit
 - (b) extra profit earned
 - (c) average profit earned by similar companies
 - (d) none of the above

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 250 words.

11. (a) X ltd forfeited 20 shares of Rs. 10 each on which Rs. 6 per share were paid. What amount will be transferred to capital reserve if out of theses 8 shares are reissued as fully paid up on payment of Rs. 5.50 per shares?

Or Page 4 Code No. : 10094 E

- (b) Give journal entry to record the following in the books of the respective company. X Company Ltd redeem 1,00,000, 10% preference shares of Rs. 10 each at par out of revenue profits.
- 12. (a) Write a short note on unclaimed dividend.

Or

- (b) Give the meaning of cost of materials consumed.
- 13. (a) X Ltd is negotiating to sell its business to Y Ltd. Its assets are agreed to be worth Rs. 40,00,000. Its share capital consists of 10,000 equity shares of Rs. 10 each and it has reserves of Rs. 50,000. Workmen's compensation fund amounts to Rs. 25,000 (estimated liability 10,000) and provident fund Rs. 20,000. Employees security deposits amount to Rs. 10,000 and trade creditors amounted to Rs. 80,000. Ascertain the purchase consideration, if it is paid 75% in Rs. 10 equity shares of the transferee company of Y Ltd and the balance in cash.

Or

(b) Write a note on Pooling of interest method.

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14. (a) List out the expenses apportioned in Sales Ratio.

 \mathbf{Or}

- (b) Explain the need for Underwriting.
- 15. (a) Calculate the yield value per share from the information given below :

40,000 Equity Shares of Rs.10 each fully paid

Normal rate of return : 8% Expected rate of return : 12%.

Or

(b) Goodwill is to be valued at three years purchase of four years average profits. The profits for the last four years of the firm were : 2011 — Rs. 12,000; 2012 — Rs. 18,000; 2013 — Rs. 16,000; 2014 — Rs. 14,000.

Calculate the amount of goodwill.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Green Ltd. Issued 40,000 shares of Rs.100 each at discount of Rs.10 per share payable as follows :

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	Rs. 30 on application				
	Rs. 40 on allotment (including discount) and				
	Rs. 20 on final call				
	The shares were applied and allotted in full and all moneys were received in time.				
	Prepare ne	ecessary le	edger accounts.		
		Or			
(b)	(b) The balance sheet of Abi & Co., Ltd on 31.12.2010 stood as follows :			., Ltd on	
Liab	ilities	Rs.	Assets	Rs.	
Equity shares of Rs. 100 each		5,00,000	Fixed Assets	8,00,000	
9% Redeemable Pref. Shares of Rs. 100 each		3,00,000	Investments	1,00,000	
Securities	premium	50,000	Bank balance	2,00,000	
Capital re	serve	1,00,000	Other current asstes	5,00,000	
Profit and	loss A/c	2,00,000			
10% Debe	ntures	3,00,000			
Creditors	_	1,50,000			
		16,00,000		16,00,000	

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Both the redeemable preference shares and debentures were due for redemption on 1.1.2011. The company arranged for the following :

- (i) It issued 2,000 equity shares of Rs. 100 at a premium of 10%.
- (ii) It sold the investments for Rs. 90,000.
- (iii) It arranged a bank overdraft to the extent necessary.

The redemptions were carried out. Prepare bank account.

17. (a) What are current liabilities and noncurrent liabilities?

Or

- (b) What are tangible assets and intangible assets?
- 18. (a) Ram Ltd. And Shyam Ltd. have agreed to amalgamate. A new company Raj Ltd., has been formed to take over the combined concern as on 31st December 2017. After negotiations, the assets of the two companies have been agreed upon as shown below :

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Liabilities	Ram Ltd.	Shyam Ltd.	Assets	Ram Ltd.	Shyam Ltd.
	Rs.	Rs.		Rs.	Rs.
Share Capital :			Building	5,00,000	3,00,000
Shares of Rs. 10 each	10,00,000	5,00,000	Machinery	2,00,000	2,50,000
Reserve fund	—	50,000	Goodwill	—	50,000
Profit and Loss A/c	50,000	50,000	Furniture	1,10,000	—
Creditors	80,000	50,000	Stock	1,50,000	20,000
			Debtors	1,20,000	20,000

		Bank	50,000	10,000
11,30,000	6,50,000		11,30,000	6,50,000

Prepare the balance sheet of Raj Ltd., assuming :

- (i) The entire purchase price is paid off in the form of equity shares of Rs. 100 each in Raj Ltd.
- (ii) The amalgamation is in the nature of merger.

 \mathbf{Or}

(b) Bring out the differences between amalgamation and external reconstruction.

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- 19. (a) You are required to calculate the Time Ratio for the pre and post incorporation periods from the following particulars :
 - (i) Date of incorporation : 1st June 2009
 - (ii) Period of financial accounts : April 2009 to March 2010
 - (iii) Total wages Rs. 4,800
 - (iv) Number of workers : pre incorporation period : 5 Post incorporation period : 25

Also divide the total wages between pre and post incorporation periods.

Or

(b) Neeraj Ltd issued 10,000 shares of Rs. 100 each at a premium of 10%. These shares were underwritten by Vignesh and Guhan to the extent of 5,000 shares and 3,000 shares respectively. Total applications received by the company were 8,000 of which the marked applications were :

Vignesh — 1,200 shares and Gugan — 300 shares

You are required to determine the liability of the underwriters.

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20. (a) Compute the yield value of the equity share on the basis of dividend yield from the information given below :

	Rs.
Average profit after tax	17,000
Preferene share dividend	5,400
Transfer to general reserve	10%
9,000 Equity share of Rs.1 0 each fully paid	90,000
Normal rate of dividend	9%

\mathbf{Or}

- (b) The following particulars are available in respect of the business carried on by David.
 - (i) Capital invested Rs. 50,000
 - (ii) Trading results :

Rs.

- 2010 Profit 12,200
- 2011 Profit 15,000
- 2012 Loss 2,000
- 2013 Profit 21,000

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- (iii) Market rate of interest on investment 8%.
- (iv) Rate of risk return on capital invested in business 2%.
- (v) Remuneration from alternative employment of the proprietor (if not engaged in business) — Rs. 3,600 p.a.

Compute the value of goodwill of the business on the basis of 3 years purchase of super profit taking average of the last four years.

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Reg. No. :

Code No. : 10095 E Sub. Code : SMCO 52

B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

 $\operatorname{Commerce}-\operatorname{Main}$

COST ACCOUNTING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. The basic objectives of cost accounting is
 - (a) tax compliance
 - (b) financial audit
 - (c) cost ascertainment
 - (d) profit analysis

- 2. Direct expenses are also called
 - (a) major expenses
 - (b) chargeable expenses
 - (c) overhead expenses
 - (d) sundry expenses
- 3. Process costing is suitable for
 - (a) hospitals (b) oil refining
 - (c) transport firms (d) brick laying firms
- 4. Cost of abnormal loss is shown in
 - (a) Balance sheet
 - (b) Profit and Loss Account Debit Side
 - (c) Profit and Loss Account Credit Side
 - (d) Abnormal loss or Abnormal Gain in the Ledger
- 5. Marginal costing is a _____ costing.
 - (a) Process (b) Technique
 - (c) Method (d) Both (b) and (c)
- 6. Which cost per unit decreases when production increases?
 - (a) Fixed asset (b) Semi-variable cost
 - (c) Variable cost (d) Total cost

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- 7. Budgetary control system facilitates centralized control with
 - (a) Decentralized activity
 - (b) Centralized activity
 - (c) Both
 - (d) None of the above
- 8. Budgetary control facilitates easy introduction of the _____
 - (a) Marginal costing (b) Ratio analysis
 - (c) Standard costing (d) Subjective matter
- 9. Standard costing committee is responsible for
 - (a) Computation of variances
 - (b) Linking the deviations with responsibilities
 - (c) Setting all types of standards
 - (d) All of the above
- 10. Standard costs are better than historical costs because
 - (a) Determination of standard costs is economical in terms of money as well as time
 - (b) They facilitate delegation of responsibility
 - (c) They help in timely action against extravagances
 - (d) All of the above

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Compute the prime cost :

	Rs.
Direct materials used	82,000
Production wages	17,000
Royalty paid	11,000
Hire charge of special machines for the job	13,000

Or

(b) Compute the amount of office overhead.

	Rs.
Office Salaries	10,000
Stationery	5,000
Audit fees	2,000
Advertising	9,000
Depreciation of office fittings	3,000

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12. (a) From the following particulars, prepare process 'A' Account showing cost per ton of output:

Material (tons) : 1,000

Cost of material per ton : Rs. 125

Wages : Rs. 28,000

Manufacturing expenses : Rs. 8,000

Output (tons) : 830

Normally 5% of the weight is lost in the process and 10% is scrap which realizes Rs. 80 per ton. There was no stock or work-in-progress.

Or

13. (a) Sales Rs. 15,000 ; Variable cost Rs. 7,500; Fixed cost Rs. 4,500.

Calculate P/V ratio and BEP.

Or

(b) From the following data, Calculate P/V ratio and Margin of safety. Sales Rs. 20,000; Variable expenses Rs.10,000; Fixed expenses Rs. 6,000.

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⁽b) State the objectives of process costing.

14.	(a)	Prepare	а	production	budget	from	the
		following	inf	ormation :			

Product	Opening stock	Est. Sales	Closing stock
	Units	Units	Units
Р	2,000	10,000	3,000
Q	3,000	15,000	5,000
R	4,000	13,000	3,000
\mathbf{S}	3,000	12,000	2,000

Or

(b) List out the objectives of budgetary control.

15. (a) Calculate the material mix variance from the following :

Material Standard Actual

- A 90 units at Rs. 12 each 100 units at Rs. 12 each
- B 60 units at Rs. 15 each 50 units at Rs. 16 each

\mathbf{Or}

(b) Bring out the advantages of standard costing.

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PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss the different types of cost accounting?

\mathbf{Or}

(b) A manufacturer presents the following details about various expenses incurred by him.

Raw materials consumed	70,000
Carriage inwards	2,000
Factory rent	2,400
Bad debts	440
Printing and stationery	620
Legal expenses	350
Carriage outwards	1,540
Indiect materials	560
Power	4,600

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Rs.

	Rs.
Depreciation of furniture	160
Postage expenses	465
Repairs of plant and machinery	1,200
Salesmen's expenses	3,400
Advertising	500
Direct wages	85,000
General Manager's salary	36,000
Factory Manager's salary	18,000
Depreciation on plant and machinery	1,240
Audit fees	350

Classify the above expenses under the various elements of cost showing separately the total expenditure under each element.

17. (a) A product passes through three processes A,
B, and C to its completion. During December 2018, 5,000 units of finished product were produced and the following expenses were incurred :

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	Process A	Process B	Process C
	Rs.	Rs.	Rs.
Materials	5,000	10,000	5,000
Direct wages	25,000	20,000	15,000
Direct expenses	2,500	3,000	5,000

Indirect expense amounted to Rs. 30,000 which are to be apportioned to the processes on the basis of direct wages. Raw materials worth Rs. 30,000 were issued to Process A. Ignore the question of process stocks and prepare the process accounts, showing cost per unit in each process.

Or

Calculate the cost of each process and total (b) cost of production from the date given below :

	Process I	Process II	Process III
	Rs.	Rs.	Rs.
Material	2,250	750	300
Wages	1,200	3,000	900
Direct expenses	500	500	500
Works overhead	1,890	2,500	1,875

Other indirect expenses of Rs. 1,275 should be apportioned on the basis of wages.

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- 18. (a) From the following information relating to Sun Ltd., you are required to find out
 - (i) P/V Ratio
 - (ii) Break even point
 - (iii) Profit
 - (iv) Margin of safety

Total fixed costs Rs. 4,500 Total variable cost Rs. 7,500

Total sales Rs. 15,000

Or

- (b) From the following figures, calculate :
 - (i) Break Even Point
 - (ii) Margin of safety and
 - (iii) Sales to earn a profit of Rs.1,20,000

Rs.

Sales 6,00,000

Variable costs 3,75,000

Fixed costs 1,80,000

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19. (a) Prepare a cash budget from April to June :

	Sales	Purchases	Expenses
February	1,80,000	1,24,800	12,000
March	1,92,000	1,44,000	14,000
April	1,08,000	2,43,000	11,000
May	1,74,000	2,46,000	10,000
June	1,26,000	2,68,000	15,000

50% of the credit sales is collected in the month following and the remaining in the second month. Credit purchases are paid in the next month. Cash at bank on 1^{st} April Rs. 25,000.

\mathbf{Or}

(b) The expenses for the production of 5,000 units in a factory are given as follows :

Rs.Materials50Labour20Variable overhead15Fixed variable (Rs. 50,000)10Administrative expenses (5% variable)10

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	Rs.
Selling expenses (20% fixed)	6
Distribution expenses (10% fixed)	5
Total cost per unit	116

You are required to prepare a budget for the production of 7,000 units.

- 20. (a) From the data given below calculate :
 - (i) Material cost variance
 - (ii) Material price variance
 - (iii) Material usage variance.

Particulars	Standard qty (units)	Standard price (units)	Actual qty (units)	Actual price
А	1,050	2	1,100	2.25
В	1,500	3.25	1,400	3.50
С	2,100	3.50	2,000	3.75
Or				

 (b) Calculate labour cost and rate variance from the following data : Standard hours : 80 Rate Rs. 6 per hour Actual hours 100

Rate Rs. 8 per hour

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(6 pages) **Reg. No. :**

Code No. : 10096 E Sub. Code : SMCO 54

B.Com. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021.

Fifth Semester

 $\operatorname{Commerce}-\operatorname{Main}$

RESEARCH METHODOLOGY

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

1. Research is based upon _____.

- (a) Scientific method (b) Experiments
- (c) Scientists (d) General principles
- 2. _____ is the first stage in the research process.
 - (a) Analysis of data
 - (b) Formulating research problem
 - (c) Collection of data
 - (d) Hypothesis testing

3. The characteristics of a good research design are

- (a) Objectivity (b) Quality
- (c) Quantity (d) Subjectivity

4. ______ is defined as anything that has a quantity or quality that varies.

- (a) Lesson
- (b) Research design
- (c) Variable
- (d) Research design
- 5. A member or an object of the population is a
 - (a) Sample size (b) Sample frame
 - (c) Population (d) Element
- 6. Judgement sampling is known as _____.
 - (a) Quota sampling
 - (b) Purposive sampling
 - (c) Accidental sampling
 - (d) Convenience sampling

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7. _____ is a structure of a set of question on a given topic asked by investigator personally.

- (a) Questionnaire (b) Schedules
- (c) Interview (d) Observation

8. ______ is the first step in data processing.

- (a) Editing (b) Classification
- (c) Tabulation (d) Coding

9. _____ is the middle component of Research Report.

- (a) Text
- (b) Preliminaries
- (c) Reference Materials
- (d) Randomization

10. ______ is data refers to the task of drawing inferences from the collected facts after an analytical and /or experimental study.

- (a) Interpretation (b) Analysis
- (c) Drawing (d) Information

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 250 words.

11. (a) What are the characteristics of research?

Or

- (b) What is Ex-post Facto research? What are the merits and demerits?
- 12. (a) What are the basic principles to be followed in experimental research design?

 \mathbf{Or}

- (b) What is the purpose of research design?
- 13. (a) Distinguish between sample survey and census survey.

Or

- (b) Write a note on snowball sampling method.
- 14. (a) Explain any three types of questionnaire.

Or

(b) What are the demerits of an interview schedule?

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[P.T.O.]

15. (a) Briefly explain an interpretation.

 \mathbf{Or}

(b) What are precautions for writing research report?

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Describe the significance of research.

Or

- (b) Write a detailed note on empirical research.
- 17. (a) What are the basic principles to be followed in experimental research design?

 \mathbf{Or}

- (b) Discuss the components of research design.
- 18. (a) Briefly explain the probability or Random sampling method.

 \mathbf{Or}

(b) What are the criteria to be taken in account while selecting a sampling technique?

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19. (a) What are the precautions to be taken while framing a questionnaire?

\mathbf{Or}

- (b) What are the guidelines to be followed for effective observation?
- 20. (a) Discuss the mechanics of writing research report.

 \mathbf{Or}

(b) Describe the significance of report writing.

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Code No:8047	Reg. No	
	Sub. Code: KCAM41/PCAN	141
	M.C.A(CBCS) DEGREE EXAMINATION, APRIL 2021 FOURTH SEMESTER COMPUTER APPLICATION	
Time : Three hours	OPEN SOURCE TECHNOLOGY	
	Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:	
1. Which of the fall		
(a) spaces	lowing are whitespace characters? (b) tabs (c) newlines (d) All the above	
2. The ternary opera (a) switch (b) i		
3 is a variable	that stores a set or sequence of values.	LUNG C
(0) p	(c) array (d) double	
4. The getdate() func	ction returns	
(a) an array (b) an	n integer (c) a float value (d) a string	
5. PHP allows us to		
(a) include()	(b) require() (c) Only (a) (d) Both (a) and (b)	
	wing is the right way to define a function in PHP? on body } (b) datatype function_name(parameter) { fun—body} arameter) { fun—body} (d) function function_name(parameter) {	fun body)
The opposite of GR	RANT command is	iun—body}
(a) REPLACE	(b) REVOKE (c) SHUTDOWN (d) All the above	This was a
8. The data in a table of (a) drop table		
9. The basic PHP libra	ary for connecting to MySQL is	
(a) mysqli (b) my	ysqlib (c) mysql (d) mysql_conn	
10. The session ID act (a) URL (b) part	t as a key that allows us to register particular variables as so called	variables.
(u) orde (b) par	th (c) session (d) user ID	T
	PART – B (5 x 5 = 25 marks) Answer ALL questions, choosing either (a) or (b).	
	Each answer should not exceed 250 words.	
11.(a) Explain understa	anding identifiers with example.	
(b)Discuss breaking	(Or) g out of a control structure or script.	
12.(a) Explain array op	perators in PHP.	
(b) Describe the calend	dar functions. (Or)	
13.(a) Discuss the callin	ing function in PHP.	
	(Or)	

(b) Discuss understanding scope using function.

14.(a) Explain the CREATE USER and GRANT command.

(b) Inserting data into a database.Discuss.

15.(a) What is session control?Discuss it.

(b) Discuss how to avoid common uploading problems.

PART – C (5 x 8 =40 marks) Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 600 words.

(Or)

16.(a) Explain embedding PHP in HTML.

(b) Discuss repeating actions using iteration with example.

17.(a) Discuss formatting strings in PHP.

(b) How to calculate dates in PHP and MySQL.

18.(a) Explain using require() and include() with Example.

(b) Describe the functions with parameters in PHP with Example.

19.(a) Explain MySQL's Privilege System.

(b) Describe altering table after creation.

(Or)

20.(a)Explain how to implement a simple session.

(b) Discuss the session upload progress.

(Or)

Code No · PCAMES

Code No: 8065

Reg. No..... Sub. Code: PCAM32

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER COMPUTER APPLICATION - CORE COMPUTER GRAPHICS AND MULTIMEDIA (for those who joined in July 2017 onwards)

Time : Three hours

Maximum: 75 marks

Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

1. The transformation that is used to alter the size of the object b) Translation c) Rotation d) Viewing a) Scaling 2. A device for specifying a series of coordinate positions is a) LOCATOR b) STROKE c) VALUATOR d) PICK 3. The type of hidden surface removal algorithm are b) Scan line algorithm, priority algorithm a) Depth comparison, Z-buffer, back-face removal c) BSP Method, Area sub division method d) All of the above 4. Scan lines are used to scan from c) Left to right d) Right to left a) Top to bottom b) Bottom to top 5. The abbreviation of GIS is a) Geographic Information System b) Geometric Inform Service c) Geometric Information Service d) Geographic Informed System is the coordinated ordering of events in time. 6. a) Synchronization b) System d) Both a) or c) c) Orchestration 7. In standard broadcast video system, normal frame rates are frames per seconds d) 27 or 34 a) 25 or 30 b) 22 or 25 c) 28 or 35 8. In JPEG, the lossless compression will work with source image having from c) 2 to 16 bpp a) 3 to 15 bpp d) 5 to 16 bpp b) 2 to 14 bpp 9. A connection --oriented cell-based data services operating from a) 45 to 150 Mb/s b) 46 to 150 Mb/s d) 42 to 150 Mb/s c) 44 to 150 Mb/s is a system for distributed (Analog) video device control. 10. c) VOX b) Etherphone d) Galatea a) Touring Machines

PART-B (5 * 5 = 25 marks)

Answer ALL question

Choosing either (a) orb), Each answer should not exceed 250 words. 11 a) Describe about Reflection and Shear.

(Or)

b) Write Short notes on the Inputs of Graphical Data Explain

12 a) Illustrate the Modeling and Coordinate Transformation in Three Dimension.

(Or)

- b) Discuss about Viewing pipeline.
- 13 a) Clarify the Distributed Multimedia Systems

(Or)

b) Mention the Multimedia Appliances with Hybrid devices.

Explain 14 a) Elaborate on the DVI Technology.

(Or)

- b) Write short notes on Standardization of Algorithms.
- 15 a) Explain the architecture of network-based Multimedia Services with neat diagram. Explain (Or)
 - b) Determine about Tack Model and Object Model.

PART-C(5 * 8 = 40 marks)

Answer ALL question Choosing either(a) or(b), Each answer Should not exceed 600 words. 16 a) Write detail notes on various types of clipping operation.

(Or)

b) Elaborate on the interactive picture-construction techniques.

17 a) Summarize the Translation, Rotation and Scaling in 3D Geometric Modeling and Transformation.

(Or)

b) Explain about Wire frame method and Visibility Detection Function

18 a) Write brief notes on Emerging application in Multimedia.

(Or)

b) Draw and explain the QOS Architecture.

19 a) Explain about Analog Video Artifacts.

the diagram

(Or)

b) Narrate the MPEG Motion Video Compression Standard.

20 a) Explain the overview of Multimedia Interchange.

(Or)

b) Elucidate the shared application architecture and embedded distributed object.

X-X

Reg. No..... Sub. Code: PCAM33

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 THIRD SEMESTER COMPUTER APPLICATION - CORE ADVANCED JAVA PROGRAMMING (for those who joined in July 2017 onwards) Maximum: 75 marks

Time : Three hours

Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

- Which of the following is not a wrapper class?
 a) String.
 b) Integer.
 c) Boolean.
 d) Character.
- 2) Which of the following methods are methods of the String class?a) deleteb) appendc) reversed) replace
- 3) Which of the following classes is used to perform basic console I/O?a) System.b) Security Manager.c) Math.d) Runtime.
- 4) What is the name of the method used to schedule a thread for execution?a) initb) startc) rund) resume
- 5) Which method may cause a thread to stop executing? a) wait b) notify (. c) sleep d) notifyAll .
- 6) Which of the following are passed as an argument to the paint() method?a) A Canvas object.b) A Graphics object.c) An Image object.d) A Paint object.
- 7) The term ______ refers to a class's direct ancestor or to any of its ascendant classes. a) sub class. b) super class. c) class hierarchy. d) class instance.
- 8) The new operator dynamically allocates ______ for an object and returns a reference to it. a) classes. b) variables. c) memory. d) none of the above.
- 9) finalize() is only called just prior to ______.
 a) initialization.
 b) runtime.
 c) garbage collection.
 d) destruction.
- 10) Which of the following methods are invoked by the AWT to support paint and repaint operations?a) paint . b) repaint . c) draw d) redraw .

PART - B (5 X 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11) (a) What is a constructor? What are the different types of constructor?

(or)

a

(b) What are objects? How are they created from a class? Explain.

12) (a) Describe the try and catch statement with example program.

(or)

(b) What is a package? How to create a package?

13) (a) Explain the Applet skeleton and Distinguish between init() and start() methods.

Explain (or)

(b) Write down the uses of labels control.

14) (a) What are the types of JDBC drivers? Explain.

(or)

(b) Summarize the various types of methods used in InetAddress.

15) (a) Write a note on bean development kit.

(or)

(b) What are JAR files in Java Beans? Describe.

PART - C (5 X 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16) (a) Discuss the three loop constructs in Java with examples.

(or)

(b) Explain the fundamental concepts of Object Oriented Programming.

17) (a) Compare and contrast overriding and overloading a method.

(or)

(b) What is an interface? Describe the various forms of implementing interfaces. Give examples of Java code for each case.

18) (a) Explain the complete syntax of HTML Applet tag.

(or)

(b) Illustrate the event listener interfaces in java.

19) (a) Summarize the java.rmi.server packages in detail.

ø

(b) Draw and explain the complete architecture of JDBC.

20) (a) How are cookies created in Servlet? Explain.

(or)

(b) Demonstrate the developing a simple Bean using the BDK.

Code No: 8068

Reg. No..... Sub. Code: PCAM44

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 FOURTH SEMESTER COMPUTER APPLICATION - CORE PRINCIPLES OF COMPILER DESIGN (for those who joined in July 2017 onwards)

Time : Three hours

Maximum: 75 marks

Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

1. Compile	r can diagnose	_		
a) Any	kind of error	b) logical	error	
b) c) lex	ical errors only	d) syntax	errore and	I lawlant
or and the second	of the program	ming is checke	d at	
11 M. 133 M. 153		(1)	Semantic	phase of compiler.
e) couc c	pumzanon	d)	C.1. C.	eration
3. The	are suitable	for describing	tokuna	
a) Regular Expres	ssions	b) Finite A	utomataic	m
c) raisers		d) Transiti	an dia	
4. A grammar that	t produces more	than one parse	tree for s	ns ome sentence is called
21 Test - 22	0,0	nambiguous	19890975454 A	or sentence is called
c) Regular	d) N	one of the mar	ntioned	
5. Each interior no	de of a parse tre	e is labeled by	some	
a) Start Symbol	b) root	c) terminal	147.8.8	d) non-terminal
6. Three address co	ode statements a	re represented	by a struc	d) non-terminal ture with only three fields that is
a) Tree b) In	ndirect triples	c) Triples	d) Oua	druples
in a source in the source in t	ution for a*(b+c)	is	-1000-0000	
a) +abc b) abc+*	c) a+bc	d) about		
8. when most of the	e execution time	is spent in rela	atively litt	le of the program called
	-/ - · · · · · · · · · · · · · · · · · ·	le	1410 LENN . 14 ST	it of the program called
c) 90-10 rule				
9. The output of the	code generator	s		
a) lexical analysis		b) semantic a	nalyzer	
c) syntax analysis		d) machina la		
10. The replacement a) upper b) bit	of an expensive	operation by a	cheanar	one is termed as
a) upper b) bij	polar c) quad	lratic d) Red	duction in	Strength
			100000000000000000000000000000000000000	

PART B (5 2 5 = 25 Marks)

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words

a) Explain the evolution of programming languages with examples.
 [Or]

b) Describe a simple syntax directed translated scheme with suitable example.

12. a) What do you mean by input buffering? Explain.

[Or]

b) What do you mean by token? How do you recognize tokens? Discuss.

13. a) Define Grammar. Explain the types of Grammars with examples. [Or]

b) What do you mean by ambiguous grammar? Explain.

14. a) What is meant by back patching? Discuss.

[Or]

b) Elucidate type checking with example.

15. a) Illustrate basic blocks and flow graphs with examples

[Or]

b) Discuss dynamic programming code generation.

PART C (5 *8 = 40 Marks)

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words

16. a) What are the phases of the compiler? Explain the phases in detail. Write down the output of each phase for the expression a = b + c * 50.

[Or]

b) Explain the various parameter passing mechanisms of a high level language.

17. a) Construct a minimal DFA for (a/b)*(a/b) and write the algorithm for minimizing a DFA.

[Or]

b) Discuss the role of lexical analyzer.

18.a) Explain the first and follow procedures to construct a predictive parser.

b) Check whether the following grammar is a LL(1) grammar. S->iEtS | iEtSeS | a E->b

a) Explain the process of translating an assignment statement.
 [Or]

b) What are the three storage allocation strategies? Explain each in detail.

20. a) Explain in detail about Peep-Hole Optimization.[Or]b) Explain the issues in the design of as do served.

b) Explain the issues in the design of code generator.

(6 pages) **Reg. No. :**

Code No. : 8069 Sub. Code : PCAE 41

M.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Fourth Semester

Computer Applications

Elective — DATA MINING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Discovering patterns and rules refer to
 - (a) Data detection
 - (b) Pattern detection
 - (c) Algorithm detection
 - (d) Data analysis

- 2. Exploratory data analysis techniques are
 - (a) Exhaustive and voluminous
 - (b) Interactive and visual
 - (c) Linear and slow
 - (d) Time consuming and imperfect
- 3. Which is a well-define procedure that takes data as input and procedure produces output in the form of models or patterns
 - (a) Data mining algorithm
 - (b) Data structure algorithm
 - (c) Network algorithm
 - (d) Routing algorithm
- 4. Feed-forward neural networks are a generalization of
 - (a) Traveling salesman
 - (b) Towers of Hanoi
 - (c) Perceptron
 - (d) Trees

Page 2 **Code No. : 8069**

- 5. Applications like "market-basket data" helped in finding general idea of
 - (a) fuzzy logic (b) routing
 - (c) association rules (d) data analysis
- 6. What parts does the association rule line?
 - (a) An antecedent, a consequent
 - (b) Header, Trailer
 - (c) Body, tail
 - (d) Head, tail
- 7. Which field gathers information from the web?
 - (a) Database
 - (b) Information system
 - (c) Web mining
 - (d) Data processing
- 8. Which mining tries to discover link structure of the hyper links at the inter document level?
 - (a) Data processing
 - (b) Web structure mining
 - (c) Data usage
 - (d) Multiuser system

Page 3 Code No. : 8069

- 9. Which contains set of objects and utilities to allow the automation of contract, transform and load operation to as from a database
 - (a) DTS (b) ATS
 - (c) CTS (d) DBMS
- 10. Datamining designer works with
 - (a) Data models
 - (b) Mining models
 - (c) Software models
 - (d) Hardware models

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

11. (a) Write about data mining tasks.

Or

- (b) Compare data mining with knowledge in databases.
- 12. (a) Explain the importance of decision tree in data mining.

Or

(b) Write about any one neural network based algorithm.

Page 4 Code No. : 8069 [P.T.O.] 13. (a) Give an account of distributed algorithm.

 \mathbf{Or}

- (b) Explain incremental rules in a brief manner.
- 14. (a) Write about web usage mining.

Or

- (b) Explain spatial mining.
- 15. (a) Write about DTS designers.

Or

(b) Briefly discuss about creating data mining model using DTS.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write about social implication of data mining.

 \mathbf{Or}

(b) Explain data mining from a database perspective.

Page 5 **Code No. : 8069**

17. (a) Write about similarity and distance measures.

 \mathbf{Or}

- (b) Write about hierarchical algorithms.
- 18. (a) Explain advanced association rule techniques.

Or

- (b) Explain the process of measuring the quality of rules.
- 19. (a) Write about web content mining.

Or

- (b) Discuss web structure mining.
- 20. (a) Write about data mining structures.

Or

(b) How will you use DTS to create data mining model?

Page 6 **Code No. : 8069**

Code No:8071

Reg. No..... Sub. Code: PCAE43

M.CA.(CBCS) DEGREE EXAMINATION, APRIL 2021 FOURTH SEMESTER COMPUTER APPLICATION - ELECTIVE SOFT COMPUTING (for those who joined in July 2017 onwards)

Time : Three hours

Maximum: 75 marks Part - A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

1. The fundamental unit of network is

a) brain b) nucleus c) neuron d) axon

2. Which of the following model has ability to learn?

a) pitts model b) rosenblatt perceptron model

c) bothrosenblatt and pitts model d) neither rosenblatt nor pitts

3. What is ART in neural networks?

a) automatic resonance theory b) artificial resonance theory

c) adaptive resonance theory d) none of the mentioned

4. The process of adjusting the weight is known as?

a) activation b) synchronisation c) learning d) none of the mentioned

5. Fuzzy Set theory defines fuzzy operators. Choose the fuzzy operators from the following.

a) AND b) OR c) NOT

6. Fuzzy logic is usually represented as

a) IF-THEN-ELSE rules b) IF-THEN rules

c) Both IF-THEN-ELSE rules & IF-THEN rules d) None of the mentioned

7. Genetic Algorithm are a part of

a) Evolutionary Computing

b) inspired by Darwin's theory about evolution - "survival of the fittest"

c) are adaptive heuristic search algorithm based on the evolutionary ideas of natural selection and genetics d) All of the above

8. Which approach is most suited to structured problems with little uncertainty?

a) Simulation b) human intuition c) optimization

9. What does ART stand for?

a) Automatic resonance theory b) Artificial resonance theory

c) Adaptive resonance theory d) None of the mentioned

10. ANFIS stands for

a) Additional Network Fuzzy Inference System

b) Adaptive Network Fuzzy Information System

c) Adaptive Neuro-Fuzzy Inference System

d) Additional Neuro-Fuzzy Inference System

d) genetic algorithms

d) All of the mentioned

PART B (5 15 = 25 Marks)

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 250 words 🕹

11. a) Explain model of an artificial neuron.

[Or]

b) What is ANN? Explain the characteristics of ANN.

12. a) What are associative memory networks? List the training algorithms for pattern association.

[Or]

b) What you mean by learning vector quantization? Explain with example.

13. a) Define a fuzzy set and explain the concept fuzziness.

[Or]

b) Differentiate between classical sets and fuzzy sets.

14. a) Mention the role of fitness function in GA and what are the requirements of GA.

[Or]

b) Differentiate between GA and other traditional methods.

15. a) Explain the advantages of hybrid systems with suitable example.

[Or]

b) Explain the applications of soft computing.

PART C (5 %8 = 40 Marks)

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 600 words

16. a) Explain McCulloch-Pitts neuron model with diagram.

[Or]

b) Write various steps of the back propagation algorithm.

17. a) Illustrate Hopfield networks with example.

[Or]

b) Discuss the features of a simple Kohonen self-organizing network with suitable example.

18. a) What is union, intersection and complement operations in Fuzzy set? Illustrate with examples.

[Or]

b) Give the properties of fuzzy sets and also explain the operations involved in it.

19. a) Examine the steps involved in designing simple Genetic Algorithm by explaining population of Selection, cross over and mutation operators.

[Or]

b) Discuss the generational cycle convergence of genetic algorithm with example.

20. a) Explain genetic algorithm based backpropagation network.

[Or]

b) Illustrate the architecture of ANFIS with example.

NX-X

Reg. No..... Sub. Code: PCAM53

Code No: 8073

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 FIFTH SEMESTER COMPUTER APPLICATION - CORE DATA COMMUNICATION AND NETWORKS (for those who joined in July 2017 onwards) Maximum: 75 marks

Time : Three hours

Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

1	is the	protocol su	ite for the c	urrent Internet.	
a) TCP/IP	b) NC	P d) UNIX	d) ACM	
2. A	is a dat	ta commun	ication syste	em within a buildi	ng, plant, or campus or
between near	by buildings	100			
a) MAN	b) LAN		c) WAN	d) Both a and	b
3. To change a) PCM	an analog si b) DM	gnal to digi c) CPM	təl data (dig d) CRI	jitization) is called M	<u> </u>
4. Analog-to	-analog conv	ersion can	be accompli	ished in	ways
a) three	b) two	c) four	d) one		
5. How man	y connectors	used in Fib	er-Optic Ca	ibles?	
a) four	b) three	c) one	d) two		
	ignetic wave	s ranging ir	frequencie	s between 3 kHz a	nd 1 GHz are normally
a) Radio wa	ives b)	Micro wav	es c)]	Infrared waves	d) None of the above
7. If value o	f checksum i	s 0, then m	essage is		
a) Accepted	i b)	Rejected	c)	Send back	d) Resend
8. In Point-1	o-Point proto	ocol, framir	ig technique	es done according	to the
a) Bit orient	ted protocol		b) Byt	e-oriented protoco	1
c) High-lev	el Data Link	Protocol	d) Link	c control protocol	

9. Size and format of physical addresses vary depending on the

d) Network c) Sender b) Message a) Receiver

is an implementation of the distance vector protocol 10. d) None of these c) BGP b) OSPF a) RIP

Part B (5 x 5 = 25 Marks) Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 250 words

and the state of the second of

11 a) Write short notes on categories of network.

(Or)

b) Determine the working operation of network layer in TCP/IP.

12 a) Justify the digital data transmission modes.

(Or)

b) Categorize the Line Coding schemes

13 a) Discuss about Coaxial cables.

(Or)

b) Explain Radio Waves and Microwave.

14 a) How to make Error Correction.

(Or)

b) Find the minimum Hamming distance of the coding scheme in Table

Datawords	Codewords
00	000
01	011
10	101
11	110

15 a) List out the application of Multicast Routing.

(Or)

b) Evaluate the Intra and Inter domain Routing.

Part C (5 x 8 = 40 Marks)

Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 600 words

16 a) Explain est ni about Data Communication.

(Or)

b) Define Internet. Write the brief history of internet.

17 a) Elucidate the concept of Analog-to-Digital conversion. (Or)

b) Elaborate the concept of Digital-to-Digital Conversion.

18 a) Determine the Structure of Switch.

(Or)

b) Explain in detail about Virtual-Circuit Networks.

19 a) Evaluate the Point-to-Point protocol (Or)

b) Write detailed notes on Cyclic Code.

20 a) Analyze the concept of ICMPv6 Protocol. (Or)

b) Summarize about Unicast Routing Protocol.

Code No: 8076 <

Reg. No..... Sub. Code: BCAM12

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 FIRST SEMESTER COMPUTER APPLICATIONS OBJECT ORIENTED ANALYSIS AND DESIGNUSING UML (For those who joined in July 2020 onwards)

Time: Three hours

Maximum: 75 marks

Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

1. What is an object? a) An object is an instance of a class (b) An object includes encapsulation of data c) An object is not an instance of a class d) An object is a constraint defines the system's actions and how different parts contribute to it. a) Behavior b) Structure c) Model d) Use case 3. Which of the following early OOD methods incorporates both a "micro development process" and a "macro development process."? a) Wirfs-Brock method b) Rumbaugh method c) Booch method d) Coad and Yourdon method 4. Which of the following UML diagrams has a static view? a) Collaboration b) Use case c) State chart d) Activity 5. Actors are connected to use cases only by a) association relationship b) generalization relationship c) realization relationship d) dependency relationship 6. The behavior of a system is modeled using a) class diagram b) activity diagram c) use case diagram d) interaction diagram 7. Which of the following is the best type of module coupling? a) Control Coupling b) Stamp Coupling c) Data Coupling d) Content Coupling is an indication of the relative functional strength of a module. a) Cohesion b) Coupling c) Modularity d) Process 9. White Box techniques are also classified as a) Design based testing b) Structural testing c) Error guessing technique d) Sanity testing 10. Scenario-based testing also called

a) White box testing b) Top-down testing

Black box testing
 d) Usage-based testing

PART-B (5X5=25 Marks)

Answer all Questions, Choosing either (a) or (b) Each answer should not exceed 250 words.

11. a) Why an object orientation? Explain. .(or)

b) Write a note on object relationships and associations.

12. a) Discuss about the three different parts of modeling in object modeling technique. b) Explain about UML extensibility.

13. a) Write down the guidelines for developing effective documentation. (OF)

b) Analyze defining methods for ViaNet bank objects.

14. a) Explain the different types of coupling among components.

6430

b) Explain about refining attributes.

15. a) Write a note on quality assurance tests. (or)

b) Discuss about the impact of object orientation on testing.

PART - C (5X8=40 Marks)

Answer all Questions, Choosing either (a) or (b) Each answer should not exceed 600 words.

16. a) Discuss in detail about class hierarchy.

(or)

b) Explain about the software development process.

17. a) Briefly explain about patterns template. (OT)

b) Identify UML class diagram.

18. a) Describe about Use-Case model. (or)

b) Explain in detail about super-sub class relationships.

19, a) Illustrate Object-Relational Systems. (Or)

b) Explain about the purpose of a view layer interface.

20. a) Explain in detail about testing strategies. (or)

b) Elaborate Usability testing.

Reg. No..... Sub. Code: BCAM13

-Code No: 8077

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 FIRST SEMESTER COMPUTER APPLICATIONS - CORE ADVANCED JAVA PROGRAMMING (for those who joined in July 2020 onwards) Maximum: 75 marks

Time : Three hours

Part – A (10 X 1 = 10 marks) Answer all question, choose the correct answer:

1) What will be the return type of a method that not return any value?

A, Int B. String C. Null D. Void

2) Who is known as father of Java Programming Language?

A. James Gosling B. M. P Java C. Charel Babbage D. Blais Pascal

3) Which of these class is used to read characters in a file?

A. FileReader B. FileWriter C. FileInputStream D. InputStreamReader

4) Which of these is wildcard symbol?

A.? B.! C.% D.&

5) Package of drawstring() method is _____

A. java.applet B. java.io C. javax.swing D. java.awt

6) Which JDBC driver type is the JDBC-ODBC type?

A. Type 1 B. Type 2 C. Type 3 D. Type 4

7) Which of these is a protocol for breaking and sending packets to an address across a network?

A. TCP/IP B. DNS C. Socket D. Proxy Server

8) An RMI Server is responsible for

A. Creating an instance of the remote object B. Exporting the remote object

C. Binding the instance of the remote object to the RMI registry

D. All mentioned above

9) Which of the following is not a feature of Beans?

A. Introspection B. Events C. Persistence D. Serialization

10) What is javax.servlet.http.HttpServlet?

A. interface B. abstract classC. conc reate class D. Collection

PART- B - (5 X 5 = 25 Marks) Answer All the Questions, Choosing either (a) or (b) Each answer should not exceed 250 words

		(0)	
11)	A) Discuss about Constructor. Rote & Pn : B) Write short Abstract Classes.		(OR)
12)	A) Mention the Predefined Streams.		(OR)
13)	A) What do you mean by Containers : • Expression A) What do you mean by Containers : • Expression A)		(OR)
14)	 A) How to Read and Write Files Via Channel B) Write short notes on InetAddress. 		(OR)
15)	A) Write Short notes on BDK.		

B) Discuss about the Life Cy

PART- C - (5 X 8 = 40 Marks) Answer All the Questions, Choosing either (a) or (b) Each answer should not exceed 600 words

	Each and	
	Concents.	(OR)
:6)	 A) Summarize the Object Oriented Programming Concepts. B) Write detail notes on Packages. 	(OR)
<u>;</u> _)	A) Discuss about File Operations in JAVA.	(OR)
18)	A) Elaborate Swing Packages in JAVA. B) Discuss about the Types of Resultset.	(OR)
<u> </u>	A) Differentiate TCP/ IP and UDP. A) Differentiate TCP/ IP and UDP.	pplication. (OR)
20)	 B) Mention the program to even A) Explain Java Bean Properties, Methods and Events. B) Mention the Handling methods of HTTP request and response 	es.

			Reg. No Sub. Code: BCAI
Code No: 8078			
Time : Three hours	COMPUTER APP COMPUTER ORGANIZA (for those who joine	SEMESTER LICATIONS - CO TION AND ARCH d in July 2020 o X 1 = 10 marks	DRE IITECTURE nwards) Maximum: 75 marks)
1. The 8-bit of	encoding format used to stor	e data in a compu	ter is
a) ASCII	b) EBCDIC c) ANCI	d)USCII	
2. In which c1?	ین of the following gates, the ou	tput is 1 if and on	ly if at least one input is
a)OR	b) NOR	c) AND	d)NAND
3. Which among	following is an important da	i ta transfer technic	jue?
a) CAD b)C	'AM c)DMA d) M	IMA	
4. What character	ristic of RAM memory make	s it not suitable fo	r permanent storage?
a) too slow b) u	inreliable c) it is volatile	d) high capacity	-
5. RISC stands fo	r		
a) Reduced Infor	mation Set Computation	b) Reduced Inst	ruction Set Computer
c) Refreshed Inst	ruction Set Computation	d) Registered Ir	struction Set Computer

6. A ______ field that specifies the way the operand or the effective addressis determined.

b) mode field a) address field c) instruction field d) operation code

7. The method of accessing the I/O devices by repeatedly checking the status flags is

a) Program-controlled I/O b) Memory-mapped I/O

c) I/O mapped d) None of the above

8. An instruction pipeline can be implemented by means of

a) LIFO buffer b) FIFO buffer c) Stack d) None of the above

9. Write Through technique is used in which memory for updating the data

a) Virtual memory b) Main memory c) Auxiliary memory d) Cache Memory

10. A multiprocessor operating system should perform

a) a mechanism to split a task into concurrent subtasks

b) optimise the system performance

c) handling structural or architectural changes

d) all of the mentioned

(5 * 5 = 25 Marks)PART B

Answer ALL questions, choosing either (a) or (b) Each Answer Should not enced 250 Words

11. a) Determine by means of a truth table the validityofDE Morgan's theorem for

three variables: (ABC)' = A' + B' + C'.

[Or]

b) Explain multiplexers with example.

12. a) Illustrate shift micro operation with example,

[Or]

b) Write an assembly language program to add two numbers.

13. a) Illustrate the design of control unit with suitable diagram.

[Or]

b) Discuss Vector processing with example.

14. a) Describe subtraction algorithm with example.

[Or]

b) Discuss asynchronous data transfer with suitable example.

15. a) Illustrate cache memory in detail.

[Or]

b) What is multiprocessor? Explain the characteristics of multiprocessor.

(5 * 8 = 4 9 Marks) PART C

Answer ALL questions, choosing either (a) or (b) Each Answer Should not enceed 600 Words

16. a) Explain any five logic gates with graphic symbols and truth tables.

[Or]

b) Simplify using k-map

 $F(A, B, C, D) = \Sigma(0, 1, 2, 5, 7, 8, 9, 10, 13, 15)$.

17. a) Illustrate the ALU with diagram.

[Or]

b) Discuss instruction cycle with example.

18. a) Explain in detail about addressing modes.

[Or]

b) Elucidate vector operations with examples.

19. a) Discuss Multiplication and division algorithm with examples

[Or]

b) Elucidate Direct Memory Access with neat example.

20. a` Explain about main memory & auxiliary memory. [Or]

b) Discuss interconnection structures.

(7 pages) **Reg. No. :**

Code No.: 8081 Sub. Code : BCAM 22

M.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Second Semester

Computer Applications - Core

MACHINE LEARNING USING PYTHON

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

1. Which of the following are ML methods?

- (a) Based on human supervision
- (b) Supervised Learning
- (c) Semi-reinforcement learning
- (d) All of the above

- 2. Which of the following is a widely used and effective machine learning algorithm based on the idea of bagging?
 - (a) Decision tree
 - (b) Regression
 - (c) Classification
 - (d) Random Forest
- 3. How do you handle missing or corrupted data in a dataset?
 - (a) Drop missing rows or columns
 - (b) Replace missing values with mean/median/mode
 - (c) Assign a unique category to missing values
 - (d) All of the above
- 4. Which of the following is a good test dataset characteristic?
 - (a) Large enough to yield meaningful results
 - (b) Is representative of the dataset as a whole
 - (c) Both (a) and (b)
 - (d) None of the above

Page 2 Code No. : 8081

- 5. Supervised learning and unsupervised clustering both require which is correct according to the statement
 - (a) Output attribute
 - (b) Hidden attribute
 - (c) Input attribute
 - (d) Categorical attribute
- 6. Does the function provide unsupervised prediction, which of the following is the correct statement?
 - (a) cl_precast (b) cl_nowcast
 - $(c) \quad cl_forecast \qquad \qquad (d) \quad All \ of \ these \\$
- 7. The advantage of Grid search is ———.
 - (a) It cannot be applied to non-differentiable functions
 - (b) It cannot be applied to non-continuous functions
 - (c) It is easy to implement
 - (d) It runs reasonably fast for multiple linear regression
- 8. Which of the following is the best machine learning method?
 - (a) Scalable (b) Accuracy
 - (c) Fast (d) All of these
 - Page 3 Code No. : 8081

- 9. To find the minimum or the maximum of a function, we set the gradient to zero because
 - (a) The value of the gradient at extrema of a function is always zero
 - (b) Depends on the type of problem
 - (c) Both (a) and (b)
 - (d) None of the above
- 10. Grid search is ———.
 - (a) Linear in D
 - (b) Polynomial in D
 - (c) Exponential in A
 - (d) Linear in N

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What are the problems machine learning can solve? Explain.

Or

(b) How will you install the scikit-learn? Explain.

Page 4	Code No. : 8081
	[P.T.O.]

12. (a) Summarize the various types of unsupervised learning.

Or

- (b) Explain the effect of preprocessing on supervised learning.
- 13. (a) Discuss the need of one-hot-encoding using dummy variables.

Or

- (b) Write down the methods of model-based feature selection.
- 14. (a) Elaborate the cross-validation in scikit-learn.

Or

- (b) How the grid search with cross-validation works?
- 15. (a) Discuss the parameter selection with preprocessing.

 \mathbf{Or}

(b) Mention the uses of pipelines in grid searches.

Page 5 **Code No. : 8081**

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) What are the essential libraries and tools? Explain.

 \mathbf{Or}

- (b) Illustrate the ensembles of decision trees with neat diagram.
- 17. (a) Discuss the need of Principal Component Analysis (PCA).

Or

- (b) How the k-means clustering works? Give example.
- 18. (a) Outline the univariate nonlinear transformations.

Or

- (b) Explain the implementation of iterative feature selection.
- 19. (a) Summarize the metrics for binary classification.

Or

(b) Discuss the metrics for multiclass classification.

Page 6 **Code No. : 8081**

20. (a) Elaborate the grid-searching preprocessing steps and model parameters.

 \mathbf{Or}

(b) Illustrate the accessing attributes in a grid-searched pipeline.

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(6 pages) **Reg. No. :**

Code No.: 8082 Sub. Code : BCAM 23

M.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Second Semester

Computer Applications — Core

OPEN SOURCE TECHNOLOGY

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. What is the default number of shell commands saved in the history in list of .cshrc file?
 - (a) 200 (b) 100
 - (c) 150 (d) 175

2.		advantage of using ile sharing in Linux	0	S rather than Samba	
	(a)	files saved as .tar extension			
	(b)	compressed files			
	(c)	compatibility with	wind	lows file sharing	
	(d)	none of the above			
3.	Find	l command can sear	ch for	files by ———.	
	(a)	date	(b)	size	
	(c)	name	(d)	all of above	
4.		v can we find the ables?	e cur	rent value for shell	
	(a)	set command	(b)	display command	
	(c)	val command	(d)	curval command	
5.		is a ser allows your web sit		de scripting language e truly dynamic.	
	(a)	PHP	(b)	Java	
	(c)	SQL	(d)	ActiveX	
6.		values assigned to PHP function ——		ants are defined with ——.	
	(a)	Assign()	(b)	define()	
	(c)	Equal()	(d)	Store()	

Page 2 Code No. : 8082

7.				nds a decimal up to
	the 1	next highest integer		
	(a)	floor()	(b)	found()
	(c)	rand()	(d)	ceil()
8.		' is denoted in th ng tags as ———		e with opening and
	(a)	php ?	(b)	? <php>?</php>
	(c)	<php></php>	(d)	?php?
9.		functi	on se	orts the array in
		ending value.		
	(a)	resort()	(b)	dsort()
	(c)	sort()	(d)	assort()
10.		return	the v	value of the current
	elem	nent.		
	(a)	pos()	(b)	list()
	(c)	range(low, high)	(d)	sizeof()
		PART B — (5 \times	5 = 25	5 marks)
Answer ALL questions, choosing either (a) or (b).				
	Ea	ch answer should n	ot exce	eed 250 words.

11. (a) Distinguish between the Linux and Unix.

Or

(b) Explain the pipes and redirection in Linux programs.

Page 3 Code No. : 8082

12. (a) Describe the *printf*, *fprintf* and *sprintf* in Linux.

Or

- (b) Write down the use of environment variables in Linux.
- 13. (a) What is MySQL? Explain.

Or

- (b) Summarize the client-side technologies in PHP.
- 14. (a) Describe the syntax and example of GET arguments in PHP.

 \mathbf{Or}

- (b) Explain the purpose of string cleanup functions in PHP.
- 15. (a) Write down the making MySQL queries in PHP.

Or

(b) What are the MySQL functions? Explain.

Page 4	Code No. : 8082
-	[P.T.O.]

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss the shell as a programming language.

Or

- (b) Explain the for loop syntax and example in Linux programming.
- 17. (a) Illustrate the scanning directories in Linux.

Or

- (b) Elaborate the reading from and writing to the terminal.
- 18. (a) Discuss the C-style multiline comments in PHP.

 \mathbf{Or}

- (b) Explain the Switch statement in PHP with simple example.
- 19. (a) Illustrate the need of multidimensional arrays in PHP.

Or

(b) Elaborate the various types of case functions in PHP.

Page 5 **Code No. : 8082**

20. (a) Compare the HTML tales and database tables.

Or

(b) How will you edit data with an HTML Form? Give example.

Page 6 Code No. : 8082

Reg. No. :

Code No.: 8083 Sub. Code: BCAM 24

M.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Second Semester

Computer Applications - Core

ADVANCED RELATIONAL DATABASE MANAGEMENT SYSTEM

(For those who joined in July 2020 onwards)

Time : Three hours

(6 pages)

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

1. ——— is a collection of facts, such as values or measurements.

- (a) Data
- (b) Information
- (c) Things
- (d) Items

- 2. A <u>is a set of software programs that</u> allows users to create, edit and update data in database files, and store and retrieve data from those database files.
 - (a) data base
 - (b) data management system
 - (c) database management system
 - (d) office management system
- 3. A database is a complex ———.
 - (a) Data structure (b) Memory
 - (c) Field (d) Record
- 4. The overall description of a database is called
 - (a) Data definition
 - (b) Data Manipulation
 - (c) Data integrity
 - (d) Database schema
- 5. Retrieval of data is done by using a ———.
 - (a) Stack (b) Query
 - (c) Linked list (d) All of these Page 2 Code No.: 8083

6.	SQL	stands for —		
	(a)	System Query Lar	nguage	е
	(b)	Structured Query	Langu	uage
	(c)	Sets Query Langu	ages	
	(d)	None of these		
7.		ld that can identify ——— of the recor		ord uniquely is called
	(a)	foreign key	(b)	super key
	(c)	primary key	(d)	candidate key
8.		—— command can	be use	ed to modify a column
	in a	table.		
	(a)	alter	(b)	update
	(c)	set	(d)	create
9.	A ta	ble in RDBMS is al	so call	ed as
	(a)	tuple	(b)	domain
	(c)	relation	(d)	projection
10.	The	number of columns	in a t	able is its ———.
	(a)	degree	(b)	cardinality
	(c)	relation	(d)	tuple
		Page	e 3	Code No. : 8083

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Discuss the structure of relational data in DBMS.

 \mathbf{Or}

- (b) Distinguish between the relational algebra and relational calculus.
- 12. (a) Write down the various types of E-R modeling symbols.

Or

- (b) Summarize the semi-structured data with example.
- 13. (a) Differentiate between function and procedure.

 \mathbf{Or}

- (b) Discuss the aggregate functions in SQL with examples.
- 14. (a) Write a short note on B+ Tree.

Or

(b) Discuss about the timestamp ordering protocol.

Page 4	Code No. : 8083
	[P.T.O.]

15. (a) Explain the failure classification in recovery system.

 \mathbf{Or}

(b) Write down the purpose of interquery parallelism.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Compare the physical and logical database model.

Or

- (b) Explain about the system structure of a DBMS.
- 17. (a) Discuss the Boyce-Codd normal form in detail.

Or

- (b) Differentiate between the textual data and spatial data.
- 18. (a) How will you create and manipulate tables in SQL? Describe.

 \mathbf{Or}

(b) What are the set operations in SQL? Explain.

Page 5 Code No. : 8083

19. (a) What are the type of hashing techniques? Explain.

Or

- (b) Illustrate the transaction atomicity and durability.
- 20. (a) Elaborate the architecture of client server in database system.

Or

(b) Discuss the importance of distributed data storage.

Page 6 **Code No. : 8083**

Reg. No.

		Sub. Code: BCAE21	
Code No	: 8084	APRIL 2021	
		EGREE EXAMINATION, APRIL 2021 SECOND SEMESTER	
	COMPLITE	R APPLICATIONS - ELECTIVE	
		E COMMERCE	
		ho joined in July 2020 onwards) Maximum: 75 marks	
Time :	Three hours Part	$-A(10 \times 1 = 10 \text{ marks})$	
	Answer all que	estion, choose the correct answer:	
	A TABANA A A A A A A A A A A A A A A A A A		
	m	to the formation interesting	
1.		electronic environment is a interaction. b) Screen-to-face	
	a) Follow – upc) Screen- to – customer	d) Face – to - Face	
2	The expansion of C2B is	Construction of the second s	
4.	a) Customer – to – Business	A CONTRACTOR OF A CONTRACTOR AND A CONTRACTOR A	
	a) Customer – to – Business	b) consistent to Dusiness	
	c) Consumer - to - Bank	d) Consistent – to - Bank	
3	A search returns a list of zero	or more links to that state by using	
5.	a) Register b) Select		
4.		and mailing make possible a new form of marketing called	
ч.	The advent of internet sites a		
	a) Old media	b) Savvy Marketers	
	u) 510 110 010	Configure apparent of a configure and the state of the st	
	c) Spiral branding	d) e-Branding	
5	In which online payment cate	gory, transaction value is less than 5 euros or dollars and the	
	transaction cost are nearly zer		
	a) Micropayments	b) Consumer payments	
	c) Business payments	d) All the above	
	c) Dusiness payments		
6.	E-cash is based on cryptograp		
	a) Encoding Key	b) Decoding Key	
	c) Public Key	d) Digital Signature	
7.	modula cumparte a re	unge of statistical tools and business forecasting techniques	
1.	a) Demand Forecasting Programme		
	a) Demand Porceasing Programme		
	b) Transportation Logistics Programme		
	c) Distribution Planning Programme		
	d) Advanced Scheduling Pro	gramme	
8.	is ascribing the characteristics of one person to another often at a subconscious		
	a) Variability b) Scalability c) Reliability d) Transference		
	a) Variability b) Scalability	c) Reliability d) Iransference	
9.	is a Protocol that suppo	orts mobile computing.	
9.			
	a) ICMP b) WA	*	
	0 are the most basic	form of personalization	
1	a) Greeting	b) Customization	
	c) Narrow casting	d) Recommendation	
	c) manow cashing	1972 A. H. Constanting M. Dellargine (2014) To access to 2014 (1994)	

PART B $-(5 \times 5 = 25 \text{ marks})$ Answer ALL the questions, choosing either (a) or (b)

Each answer should not exceed 250 words

11. a) Write in detail about the limitations of E-Commerce in your own words.

(Or)

b) Explain Business to Business in detail.

12. a) Describe the role of Browsing Behavior Model in E-Commerce.

(Or)

b) Discuss in detail about Internet Marketing Trends.

13. a) Write the properties of Electronic Cash.

(Or)

b) What are the risk associated with the e-payment systems? Explain.14. a) What is CRM? Explain the need of Electronic CRM

(Or)

b) Demonstrate the E-supply architecture.

15. a) State and explain the categories of Mobile commerce.

(Or)

b) What are the requirements needed for designing a website?

$PART - C (5 \times 8 \text{ marks})$

Answer ALL the questions, choosing either (a) or (b) Each answer should not exceed 600 words

16. a) Discuss about the disadvantages of E-commerce.

(Or)

b) Explain Brokerage model in detail.

17. a) Discuss about Online Marketing.

(Or)

b) Give brief notes on marketing strategies.

18. a) How will you classify E-Payment System? Explain.

(Or)

b) Discuss about the designing of E-Payment systems in detail.

19. a) Explain the architectural components of a CRM solution.

(Or)

b) Describe the major trends in electronic supply chain management.

20. a). Discuss briefly about the technologies of mobile commerce.

(Or)

b) Describe the steps to create a website for a business organization with example.

Reg. No..... Sub. Code: BCAE23

Code No: 8086

M.C.A (CBCS) DEGREE EXAMINATION, APRIL 2021 SECOND SEMESTER COMPUTER APPLICATIONS - ELECTIVE SOFTWARE ENGINEERING (for those who joined in July 2020 onwards) Maximum: 75 marks Time : Three hours Part - A (10 X 1 = 10 marks)

Answer all question, choose the correct answer:

1. SRS is also known as specification of

- (a) White box testing (b) Stress testing
- (c) Integrated testing (d) Black box testing

In function point analysis, number of general system characteristics used to rate the 2. system are

(a)	10	(b)	14
(c)	20	(d)	12

Coupling and cohesion can be represented using a 3.

(a)	cause-effect graph	(b)	dependence matrix
(c)	Structure chart	(d)	SRS

4. Software consists of

- (a) Set of instructions + operating procedures
- (b) Programs + documentation + operating procedures
- (c)Programs + hardware manuals
- (d) Set of programs

5. The desired level of coupling is

ø

- No coupling (a) (b) Control coupling
- (C) Common coupling (d)Data coupling

6. Which is not a step of Requirement Engineering?

- (a) Requirements elicitation (b) Requirements analysis
- (c) Requirements design (d)Requirements documentation
- In size oriented metrics, metrics are developed based on the 7.
 - (a) number of Functions

(c)

number of lines of code amount of memory usage (d)

(b)

number of user inputs

Whic	h one of the following is not a source co	de metric?	
(a)	Halstead metric	<u>(b)</u>	Function point metric
(c)	Complexity metric	(d)	Length metric
		-	
The r	nain purpose of integration testing is to		
(a)	design errors		analysis errors
(c)	procedure errors	(d)	interface errors
Chan	ores made to the system to reduce the fu	ture system f	ailure chances is called
			Adaptive Maintenance
		(d)	Perfective Maintenance
(•)	الم الم		
	PART B - (5 X	K 5 = 25 Mar	ks)
12	Answer ALL questions,	choosing eith	ner (a) or (b).
	Each answer should r	not exceed 25	50 words.
(a)	Write short note on Software process	es.	
	∧ Or ≉	•	
(b)	What are the key challenges facing so	oftware engin	neering?
			· .
(a)	Explain in detail about Size – Oriente	ed Metrics.	
	Or		
(b)	Elucidate the function -oriented metr	rics.	
(a)	Differentiate Cohesion and coupling.		
0 - 22 0	Or		
(b)	Brief about Structured Analysis vs O	bject Oriente	ed Analysis.
	5. 5.		<i>a</i>
(a)	Explain about the software project es	stimation.	
	Or		×
(b)	Write short note on Stress Testing.		
e 6			
(a)	What do you mean by system testing	? Explain in	detail.
all n ar	Or	5.	
(b)	Explain in detail about the Integratio	n Testing.	_
			(P.7)
	 (a) (c) The r (a) (c) Char (a) (b) (a) (a) (b) (c) (c)<td> (a) Halstead metric (c) Complexity metric The main purpose of integration testing is to (a) design errors (c) procedure errors Changes made to the system to reduce the fut (a) Preventive Maintenance (c) Corrective Maintenance (c) Corrective Maintenance (c) Corrective Maintenance (a) Write short note on Software process North or software North or software process North or software North or</td><td>(c)Complexity metric(d)(c)Complexity metric(d)The main purpose of integration testing is to find(a)design errors(a)design errors(d)(c)procedure errors(d)(a)Preventive Maintenance(b)(c)Corrective Maintenance(d)(c)Corrective Maintenance(d)(c)Corrective Maintenance(d)(a)PART B - (5 X 5 = 25 Mar Answer ALL questions, choosing eith Each answer should not exceed 23(a)Write short note on Software processes. N Or(b)What are the key challenges facing software engine(a)Explain in detail about Size – Oriented Metrics. Or(b)Elucidate the function –oriented metrics.(a)Differentiate Cohesion and coupling. Or(b)Brief about Structured Analysis vs Object Oriented(a)Explain about the software project estimation. Or(b)Write short note on Stress Testing.(a)What do you mean by system testing? Explain in Or</br></br></td>	 (a) Halstead metric (c) Complexity metric The main purpose of integration testing is to (a) design errors (c) procedure errors Changes made to the system to reduce the fut (a) Preventive Maintenance (c) Corrective Maintenance (c) Corrective Maintenance (c) Corrective Maintenance (a) Write short note on Software process North or software North or software process North or software North or	(c)Complexity metric(d)(c)Complexity metric(d)The main purpose of integration testing is to find(a)design errors(a)design errors(d)(c)procedure errors(d)(a)Preventive Maintenance(b)(c)Corrective Maintenance(d)(c)Corrective Maintenance(d)(c)Corrective Maintenance(d)(a)PART B - (5 X 5 = 25 Mar Answer ALL questions, choosing eith Each answer should not exceed 23(a)Write short note on Software processes. N Or(b)What are the key challenges facing software engine(a)Explain in detail about Size – Oriented Metrics. Or(b)Elucidate the function –oriented metrics.(a)Differentiate Cohesion and coupling. Or(b)Brief about Structured Analysis vs Object Oriented(a)Explain about the software project estimation.

Paeritinuation Sheet

PART-C $C 5 \times 8 = 40 \text{ Marks}$ Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss about the Waterfall model.

Or

(b) Explain the Spiral Model in detail.

17. (a) Describe the metrics in the process and project domains.

Or

(b) Discuss about the COCOMO Model.

18. (a) Discuss the concept of software maintenance process.

Or

(b) Explain black box testing methods and its advantages and disadvantages.

19. (a) Describe distinct and measurable characteristics of an Object Oriented design.

Or

(b) Explain the following Software Metrics

i) Token Count

ii) Function Count

20. (a) Discuss about the Black Box testing in detail.

Or

(b) Explain in detail about the Unit Testing.

Reg. No. :

Code No. : 8061 Sub. Code : BCAE 31

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Computer Applications - Elective

INTERNET OF THINGS

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

- 1. Which classification is based on whether the "thing" should move or always stay at the same location?
 - (a) Simple or rich data
 - (b) Report range
 - (c) Mobile or static
 - (d) Object density per cell

(6 Pages)

- 2. _____ typically refers to an outdoor area larger than a single group of house units.
 - (a) LAN (b) FAN
 - (c) NAN (d) HAN
- 3. _____ are fundamental building blocks of IoT network.
 - (a) Frequency (b) Sensors
 - (c) Modulation (d) None of these
- 4. How many characteristics defining the smart objects?
 - (a) 4 (b) 5
 - (c) 6 (d) 3
- 5. Constraints networks are often referred to as
 - (a) Low-power and lossy network
 - (b) Low-constraint and lossy network
 - (c) Loss network
 - (d) High-power and high network
- 6. In case of constraint network the enabled web server software with advanced features are now implemented with little memory in the range of
 - (a) 20 KB (b) 10 KB
 - (c) 30 KB (d) 5 KB Page 2 **Code No. : 8061**

- 7. We find the structured data in a simple ——
 - (a) Tabular form (b) Word form
 - (c) Presentation form (d) Data form
- 8. Relational database are often grouped into a broad data storage category called ———.
 - (a) Data warehouses (b) Data mining
 - (c) Data mart (d) Spatial mining
- 9. The core element of architecture of smart city is
 - (a) Mobile unified service
 - (b) Urban application platform
 - (c) Management center
 - (d) Integrated information provider
- 10. Which of the following is not a layer present smart city IoT architecture?
 - (a) Street layer
 - (b) City layer
 - (c) Data center layer
 - (d) Communication layer

Page 3 **Code No. : 8061**

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words.

11. (a) Compare the various differences between IT and OT networks.

Or

- (b) Write short notes on IoT simplified architecture with neat diagram.
- 12. (a) Clarify about actuators how they can be classified?

Or

- (b) Mention the advantages and disadvantages of wireless sensor network.
- 13. (a) Discuss the need for optimization of business case for IP.

\mathbf{Or}

- (b) Define CoAP. How the message is composed using CoAP?
- 14. (a) Compare the differences between structured and unstructured data.

\mathbf{Or}

(b) How to compare big data and edge analytics?

Page 4 Code No. : 8061 [P.T.O] 15. (a) Discuss about the IoT strategy for smart cities.

 \mathbf{Or}

PART C — $(5 \times 8 = 40 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.
- 16. (a) Explain in detail about various impacts of IoT.

Or

- (b) Summarize the core IoT functional stack.
- 17. (a) Define sensor. Write brief notes on categories of sensor and its applications.

 \mathbf{Or}

- (b) Illustrate about IEEE 802.15.4 IoT technology. How it works?
- 18. (a) How to adapt the SCADA for IP?

 \mathbf{Or}

(b) Discuss in detail about IoT application transport methods.

Page 5 Code No. : 8061

19. (a) Explain how to use the data analytics in IoT?

Or

- (b) Determine the various types of big data analytics tools and technology.
- 20. (a) Explain in detail about IoT architecture for transportation.

 \mathbf{Or}

(b) Elaborate the emergency response IoT architecture.

Page 6 Code No. : 8061

Reg. No. :

Code No.: 8062 Sub. Code: BCAE 32

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Computer Applications

Elective — SOFTWARE PROJECT MANAGEMENT

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

- 1. Which type of project plan describes the skills of the participants will be developed?
 - (a) Configuration management plan
 - (b) Staff development plan
 - (c) Maintenance plan
 - (d) Quality assurance plan

(6 Pages)

- 2. The net profit of a project is the differences between the ——— over the life of the project.
 - (a) net cost and the total income
 - (b) total costs and the total income
 - (c) net profit and the total income
 - (d) total costs and the total expenditure
- 3. <u>methods break the product into small</u> incremental builds.
 - (a) Agile (b) Extreme
 - (c) RAD (d) Process model
- 4. ——— is an efficient framework within which you can develop software with teamwork.
 - (a) Estimation (b) Scrum
 - (c) COSMIC (d) Organic mode
- 5. The abbreviation of PERT stands for ———
 - (a) Program evaluation and review technique
 - (b) Program estimation and review technique
 - (c) Program evaluation and refer technique
 - (d) Programmed evaluation and review technique

Page 2 Code No. : 8062

- 6. _____ schedule indicating start and completion dates for each activity.
 - (a) Activity (b) Cost
 - (c) Resource (d) Staff
- 7. Which one of the following is the simplest and oldest technique for tracking project progress?
 - (a) Slip chart(b) Ball chart(c) Gantt chart(d) Timeline
- 8. _____ is the discipline for systematically controlling the changes that take place during development.
 - (a) Control chain
 - (b) Earned value analysis
 - (c) Software Configuration Management (SCM)
 - (d) Project tracking
- 9. ——— had a simple view about what motivated people at work money.
 - (a) Maslow (b) Taylor
 - (c) Herzberg (d) None of these
- 10. How many types of group responsibilities for ethical and professional concerns?
 - (a) Four (b) Two
 - (c) Three (d) Six
 - Page 3 Code No. : 8062

PART B — $(5 \times 5 = 25 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.
- 11. (a) How does project management methodology differ for simple projects and complex projects?

Or

- (b) Explain in detail about strategic program management.
- 12. (a) Mention the various phases of software process model.

\mathbf{Or}

- (b) Discuss about agile methods in detail.
- 13. (a) Write short notes on objectives of activity planning.

\mathbf{Or}

- (b) Clarify the concept of risk identification.
- 14. (a) List the methods for assigning an earned value in earned value analysis.

Or

- (b) Discuss the steps in managing the contracts.
 - Page 4 Code No. : 8062 [P.T.O]

15. (a) How do you select the right persons for the job?

Or

(b) What are the measures to reduce the disadvantages of group decision making?

PART C — $(5 \times 8 = 40 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 600 words.
- 16. (a) Describe about activities covered by the software project management with example.

 \mathbf{Or}

- (b) Explain the step-wise project planning in detail with suitable flowchart.
- 17. (a) Discuss in detail about software process and process models.

Or

- (b) What are effort and cost estimation techniques? Analyze the importance of COCOMO model for software estimation.
- 18. (a) Analyze the different network planning models. Give example for precedence construction.

Or

(b) Write a brief notes on resource allocation and cost schedule.

Page 5 Code No. : 8062

19. (a) Summarize the framework for management and control in detail.

\mathbf{Or}

- (b) Give in detail about the importance of cost monitoring.
- 20. (a) Discuss the organizational behavior with example.

 \mathbf{Or}

(b) How to deal with ethical and programming concerns in software project management?

Page 6 **Code No. : 8062**

Reg. No. :

Code No. : 8063 Sub. Code : BCAE 33

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Computer Applications

Elective — MOBILE COMMUNICATIONS

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

1. _____are the physical representation of data.

- (a) Signals (b) Information
- (c) Frames (d) Packets
- 2. <u>describes how several users can share</u> a medium with minimum or no interference.
 - (a) Doppler shift
 - (b) Training sequence
 - (c) Inter symbol interference
 - (d) Multiplexing

(6 Pages)

- 3. ——— is often used for simultaneous access to the medium by base station and mobile station in cellular networks.
 - (a) SDM (b) FDM
 - (c) TDM (d) CDM
- 4. _____ is a strictly centralized scheme with one master station and several slave stations.
 - (a) inhibit sense multiple access
 - (b) digital sense multiple access
 - (c) symmetrical transmission
 - (d) polling
- 5. IrDA devices are internally connected to a serial port limiting transfer rates to 115 kbit/s.
 - (a) 115 kbit/s (b) 111 kbit/s
 - (c) 109 kbit/s (d) 120 kbit/s
- 6. In start frame delimiter (SFD) how many bits indicate the start of the frame and provide frame synchronization?
 - (a) 20 (b) 16
 - (c) 18 (d) 13

Page 2 **Code No. : 8063**

- 7. The <u>is the network for global data</u> communication with hundreds of millions of users.
 - (a) Network (b) Router
 - (c) Internet (d) Bridges
- 8. A ——— layer protocol such as TCP has been designed for fixed networks with fixed end-systems.
 - (a) Network (b) Physical
 - (c) Session (d) Transport
- 9. <u>addresses</u> the problems of locationdependent view on a file system.
 - (a) Consistency (b) Redundancy
 - (c) Availability (d) Transparency
- 10. Which protocol offers delivery of push messages, selection of transport service for push messages and authentication of PIs?
 - (a) Push OTA
 - (b) Push access protocol
 - (c) Internet protocol
 - (d) TCP

Page 3 Code No. : 8063

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words.

11. (a) Discuss about the concept of signals and antenna.

Or

- (b) What is meant by signal propagation? Explain its types with an example.
- 12. (a) Clarify about carrier sense multiple access and demand assigned multiple access.

Or

- (b) Examine the various types of GSM mobile service.
- (a) Compare the differences between infra red versus radio transmission technology.

\mathbf{Or}

(b) Write short notes on WLANs infrastructure and ad-hoc network.

Page 4	Code No. : 8063
	[P.T.O]

14. (a) Clarify about goals, assumptions and requirements of mobile IP.

Or

- (b) Explain the following :
 - (i) Indirect TCP
 - (ii) Snooping TCP
 - (iii) Mobile TCP.
- 15. (a) Determine about HTTP and HTML.

Or

(b) List out the some approaches that might help for wireless access.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 600 words.

16. (a) Write short notes on application and needs for wireless networks.

Or

- (b) Define multiplexing. Write brief notes on various types of multiplexing.
- 17. (a) What is meant by TDMA? How to avoid the collision during multiple accesses in TDMA.

 \mathbf{Or}

(b) Explain the detail about DECT system and protocol architecture.

Page 5 Code No. : 8063

18. (a) Why is the PHY layer in IEEE 802.11 subdivided?

\mathbf{Or}

- (b) Define WATM. Explain the WATM services and its various features.
- 19. (a) Explain the following :
 - (i) Tunneling and encapsulation
 - (ii) Dynamic host configuration protocol.

 \mathbf{Or}

- (b) Describe the several mechanism of traditional TCP.
- 20. (a) Define WWW. Draw and explain the WWW system architecture.

\mathbf{Or}

(b) Give an overview about wireless application protocol and its architecture with neat diagram.

Page 6 **Code No. : 8063**

Reg. No. :

Code No. : 8044

Sub. Code : BCAM 11/ ZCAM 13

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Computer Applications – Core

DESIGN AND ANALYSIS OF ALGORITHMS

USING C++

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. In a stack, if a user tries to remove an element from an empty stack it is called ______
 - (a) Underflow
 - (b) Empty collection
 - (c) Overflow

(6 pages)

	(d) Garbage Collection	
2.	Circular Queue is also known as ————.	
	(a) Ring Buffer	
	(b) Square Buffer	
	(c) Rectangle Buffer	
	(d) Curve Buffer	
3.	What is the worst case complexity of QuickSort?	
	(a) O(nlogn) (b) O(logn)	
	(c) O(n) (d) O(n2)	
4.	Strassen's algorithm is an algorithm.	
	(a) Non- recursive	
	(b) Recursive	
	(c) Approximation	
	(d) Accurate	
5.	Prim's algorithm is a ————.	
	(a) Divide and conquer algorithm	
	(b) Greedy algorithm	
	(c) Dynamic Programming	
	Page 2 Code No. : 8044	

- (d) Approximation algorithm
- 6. Kruskal's algorithm is used to ———.
 - (a) find minimum spanning tree
 - (b) find single source shortest path
 - (c) find all pair shortest path algorithm
 - (d) traverse the graph
- 7. What is the maximum number of children that a binary tree node can have?
 - (a) 0 (b) 1
 - (c) 2 (d) 3
- 8. The post-order traversal of a binary tree is O P Q R S T. Then possible pre-order traversal will be
 - (a) TQRSOP (b) TOQRPS
 - (c) TQOPSR (d) TQOSPR
- 9. Branch and bound is a
 - (a) problem solving technique
 - (b) data structure
 - (c) sorting algorithm
 - (d) type of tree
- 10. _____ is the class of decision problems that can be solved by non-deterministic polynomial algorithms.
 - (a) NP (b) P

Page 3 Code No. : 8044

(c) Hard (d) Complete

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain about Recursive algorithms.

Or

- (b) Write a note on Heaps.
- 12. (a) Write an algorithm for recursively finding the maximum and minimum.

Or

- (b) Write an algorithm for Iterative binary search.
- 13. (a) Discuss about Knapsack problem.

 \mathbf{Or}

- (b) Write down the greedy algorithm to generate shortest paths.
- 14. (a) Categorize preorder and postorder traversals algorithm.

Or

(b) Explain about recursive backtracking algorithm.

Page 4 Code No. : 8044

[P.T.O.]

15. (a) Describe about control abstractions for Least Cost Search.

Or

(b) Discuss about Cook's theorem.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss about Amortized complexity.

 \mathbf{Or}

- (b) Summarize Binary search tree.
- 17. (a) Explain about Quick sort.

 \mathbf{Or}

- (b) Give an overview about Strassen's matrix multiplication.
- 18. (a) Discuss about Prim's algorithm.

Or

- (b) Briefly explain about all-pairs shortest paths.
- 19. (a) Describe about Breadth first search and traversal.

 \mathbf{Or}

(b) Discuss about Hamiltonian cycles.

Page 5 Code No. : 8044

20. (a) Explain about Least Cost Branch-and-Bound solution.

Or

(b) Analyze the Nondeterministic algorithms.

Page 6 **Code No. : 8044**

Reg. No. :

Code No. : 8045

Sub. Code : BCAM 12/ ZCAM 15

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Computer Applications – Core

OBJECT ORIENTED ANALYSIS AND DESIGN USING UML

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Software development is _____ and always undergoing major change.
 - (a) static (b) protected
 - (c) dynamic (d) public

(6 pages)

- 2. Software development methodology is a _____ of processes.
 - (a) group (b) series
 - (c) set (d) unique set
- 3. UML stands for _____
 - (a) Unified Modeling Language
 - (b) Union Method Language
 - (c) Unified Method Language
 - (d) Union Member Language

4. The heart of the UA is____

- (a) Booch (b) Rumbough
- (c) Jacobson's (d) Ali
- 5. The Process used for determining respective project's requirements and then develop a design for the project is termed as ______
 - (a) Initializing
 - (b) Requirement checking
 - (c) Analysis
 - (d) Project Study
- 6. _____ is a creative activity that involves understanding the problem its associated constraints.
 - (a) Modelling (b) Analysis
 - (c) Design (d) Implementation
 - Page 2 Code No. : 8045

- 7. The connection involves direct reference to attributes or methods of another object is called as ______ Coupling.
 - (a) Content (b) Common
 - (c) Control (d) Data
- 8. _____ provides a scheme for refining the subsystem or components of software systems.
 - (a) Axioms
 - (b) Corollaries
 - (c) Design Patterns
 - (d) Class Design
- 9. _____ errors results from incorrectly constructed code.
 - (a) Logic (b) Syntax
 - (c) Runtime (d) General
- 10. <u>testing</u> testing assumes that the specific logic is important and must be tested to guarantee the system's proper functioning.
 - (a) Black box
 - (b) White Box
 - (c) Top-down
 - (d) Bottom-up

Page 3 Code No. : 8045

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What is an Object, state of the object? Give an example.

Or

- (b) Why do you use object orientation? List out the benefits of object orientation.
- 12. (a) What are the phases of OMT?

Or

- (b) Write short notes on class diagram.
- 13. (a) Mention the steps for finding use cases.

Or

- (b) State the three steps in CRC process.
- 14. (a) Differentiate good design and bad design.

Or

(b) What are the benefits of the Access Layer Class? List the access layer tasks.

Page 4 Code No. : 8045 [P.T.O.] 15. (a) Write short notes on : Quality Assurance.

Or

(b) Mention the Imapct of Object Orientation on Testing.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) What is Polymorphism? Why is polymorphism useful? Give an example.

 \mathbf{Or}

- (b) Discuss about Object Oriented System Development Life Cycle.
- 17. (a) Write the differences between design patterns and frameworks.

Or

- (b) Discuss about UML and mention the primary goal in the design of UML.
- 18. (a) List the guidelines for identifying super -sub relationships.

Or

(b) How to eliminate unnecessary associations? Give examples.

Page 5 Code No. : 8045

19. (a) Write detail notes on Object Relational System.

 \mathbf{Or}

- (b) Discuss about Macro and Micro Level Process.
- 20. (a) Write Detail notes on Testing Strategies.

 \mathbf{Or}

(b) Discuss about Usability Testing.

Page 6 **Code No. : 8045**

Reg. No. :

Code No. : 8046

Sub. Code : BCAM 13/ ZCAM 14

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Computer Applications- Core

ADVANCED JAVA PROGRAMMING

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. Which of the following is a valid declaration of an object of class say MCA?
 - (a) MCA obj=new MCA();
 - (b) MCA obj=new MCA;
 - (c) obj=new MCA();
 - (d) new MCA obj:

(6 pages)

- 2. What is the process of defining more than one method in a class having the same name but differentiated by method signature?
 - (a) Method overriding (b) Method overloading
 - (c) Encapsulation (d) Inheritance
- 3. Which of the following class is not a member class of java.io package?
 - (a) String (b) StringReader
 - (c) Writer (d) FileReader
- 4. Which of these are legacy classes?
 - (a) Stack (b) Hashtable
 - (c) Vector (d) All of the mentioned
- 5. Which of the following is advantage of using PreparedStatement in Java?
 - (a) Slow performance
 - (b) Encourages SQL injection
 - (c) Prevents SQL injection
 - (d) More memory usage
- 6. Which of these events is generated when the component is added or removed?
 - (a) ComponentEvent (b) ContainerEvent
 - (c) FocusEvent (d) InputEvent
 - Page 2 Code No. : 8046

- 7. How many bits are in a single IP address?
 - (a) 8 (b) 16
 - (c) 32 (d) 64
- 8. Which one of the Exception is thrown by remote method?
 - (a) RemoteException
 - (b) InputOutputException
 - (c) RemoteAccessException
 - (d) RemoteInputOutputException
- 9. Which of the following is not a feature of Beans?
 - (a) Introspection (b) Events
 - (c) Persistence (d) Serialization
- 10. Which of the following code is used to get an attribute in a HTTP Session object in servlets?
 - (a) session.getAttribute(String name)
 - (b) session.alterAttribute(String name)
 - (c) session.updateAttribute(String name)
 - (d) session.setAttribute(String name)

Page 3 Code No. : 8046

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

11. (a) Discuss the requirement of each keyword in the following java program statement: public static void main(String args[])

Or

- (b) Write a note on enumerations in Java.
- 12. (a) Classify any five ByteStream classes.

Or

(b) Summarize HashTable.

13. (a) List down the Swing packages.

Or

- (b) Generalize the JDBC statements.
- 14. (a) Explain about InetAddress.

 \mathbf{Or}

(b) Write any five methods defined by Basic FileAtrributes.

Page 4 Code No. : 8046

[P.T.O.]

15. (a) Outline the advantages of java Beans.

Or

(b) Write down the Life Cycle of a Servlet.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.

16. (a) What is method overloading and method overriding? Differentiate these with an example java program.

Or

- (b) Discuss about the usage of packages with an example java program.
- 17. (a) Illustrate bounded wildcards.

Or

- (b) Generalize the Collection interfaces.
- 18. (a) Discuss in detail about the four types of Swing buttons.

Or

(b) What are the steps to connect to the database in java? Explain in detail.

Page 5 Code No. : 8046

19. (a) List down the methods defined by Buffer class.

\mathbf{Or}

- (b) Write a Simple Client/Server Application Using RMI.
- 20. (a) Explain about the Java Beans API.

Or

(b) Discuss in detail about the javax.servlet package.

Page 6 Code No. : 8046

(6 pages)

Reg. No. :

Code No.: 8047

Sub. Code: BCAM 14/ ZCAM 12

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Computer Applications - Core

COMPUTER ORGANIZATION AND ARCHITECTURE

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer :

- 1. The digital system usually operated on ______ system.
 - (a) binary (b) decimal
 - (c) octal (d) hexadecimal

2.	Using	2's	Complement,	subtraction	of	$(1010)_2$
	from, (0011)2	_		

(a) $(0111)_2$ (b) ($(1001)_2$
----------------------	------------

- (c) $-(0111)_2$ (d) $-(1001)_2$
- 3. _____ are used for converting one type of number system in to other form.
 - (a) Encoder (b) Logic gate
 - (c) Half adder (d) FA
- 4. Half adder consist of _____ and ____ Gates.
 - (a) EX-OR and AND (b) EX-OR and OR
 - (c) EX-OR and NOT (d) OR and NOT
- 5. An X-OR gate produces an output only when it's two-inputs are ———
 - (a) high (b) low
 - (c) different (d) same
- 6. The only function of a NOT gate is to
 - (a) stop a signal
 - (b) recomplement a signal
 - (c) invert an input signal
 - (d) act as a universal set
 - Page 2 Code No. : 8047

7.	K-Map technique ge ———————————————————————————————————			
	(a) 2	(b) 8		
	(c) 7	(d) 6		
8.	A Register is a group of -			
	(a) OR gates	(b) OR and AND gate		
	(c) Flip-flops	(d) AND gate		
9.	Decimal number syst symbols.	tem has		
	(a) 15	(b) 16		
	(c) 2	(d) 10		
10.	Which of the following is	not an octal number?		
	(a) 44	(b) 29		
	(c) 6632	(d) 74		
PART B — $(5 \times 5 = 25 \text{ marks})$				
Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.				
11.	(a) What is the ope Describe.	eration of RS flip-flop?		
	Or			
	(b) Draw a 2 to 1 multip	olexer circuit.		

Page 3 Code No. : 8047

12. (a) Describe the different phases of instruction cycle.

Or

- (b) Explain the concept of Timing and control.
- 13. (a) Write a short note on Instruction pipeline.

Or

- (b) What are the characteristics of CISC? Explain.
- 14. (a) Elaborate the hardware implementation for addition and subtraction algorithm.

Or

- (b) Summarize the concept of Serial Communication.
- 15. (a) State the advantages of cache memory.

\mathbf{Or}

(b) Write down the memory hierarchy in computer system.

Page 4 Code No.: 8047 [P.T.O.] PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.

16. (a) State and prove Demorgan's Theorem of Boolean algebra.

Or

- (b) What are the different kinds of shift registers? Explain.
- 17. (a) Compare the machine languages and assembly languages.

Or

- (b) Discuss the arithmetic micro operations with simple examples.
- 18. (a) What is a stack? What are the operations performed on stack? Describe.

Or

(b) Outline the various types of addressing modes of an instruction.

Page 5 **Code No. : 8047**

19. (a) What is DMA? Explain the block diagram of DMA.

 \mathbf{Or}

- (b) Illustrate the Asynchronous Data Transfer with neat diagram.
- 20. (a) Draw and explain the block diagram of Associative Memory.

 \mathbf{Or}

(b) Compare the address space and memory space in Virtual Memory.

Page 6 Code No. : 8047

Reg. No. :

Code No. : 8057 Sub. Code : BCAM 31

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

${\rm COMPUTER} \ {\rm APPLICATIONS} - {\rm CORE}$

DATA ANALYTICS USING R

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

- 1. Which of the following is an example of a valid graphics device in R?
 - (a) A socket connection
 - (b) A Microsoft word document
 - (c) A PDF file
 - (d) A file folder

(6 Pages)

- 2. Finally, in ———— R version 1.0.0 was released to the public.
 - (a) 2000 (b) 2005
 - (c) 2010 (d) 2012
- 3. Which of the following describes R language?
 - (a) Free
 - (b) Paid
 - (c) Available for free trial only
 - (d) None of the above
- 4. The copyright for the primary source code for R is held by the ——— foundation.
 - (a) A (b) C
 - (c) C++ (d) R
- 5. Facebook tackles big data with ——— based on Hadoop.
 - (a) Prism (b) Project prism
 - (c) Project big (d) Project data
- 6. <u>— can best be described as a</u> programming model used to develop Hadoop-based applications that can process massive amounts of data.
 - (a) MapReduce (b) Mahout
 - (c) Oozie (d) All of the mentioned Page 2 Code No.: 8057

7.	What was Hadoop written in ———			
	(a)	С	(b)	C++
	(c)	Java	(d)	JSP
8.			and l	by replicating the data nence does not require
	(a)	RAID	(b)	ZFS
	(c)	Operating system	(d)	DFS
9.	-	put to the ppers.	– is tł	ne sorted output of the
	(a)	Reducer	(b)	Mapper
	(c)	Shuffle	(d)	All of the mentioned
10.	The me	e ——— class thod to read the val	prov ues fr	ides the getValue() om its instance.
	(a)	Get	(b)	Result
	(c)	Put	(d)	Value
		PART B — $(5 \times$	5 = 2	5 marks)
1		ver ALL questions, o ach answer should r		
11.	(a)	What are the ad Explain.	lvanta	ages of data science?
		0	r	
	(b)	Describe about the	explo	oratory data analysis.
		Pag	је 3	Code No. : 8057

12. (a) Explain the concept of unsupervised learning.

Or

- (b) Write a note on data and data scraping classification.
- 13. (a) Summarize the need of big data.

Or

- (b) How will you getting your data in Hadoop? Explain.
- 14. (a) Elaborate the analysis for big data at rest.

Or

- (b) Describe the quality file system of infosphere big insights.
- 15. (a) Write down the analytics for big data in motion inforsphere streams.

\mathbf{Or}

(b) What is the basic working of infosphere streams? Explain.

Page 4 Code No. : 8057

[P.T.O]

PART C — $(5 \times 8 = 40 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.
- 16. (a) Discuss the review of probability and probability distributions.

Or

- (b) Draw and explain the k-nearest neighbors with example.
- 17. (a) Illustrate the need of logistic regression in unsupervised learning.

Or

- (b) Explain the concept decision trees with suitable example.
- 18. (a) What are the patterns for big data deployment? Explain.

 \mathbf{Or}

- (b) Outline the application development in Hadoop.
- 19. (a) Elaborate the improved workload scheduling of infosphere big insights.

 \mathbf{Or}

(b) Compare the data discovery and visualization machine.

Page 5 Code No. : 8057

20. (a) Discuss the purpose of stream processing language.

 \mathbf{Or}

(b) What are the operators used in infosphere streams? Explain.

Page 6 Code No. : 8057

Reg. No. :

Code No.: 8058 Sub. Code : BCAM 32

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

 ${\rm COMPUTER} \ {\rm APPLICATIONS} - {\rm CORE}$

DIGITAL IMAGE PROCESSING

(For those who joined in July 2020 onwards)

Time : Three hours Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

1. Continuous functions are sampled to form a

- (a) Fourier series
- (b) Fourier transform
- (c) Fast Fourier series
- (d) Digital image

(6 Pages)

2.	The spatial coordinates of a digital image (x, y) are
	proportional to ———

- (a) Position (b) Brightness
- (c) Contrast (d) Noise
- 3. The range of values spanned by the gray scale is called ———
 - (a) Dynamic range (b) Band range
 - (c) Peak range (d) Resolution range
- 4. Which of the following is the primary objective of sharpening of a image?
 - (a) Blurring the image
 - (b) Highlight fine details in the image
 - (c) Increase the brightness of the image
 - (d) Decrease the brightness of the image
- 5. Which is a colour attribute that describes a pure colour?
 - (a) Saturation (b) Hue
 - (c) Brightness (d) Intensity
- 6. What is pixel?
 - (a) Pixel is the elements of a digital image
 - (b) Pixel is the elements of an analog image
 - (c) Pixel is the cluster of a digital image
 - (d) Pixel is the cluster of an analog image

Page 2 Code No. : 8058

- 7. The number of grey values are integer powers of
 - (a) 4 (b) 2
 - (c) 8 (d) 1
- 8. If inner region of object is textured then approach we use is ———
 - (a) discontinuity (b) similarity
 - (c) extraction (d) recognition

9. Approach to restoration is ———

- (a) inverse filtering (b) spike filtering
- (c) black filtering (d) ranking
- 10. Enhancement of differences between images is based on the principle of ______
 - (a) Additivity (b) Homogeneity
 - (c) Subtraction (d) None of the above

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words.

11. (a) How to represent the digital images? Explain.

Or

- (b) Write down the basics of intensity transformations and spatial filtering.
 - Page 3 Code No. : 8058

12. (a) Summarize the additional characteristics of the frequency domain.

 \mathbf{Or}

- (b) Elaborate the model of the image degradation and restoration process.
- 13. (a) What are the basics of full-color image processing? Explain.

Or

- (b) Describe the segmentation in RGB vector space.
- 14. (a) Write a short note on coding redundancy.

\mathbf{Or}

- (b) Explain the morphological operations on binary images.
- 15. (a) Distinguish between the point detection and line detection.

Or

(b) How to detect isolated points? Give example.

Page 4 Code No. : 8058

[P.T.O]

PART C — $(5 \times 8 = 40 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.
- 16. (a) Discuss the mechanics of spatial filtering with neat diagram.

 \mathbf{Or}

- (b) How will you saving and retrieving work session data? Explain.
- 17. (a) What are the properties of the 2-D discrete Fourier transform? Describe.

Or

- (b) Explain the image sharpening using frequency domain filters.
- 18. (a) Illustrate the fast wavelet transform with diagram.

Or

- (b) Elaborate the color image representation in MATLAB.
- 19. (a) Compare the spatial and temporal redundancy in image compression.

 \mathbf{Or}

- (b) Outline the connected components in morphological operations.
 - Page 5 Code No. : 8058

20. (a) Draw and explain the optimum global thresholding using Otsu's method.

 \mathbf{Or}

(b) Discuss the segmentation using morphological watersheds.

Page 6 **Code No. : 8058**

Reg. No. :

Code No.: 8059

Sub. Code : BCAM 33

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Computer Applications — Core

PRINCIPLES OF COMPILER DESIGN

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

- 1. ——— or scanning is the process where the stream of characters making up the source program is read from left to right and grouped into tokens.
 - (a) Lexical (b) Diversion
 - (c) Modeling (d) Class

(6 Pages)

2.	The table crated by lexical analysis to describe all
	literals used in the source program is ———

- (a) Terminal table (b) Literal table
- (c) Identifier table (d) Reductions
- 3. A bottom up parser generates —
 - (a) Right most derivation
 - (b) Rightmost derivation in reverse
 - (c) Leftmost derivation
 - (d) Left most derivation in reverse
- 4. A grammar that produces more than one parse tree for some sentence is called <u>_____</u>
 - (a) Ambiguous (b) Unambiguous
 - (c) Regular (d) Irregular

5. The linker —

- (a) Is similar to interpreter
- (b) Uses source code as its input
- (c) In required to create a load module
- (d) Reset module
- 6. Which of these is also known as look-head LR parser?
 - (a) SLR (b) LR
 - (c) LLR (d) VLR
 - Page 2 Code No. : 8059

- 7. The method which merges the bodies of two loops is ______
 - (a) Loop rolling
 - (b) Loop jamming
 - (c) Constant folding
 - (d) Constant jamming
- 8. Which table is a permanent database that has an entry for each terminal symbol?
 - (a) Terminal table (b) Literal table
 - (c) Identifier table (d) Constant table
- 9. Which loader function is accomplished by loader?
 - (a) Reallocation(b) Allocation(c) Linking(d) Loading
- 10. Which of the following is used for grouping of characters into tokens?
 - (a) Parser
 - (b) Code optimization
 - (c) Code generator
 - (d) Lexical analyzer

Page 3 Code No. : 8059

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 250 words.

11. (a) What is the usage of syntax directed translation? Describe.

Or

- (b) Describe the capabilities of a symbol table.
- 12. (a) Write down the simple approach to the design of lexical analyzer.

Or

- (b) Elaborate the concept of lexical phase errors.
- 13. (a) Define the term "Parser". What are the two types of parsers?

Or

- (b) Summarize the formal definition of a context-free grammar.
- 14. (a) Mention the applications of syntax-directed translation.

 \mathbf{Or}

(b) Explain the evaluation orders for SDD's.

Page 4 Code No. : 8059

[P.T.O]

15. (a) Describe the issues in the design of code generator.

 \mathbf{Or}

(b) Write an algorithm for code generation and explain it.

PART C — $(5 \times 8 = 40 \text{ marks})$

- Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.
- 16. (a) Illustrate the concept of lexical analysis and parsing.

Or

- (b) Outline the science of building a compiler.
- 17. (a) Explain about the optimization of DFA.

Or

- (b) How will you recognize tokens? Give example.
- 18. (a) Discuss the LR-Parsing algorithm with example.

Or

(b) What is top-down parsing? Explain.

Page 5 **Code No. : 8059**

19. (a) Elaborate the syntax-directed translation scheme for assignment statement.

\mathbf{Or}

- (b) Construct three address code for the following: position : = initial + rate * 60.
- 20. (a) How the reducible flow graphs work?

\mathbf{Or}

(b) Discuss the implementation of a stack allocation of space.

Page 6 Code No. : 8059

Reg. No. :

Code No. : 8060

Sub. Code : BCAM 34

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Computer Applications — Core

RESEARCH METHODOLOGY

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answers :

- 1. Which of the following does not corresponds to characteristics of research?
 - (a) Research is not passive
 - (b) Research is systematic
 - (c) Research is not a problem-oriented
 - (d) Research is not a process

(6 Pages)

- 2. The main aim of the scientific method in the research field is to ———
 - (a) Improve data interpretation
 - (b) Confirm triangulation
 - (c) Introduce new variables
 - (d) Eliminate spurious relations
- 3. Who can successfully conduct research?
 - (a) Someone who is a hard worker
 - (b) Possesses post-graduation degree
 - (c) Has studied research methodology
 - (d) Possesses thinking and reasoning ability
- 4. Which of the following is not the method of research?
 - (a) Survey (b) Historical
 - (c) Observation (d) Philosophical
- 5. Which one is called non-probability sampling?
 - (a) Quota sampling
 - (b) Cluster sampling
 - (c) Systematic sampling
 - (d) Stratified random sampling

Page 2 **Code No. : 8060**

- 6. Research ethics do not include
 - (a) Integrity (b) Honesty
 - (c) Objectivity (d) Subjectivity
- 7. The research studies that explore the effect of one thing on another and more specifically, the effect of one variable on another are known as ______
 - (a) Causal research
 - (b) Applied research
 - (c) Conclusive research
 - (d) Exploratory research
- 8. Research can be conducted by a person who
 - (a) is a hard worker
 - (b) holds a postgraduate degree
 - (c) has studied research methodology
 - (d) possesses thinking and reasoning ability
- 9. Research ethics do not include ———
 - (a) integrity (b) honesty
 - (c) objectivity (d) subjectivity

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- 10. Which one among the following phrases does not correspond to the meaning of research as a process?
 - (a) Problem solving
 - (b) Trial and error
 - (c) Objective observation
 - (d) Systematic activity

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 250 words.

11. (a) What are the various types of research? Explain.

 \mathbf{Or}

- (b) Summarize the future of good research design.
- 12. (a) Distinguish between the census and sample survey.

 \mathbf{Or}

- (b) Explain the various steps in sample design.
- 13. (a) Write down the chi-square test for large samples.

 \mathbf{Or}

(b) Elaborate the ANOVA in Latin square design.

Page 4 Code No. : 8060 [P.T.O] 14. (a) What are the methods of data collection? Explain.

\mathbf{Or}

- (b) Describe the procedure to collection of secondary data. Give example.
- 15. (a) Mention the steps of development of algorithm.

Or

(b) What is the role of computer in research? Explain.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b)

Each answer should not exceed 600 words.

16. (a) What are the methods of research and scientific? Explain.

 \mathbf{Or}

- (b) Elaborate the important concept relating to research design.
- 17. (a) Discuss the characteristics of a good sample design.

 \mathbf{Or}

(b) Illustrate the various techniques in scale construction.

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18. (a) Explain the chi-square test as a test of goodness of fit end as a test of independence.

Or

- (b) Outline the concept of one way ANOVA.
- 19. (a) How will you do collection of data through schedules? Explain.

 \mathbf{Or}

- (b) Describe the need of precaution in interpretation.
- 20. (a) Explain the meeta heuristics for combinational problems.

Or

(b) Illustrate the important characteristics of computer system in research.

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(7 pages)

Reg. No. :

Code No.: 8065 Sub. Code : ZCAM 11

M.C.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Computer Applications — Core

MATHEMATICAL FOUNDATIONS FOR COMPUTER SCIENCE

(For those who joined in July 2021 onwards)

Time : Three hours Maximum : 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- 1. Cardinality of power set of empty set is _____
 - (a) 0
 - (b) 1
 - (c) 2
 - (d) infinite

- 2. For a 3×3 matrix, the coefficient of x^2 in characteristic equation of the matrix represent
 - (a) difference of eigen values
 - (b) sum of eigen values
 - (c) determinant of the matrix
 - (d) None
- 3. Which of the following is not a proposition?
 - (a) Earth is flat
 - (b) Thanks for your help
 - (c) Open the door
 - (d) What is your name?
- 4. Which of the following represent "All birds can fly" with B(x) : x is a bird. F(x) : x can fly?
 - (a) $(x)(B(x) \land F(x))$ (b) $(\exists x)(B(x) \land F(x))$
 - (c) $(x)(B(x) \rightarrow F(x))$ (d) None
- 5. Which of the following is a property of partial ordering?
 - (a) Irreflexive (b) Symmetric
 - (c) Anti-Symmetric (d) Skew-symmetric
- 6. The matrix $M_R \odot M_S$ represents the matrix of

the relation _____

(a) $R \circ S$ (b) $S \circ R$ (c) $R \cup S$ (d) $R \cap S$ Page 2 **Code No. : 8065**

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- (a) constant (b) Discrete RV
- (c) Continuous RV (d) Mixed RV
- 8. If f(x) is a probability mass function then
 - (a) $\sum_{x} f(x) = \infty$ (b) $\sum_{x} f(x) = 1$ (c) $\int_{x} f(x) dx \neq 1$ (d)None

9. Degree of vertex in complete graph _____

- (a) 0 (b) n(c) n-1 (d) 2
- 10. Which of the following is not a planar graph?
 - (a) K_3 (b) C_4 (c) K_5 (d) K_4

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) Give a formula for the number of elements in the union of five sets.

Or

(b) Find the characteristics equation and hence $\begin{pmatrix} 2 & 0 & 1 \end{pmatrix}$

eigen values of the matrix $\begin{bmatrix} 0 & 2 & 0 \\ 1 & 0 & 2 \end{bmatrix}$.

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12. (a) Symbolize the statement :

"Given any positive integer there is a greater positive integer".

- (i) With the positive integer as universe of discourse.
- (ii) With set of integer as Universe of discourse.

 \mathbf{Or}

- (b) Prove that if n is an integer and n^2 is an odd integer 'n' is an odd integer
 - (i) By indirect method
 - (ii) By direct method
- 13. (a) Find the transitive closure R^+ of the relation R defined on the set $\{a, b, c\}$.

 $R = \{(a,a), (a,b), (b,c), (c,a), (c,b)\}$ Is it an equivalence relation?

Or

(b) Find the matrix representing the relation $S \circ R$ if the matrices representing R and S

are
$$M_R = \begin{pmatrix} 1 & 0 & 1 \\ 1 & 1 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$
 $M_s = \begin{pmatrix} 0 & 1 & 0 \\ 0 & 0 & 1 \\ 1 & 0 & 1 \end{pmatrix}$

Page 4	Code No. : 8065
	[P.T.O.]

14. (a) Find the mean and variance of exponential distribution.

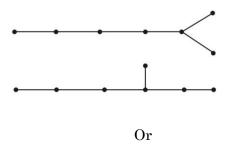
 \mathbf{Or}

(b) If
$$P(X = x) = \frac{x}{15}$$
, $x = 1, 2, 3, 4, 5$ Find

(i)
$$P(X = 1 \text{ or } X = 2)$$

(ii)
$$P\left(\frac{1}{2} < x < \frac{5}{2} | X > 1\right)$$

15. (a) Verify whether following graphs are isomorphic :



(b) Write the Warshall's algorithm to find the shortest path.

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PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions by choosing either (a) or (b).

16. (a) How many onto function from a set with 6 elements to a set with 3 elements?

 \mathbf{Or}

(b) Find the eigen values and eigen vectors if the

 $matrix \begin{pmatrix} 2 & 2 & 1 \\ 1 & 3 & 1 \\ 1 & 2 & 2 \end{pmatrix}$

17. (a) Show that $(\neg (P \land \neg (Q \cap R)) \lor (Q \land R) \lor (P \land R) \Leftrightarrow R$ using laws of logic.

Or

- (b) Prove that $(\exists x)M(x)$ follows logically from the premises $(\forall x)(H(x) \rightarrow M(x))$ and $(\exists x)H(x)$.
- 18. (a) The relation R defined on set of positive integers by aRb if and only if a/b. Then prove that R is a partial ordering.

Or

(b) If R is an equivalence relation and $R^{-1} = \{(y, x) | (x, y) \in R\}$. Then prove that R^{-1} is an equivalence relation.

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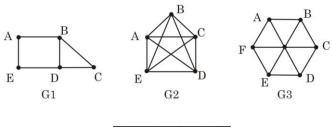
- 19. (a) In a set of 2000 electric bulbs it was found that the life of a particular brand was normally distributed with an average life of 2040 hours and variance of 3600 hours. Estimate the number of bulbs likely to burn for
 - (i) More than 2150 hours
 - (ii) Less than 1950 hours.

Or

- (b) 40% of business travellers carry a laptop. In a sample of 15 business travellers what is the probability that
 - (i) 3 travellers will have laptop
 - (ii) atleast 3 travellers will have laptop.
- 20. (a) G is a simple graph with 'n' vertices and minimum degree $\delta \ge \left\lfloor \frac{n}{2} \right\rfloor$ then prove that G is connected.

Or

(b) Write the Euler circuit or Euler path of the following graph, if they exist



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