CODE: **Duration: 3 hours**   **Marks: 100**

Instructions :- (1) All questions are compulsory having internal Options.
(2) Figures to the right indicate full marks.
(3) Use of simple calculator is allowed.
(4) Working notes are forming part of answers

Q:1   A)   Choose the correct answer from the options given below (Any 10)   10

Column A	Column B
1) consignor and consignee	a) Debited to Branch Account
2) Proforma Invoice	b) Maintain Books of Accounts
3) Account sales	c) Principal and Agent
4) Sundry Debtors Account	d) Prepared by Consignee
5) Dependent Branch	e) Prepared by the Consignor
6) Goods sent to Branch A/c	f) Credited to Trading A/c
7) Debtors method in Branch Accounting	g) Branch Account
8) Fire insurance	h) Covers risk of loss by Fire
9) Goods distributed as free sample	i) Personal Account
10) Single entry	j) Incomplete records
11) Independent Branches	k) Does not maintain Books of Accounts
12) Stock and Debtors method in Branch Accounting	l) Branch stock Account

Q:1   B)   State whether following statements are True or False (Any 10)   10

1) The Ownership right of the consignment is always with the Consignor.
2) Del Credere Commission is calculated on Credit Sales.
3) Memorandum Trading Account is prepared to calculate Stock on the date of fire.
4) Gross Profit ratio is the comparison between gross profit and Sales.
5) Period of Memorandum Trading Account is from 1st Day of Memorandum Trading Account to the date of fire.
6) Loss of Stock is equal to Stock on the date of fire less Salvage.
7) Salvage is goods lost in fire .
8) Cash received from Branch Debtors is debited to Branch Cash Account.
9) Loading on goods sent to Branch Credited to Branch Adjustment Account.
10) Credit Purchases are debited to Purchases Account.
11) Wages paid on installation of Machinery is debited to Machinery A/c.
12) Prepaid Salary paid is debited to Salary Account.

Q:2   Answer (a) or (b) of the following: 2

a) The Premises and Stock of Adil Perfumes were totally destroyed by fire on 30.1.2022. From the books and other records that were saved the following information is available. The stock on hand has always been valued at 10% less than cost. Firm's accounting year ends on 31st December every year.

CODE: **Duration: 3 hours**   *Marks: 100*

Particulars	2019	2020	2021	2022
Opening stock as valued	1,62,540	1,94,400	2,16,000	2,21,400
Purchases less returns	4,49,400	4,80,000	4,86,000	36,000
Sales less returns	7,20,000	7,92,000	8,40,000	72,000
Wages	1,04,400	1,14,000	1,25,400	12,000
Closing stock as valued	1,94,400	2,16,000	2,21,400	-

Prepare a statement of claim for submission to the Insurance Company in support of the company for loss of stock.

OR

b) A fire occurred in the premises of an Ankush Traders on 1.7.2022. From the following information, calculate the claim to be made by the firm:

Particulars	Rs.
Stock on 1.1.2021	2,52,000
Purchases for the year ending 31.12.2021	16,70,000
Sales for the year ending 31.12.2021	20,00,000
Wages for the year ending 31.12.2021	80,000
Salary for the year ending 31.12.2021	40,000
Stock on 31.12.2021	3,24,000
Purchases from 1.1.2022 to date of fire	8,00,000
Sales from 1.1.2022 to date of fire	12,00,000
Stock salvaged	40,000
Value of Policy	1,20,000

There is an average clause in the policy. The firm had the practice of valuing stock at 20% above cost price. However, during 2021 the policy was changed and the stock on 31.12.2021 was valued at 10% less than the cost.

Q:3 Answer (a) or (b) of the following:

a) Pentogon & Associates has a branch at Colaba. All the goods sent to the branch are invoiced to branch at 20% profit on sales. All expenses are reimbursed to the branch monthly, but petty expenses are incurred by the branch manager from branch cash balance. It is the custom of the branch to send all cash to the head office. Following are the details of Branch transactions for the year ending on 31st March, 2023.

Particulars	Rs.
Balances on 01-04-2022:	
Opening stock of goods (at Selling price)	22,500
Sundry debtors	13,500
Motor Vehicle	3,000
Outstanding Rent	2,000
Goods sent to branch (at invoice price)	1,20,000
Goods returned to head office (at invoice price)	1,500
Goods returned by debtors	750
Cash collection from debtors	47,500
Cash sales	75,000
Credit sales	45,000

Bad debts	75
Branch Expenses paid by Head Office: Advertisement Salary Petty cash expenses	1,200 7,200 600
Balances on 31-03-2023 Stock on (at Selling price) Prepaid Salary Debtors Motor Vehicle	21,000 1,000 ? ?

Depreciate branch Motor Vehicle @ 10% per annum.

Prepare 1) Branch Account in the books of Head Office 2) Branch Debtors Account for the year ended 31st March, 2022. (Follow Debtors method)

OR

b) Cone Ltd has branch at Fort-Mumbai. Goods are invoiced to its Fort-Mumbai Branch at cost. Following information is obtained for the year 2022-23.

Particulars	Rs.
Opening stock at Branch on 01-04-2022	1,13,400
Goods sent to Branch	5,32,500
Goods returned by customers to Branch	4,500
Total Sales	7,01,500
Cash sales	2,51,250
Goods returned by Branch to Head office	22,500
Closing stock at branch on 31-03-2023	1,04,250
Debtors on 01-04-2022	1,95,000
Cash paid by customers to Branch	3,69,000
Discount to customers	20,400
bad debts	4,500
Rent	13,500
Salaries	54,750

You are required to prepare the following Ledger Accounts in the books of Head Office (stock and Debtor method):

1. Branch Stock A/c
2. Goods sent to Branch A/c
3. Branch Profit and Loss A/c
4. Branch Debtors A/c

Q:4 Answer (a) or (b) of the following:

a) Orange Ltd Surat forwarded 50 Washing machines to Square & associates of Nagpur to be sold on behalf of Orange Ltd. The cost of each Washing machines was Rs.15,000 but the invoice price was Rs.20,000. Orange Ltd incurred Rs.10,000 on freight and insurance.

Square & associates received the consignment and accepted a three month bill drawn upon him by Orange Ltd for Rs. 1,00,000.

Square & associates paid Rs.4,000 as rent and Rs.2,500 as advertisement and sold of 40 Washing machines at Rs.20,500 each(Cash sales 30 machines and credit sales 10 machines). Square & associates is entitle to a commission of 5 percent on sales including a del credere commission of 1 percent Square & associates was not able to recover sales proceeds of one Washing machine.

Prepare Consignment Account and Consignee Account to record the above transactions in the books of the Orange Ltd.

OR

b) From the following information prepare final account for the year ended 31st March 2023 in the books of Ms. Shenaz.

Particulars	1/4/2022	31-03-2023
Cash	11,500	?
Debtors	46,000	?
Bills Receivable	44,850	?
Stock	92,000	69,000
Fixed Assets	126,500	126,500
Creditors	46,000	?
Bills Payable	23,000	?

Cash Transaction during the year 2022-23

Received from Debtors	322,000
Bills receivable encashed	115,000
Cash Sales	46,000
Payment to Creditors	172,500
Bills Payable Paid	138,000
Drawing	11,500
Salaries	115,000
Printing and Stationery	5,750

Non-Cash Transaction during the year 2022-23

Credit Sales	471,500
Credit Purchase	345,000
Discount Allowed	11,500
Discount Received	17,250
Bills Receivable Drawn	126,500
Bills Payable Accepted	161,000

Adjustment to be made
a) Prepaid Salaries Rs. 1150
b) Outstanding Printing and Stationery Rs. 11500

Q:5 Answer (a) or (b) of the following:

(a) **Answer the following:(Ten marks each)**
I) Explain in detail Branch Account.
II) Explain the Accounting Process of computing fire insurance claim for the loss of stock.

OR

(b) **Answer the following:(any four) (Five marks each)**
I) Types of commission to consignee
II) Distinguish between Branch and Department
III) Average Clause
IV) Debtors Ledger Account
V) Single entry
VI) Consignment Account

----------------X-------------X------------X----------------

SEAT NO. _____

CODE: **Duration: 3 Hours**   **Marks: 100**

Instructions: B · C   4/4/2024

1. All questions are compulsory.
2. Figures to the right indicate full marks.

Q:1   **A)**   **Explain the following terms in 2-3 sentences (Any 5)**   **Marks**

i)	Online Interview	**iii)**	Special Meetings	**10**
ii)	Group Dynamics	**iv)**	Survey	
v)	Webinar	**vi)**	Appraisal Interview	
vii)	Joint Committee	**viii)**	Letter head	

Q:1   **B)**   **Match the following:**   **5**

	Column-A		**Column-B**
i)	Resolution	a)	Internal PR measure
ii)	Suggestion Schemes	c)	Indicates the desired solution
iii)	Technical Session	d)	Formal expression of decisions taken
iv)	Star, Chain & Hook	e)	Meant for paper presenters
v)	Recommendations in a report	f)	Sales letter writing formula

Q:2   **Write short notes on any four of the following:**   **20**
a) Exit interview
b) WASP Technique of conducting an interview
c) Group Dynamics in a meeting
d) Role of participant in a meeting
e) Interviewee's preparation for the job selection interview
f) Advantages of Meetings

Q:3   **Answer any two of the following questions**   **20**
a) Discuss the internal measures of Public Relations of an organization.
b) What is a Conference? Discuss the steps in organizing a successful conference.
c) List and explain the advantages & disadvantages of committees.

Q:4   **Write any four of the following letters:**   **20**
a) Write a letter of inquiry to Finesse Stationery Limited enquiring about various types of stationery goods that you wish to stock for your shop.
b) Neelkamal Stores, Nagpur has received a consignment of clothes from John Apparels, Firozabad in a damaged condition. Write a complaint letter on their behalf.
c) Draft a sales letter to promote the sales of any one of the following products:
(i) Tooth Brush   (ii) Electric Bike
d) Ms Sanah Kazi from Mumbai had purchased a Premium car from Ismail Motors Limited. However, it developed some issues after a month of use. It required frequent repairs. During the course of repair, the mechanic damaged important parts of the car. This was brought to the notice of Ismail Motors Limited. In spite of the repeated pleas by Ms Sanah Kazi to replace the parts, the company did not take action. Write a letter to the Consumer Redressal Forum seeking justice.
e) Many street lights on Janakibai Road, Mulund have not been working for the past 3 months and the complaints to BMC have not been attended to. Write an RTI query.

Q:5 a) Draft a business proposal to be made by Tara Computers Institute to be submitted to Yash College to start a part-time 'Basics of Computer Applications Course' on their premises on a revenue sharing basis. **10**

<div align="center">OR</div>

b) Your Manager finds that the computers in the office are repeatedly found malfunctioning. There is a doubt related to mishandling of the computers. She formed a committee of staff to find the reasons behind it. Draft the committee's report and the covering letter for the same.

Q:6 Draft the Notice and Agenda of the 21st Annual General Meeting of a Vaani Dental Care Co. Limited. Also draft the following Resolutions: **10**
i) Appointment of a treasurer
ii) Adoption of common seal

Q:7 Summarize the following passage and suggest a suitable title: **05**

Why must a people submit to a constitution? Richard Kay writes that a people would submit to a constitution, when the constituent assembly crafts a narrative about the creation of the body that is both politically acceptable and historically plausible. It's not only the text, but also the story crafted of the birth of a constitution that is critical in the internalisation of a constitutional order by a people. The drafters deployed the considerable political goodwill enjoyed by key national leaders who were members of the assembly to give legitimacy to the Constitution. These told a story of how the Constitution reflected the will of the people, and how its egalitarian foundation would create a better, more decent nation.

Perhaps the freedom movement and resistance to colonial power was also good training for constitution-crafting. Dietmar Rothmund highlights the unique evolution of Indian constitutionalism — each set of reforms introduced by the British coloniser, while being designed to fulfil certain demands, leads to inspiring new agitations. Hence, the production of Indian constitutionalism through the process of resistance to the colonial legislation and colonial constitutional enactments.

As the legal historian Rohit De writes, the Constitution, had its inspiration in sources like Tilak's Swaraj Bill of 1895 (which included rights to free speech, free press, equality before law) and the Declaration of Rights of 1918 (where the Indian National Congress demanded that civil and political rights to include the right to life and liberty, freedom of press and association and for all this to be included in the Government of India Act 1919).

(259 Words) *(Source: https://indianexpress.com)*

<div align="center">---------------X------------X------------X----------------</div>

SEAT NO. _____

CODE: _____   **Duration: 3 hours**   **Marks: 100**

Instructions :-(1) All questions are compulsory having internal options.
(2) Figures to the right indicate full marks.

Q:1 **A)** **Choose the correct answer from the options given below (Any 10)**   10

1) Inseparability restricts the _____ reach of the services.
   - a) Geographical
   - b) Scientific
   - c) Environment
   - d) Legal

2) The potential service product is the _____ level of service product.
   - a) Highest
   - b) Lowest
   - c) Moderate
   - d) Pic level

3) Zoning is important element for _____ management.
   - a) Mall
   - b) Store
   - c) Farm
   - d) All of these

4) Almost all banks in India issue _____ cards
   - a) Paytm
   - b) ATM
   - c) Kisan
   - d) Policy

5) _____ software allows organization to use an integrated system of application.
   - a) GSP
   - b) KMT
   - c) ERP
   - d) EDP

6) _____ is high end business process outsourcing.
   - a) LPO
   - b) GPO
   - c) SPO
   - d) KPO

7) _____ transaction is not very common in India.
   - a) B2B
   - b) B2C
   - c) K2B
   - d) D2C

8) _____ reduces the cost of operating business.
   - a) Trade and transport
   - b) E-commerce
   - c) Market purchasing
   - d) All of these

9) Inventory Management means maintaining an adequate level of inventory to _____.
   - a) Customer requirements
   - b) Market requirement
   - c) Service needs
   - d) Durability

10) _____ is an example of unorganised retailer.
    - a) Discount stores
    - b) Kirana store
    - c) Malls
    - d) Supermarket

11) In 2012 the Government of India announced FDI in _____ sector.
    - a) Electronic
    - b) Agriculture
    - c) Retail
    - d) Education

12) _____ facilitates transactions of recurrent trade exchange.
    - a) POP
    - b) PPT
    - c) BPO
    - d) EDI

Q:1 **B)** **State whether following statements are True or False (Any 10)**   10

1) Desired service is the highest level of expectation.
2) Idea screening is required in service development cycle.
3) The research design is the ground plan for conducting research.
4) The entry of corporates has given a boost to the organized retail sector in India.
5) Logistics provides value added services
6) The issuer of a credit card grants a line of credit to the credit card holder.

7) Analysis of data is the first step in online market research.
8) KPO is related to processes about Intellectual Property Rights or Patents etc.
9) Service marketers face the challenge of tangibility
10) ATM in banking stands for Augmented teller machine
11) Brick and Mortar store refers to online store.
12) FDI could not improve the efficiency of the Indian insurance sector.

Q:2 Answer any two of the following: 1:
    a) What is service? Explain its features briefly.
    b) Elucidate the objectives of promotion mix of services
    c) "Entrepreneurs are facing many challenges in the service sector" explain the statement.

Q:3 Answer any two of the following: 1!
    a) What are the factors that influence the growth of retailing in India?
    b) Elaborate the different types of store formats in India
    c) Write an essay on the Indian retailing prospects.

Q:4 Answer any two of the following: 1!
    a) Describe the various benefits of BPO.
    b) Why are the banking sectors exposed for private players in India?
    c) Elucidate the elements of the Indian logistic.

Q:5 Answer any two of the following: 1!
    a) Explain the Importance of E- commerce.
    b) Distinguish between Debit card and Credit card
    c) Discuss the advantage of online marketing research.

Q:6 Write Short Notes on (Any 4)   2(
    a) Benefits of Franchisee
    b) Stages in the new service development cycle
    c) Career opportunities in retailing
    d) Activities involved in C2C process
    e) Levels of services.
    f) Types of service expectations

---------------X-------------X-------------X---------------

CODE: **Duration: 3 hours**   **Marks: 100**

Instructions :- (1) All questions are compulsory
(2) Figures to the right indicate full marks.
(3) Draw neat diagrams and figures wherever applicable
(4) Attach the Map supplement to the main answer book.

Q:1   A)   Mark and Name the following in the outline map of Mumbai provided to you   **10**

1)   An area affected by Landslides and Rockfalls
2)   A Sinking area
3)   An area rich in Mangroves
4)   A highly polluted River
5)   An area affected by Air Pollution due to chemical and Petro chemical Industries.
6)   A region having Air Pollution due to Tanneries.
7)   An area subject to Noise Pollution due to Road Transportation.
8)   A Conventional Power Plant
9)   A wonderland
10) A Fort site

Q:1 ' B)   Mark and Name the following in the outline map of Konkan provided to you   **10**

1)   A Dumping of Solid Waste site.
2)   A Hot spring site.
3)   A Port which frequently gets Silted.
4)   A National Park.
5)   An Earthquake prone region.
6)   A region affected by Air Pollution due to Fisheries.
7)   A Perishable Products Market.
8)   A Recreational site affected by Noise Pollution.
9)   A Beach Resort.
10) An area of Historical and Archaeological Importance.

Q:2   Answer any two of the following: **20**

a)   Discuss on Biodegradable waste and its management.

b)   Why should Solid Waste be effectively managed?

c)   How is Solid Waste Management done for the city of Mumbai?

Q:3   Answer any two of the following: **20**

a)   Identify and elaborate on some of the major environmental problems associated with agriculture.

b)   What is Ozone and why is ozone depletion a matter of great concern.

c)   Write a short note on Green Business and Green Consumerism.

Q:4 Answer any two of the following:

2

a) Discuss on the tourism potentials of India and what can be further done to enhance tourist arrivals in the country?

b) 'Tourism should be encouraged but with caution.' Do you agree with the given statement. Justify your answer.

c) Discuss briefly on Eco tourism and Sustainable tourism.
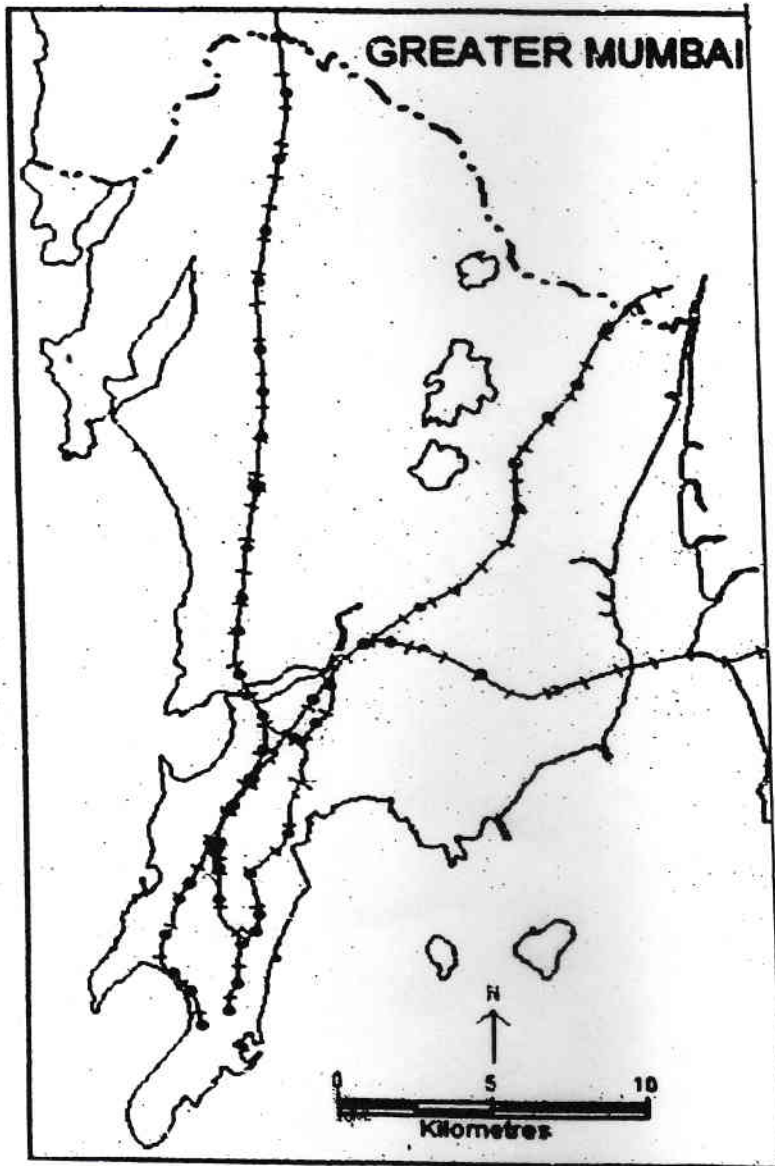
Q:5 Answer any two of the following:

2

a) What is Carbon trading? How is it beneficial for India?

b) Discuss in detail on the application of GIS in environmental management.

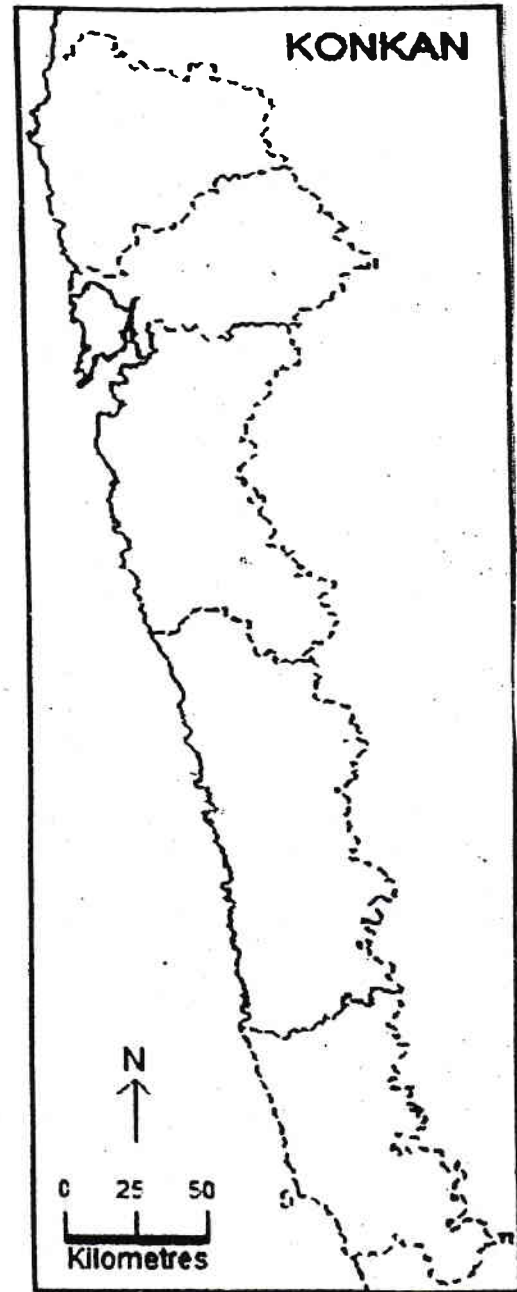c) Write a short note on Jaitapur nuclear power plant

-----------------X-------------X------------X----------------

Q.1.A.

Q.1.B.

GREATER MUMBAI

KONKAN

N

0   5   10
Kilometres

N

0   25   50
Kilometres

Legend : -

Legend : -

10) Capital budgeting plays an important role in assisting business enterprise.
11) Payback period method is simple and easy to calculate compare to other methods.
12) If the NPV is negative the project will be accepted.

Q:2   Attempt A and B or C and D:

A) Discuss the Characteristics of a Perfectly Competitive market.   7

B) Explain the short- run equilibrium of a firm under monopoly with   8
   i) Excess profit   ii) Loss

OR

C) Explain the behaviour of TR, AR and MR of a Perfectly Competitive firm.   7

D) Explain different sources of Monopoly Power.   8

Q:3   Attempt A and B or C and D:

A) Discuss the meaning and features of Monopolistic Competition.   7

B) Explain the salient features of Oligopoly Market.   8

OR

C) Examine the equilibrium of a firm in Monopolistic Competition in the short run.   7

D) Elaborate Paul Sweezy's Kinked demand curve model.   8

Q:4   Attempt A and B or C and D:

A) i Explain Full Cost Pricing Method.   4
   ii) Using given information, calculate the Full Cost price.   3
   Average fixed cost Rs. 600.
   Average variable cost Rs.200.
   Expected profit margin: 15%

B) Explain the Multiple Product Pricing method in detail.   8

OR

C) Examine the Conditions under which Price discrimination is possible.   7

D) Write detailed note on Transfer Pricing.   8

Q:5   Attempt A and B or C and D:

A) Discuss the concept of Capital Budgeting and its importance.   7

B) A Business firm has to select a project out of four alternative projects, all of which involve   8
   the same capital expenditure of Rs 1,00,000. The average net annual return expected from
   these projects are as follows:

Project	A	B	C	D
Average Net Annual Return (in Rs)	10,000	20,000	25,000	50,000

   Using payback period criterion, select the most suitable project. Justify your answer.

OR

C) Examine Net Present Value method of project evaluation with suitable example.   7

D) Explain the Internal Rate of Return criteria of Investment appraisal.   8

Q:6   Attempt A and B OR Write short notes on any four:

A) Elaborate the equilibrium of a firm and industry under perfect competition.   10

B) Write a detailed note on Advertisement.   10

OR

Write Short notes on any four of the following: 20

a) Features of Monopoly.   d) Dumping.

b) Collusive Oligopoly.   e) Degrees of Price Discrimination.

c) Types of Price leadership.   f) Steps in Capital Budgeting.

CODE: Duration: 3 hours Marks: 100

Instructions:- *(1) All questions are compulsory having internal options.*
(2) Figures to the right indicate full marks.

Q:1 A) Choose the correct answer from the options given below (Any 10) 10

1) A Natural monopoly is attributed to _____.
   - a) Government policy
   - b) Big market
   - c) Control over the raw materials
   - d) Economics of scale

2) Excess profit is also known as _____ profit.
   - a) Sub Normal
   - b) Super Normal
   - c) Normal
   - d) None of the above

3) A firm is said to be in equilibrium when _____.
   - a) MC = MR
   - b) MC > MR
   - c) MC < MR
   - d) MC = Zero

4) Sellers under collusive Oligopoly behave like a _____.
   - a) Cartel
   - b) Firm
   - c) Company
   - d) Corporation

5) Product sold in monopolistic competition is _____.
   - a) Homogenous
   - b) Differentiate
   - c) Similar
   - d) Uniform

6) An Oligopolistic firm's faces _____.
   - a) Horizontal demand curve
   - b) Downward sloping curve
   - c) Kinked demand curve
   - d) Upward sloping curve

7) Price discrimination refers to _____.
   - a) Charge equal prices for different commodities
   - b) Charge different prices for same buyers
   - c) Charge different prices for same commodity to different buyers
   - d) Charge same prices for same commodity

8) Transfer price refers to _____ pricing.
   - a) Intra-firm
   - b) Multi-product
   - c) Marginal cost
   - d) Cost-plus

9) Marginal cost pricing is followed by _____.
   - a) Private manufacturing enterprises
   - b) Public undertakings
   - c) Private services enterprises
   - d) None of the above.

10) A project is more likely to be accepted if the Discounted present value is _____.
   - a) More than investment
   - b) Less than investment
   - c) Less than zero
   - d) All of the above

11) Capital investment decisions are irreversible because _____.
   - a) The Capital expenditure is very large
   - b) The Capital Expenditure is very small
   - c) Capital expenditure has less significance
   - d) None of the above

12) Payback period method of capital budgeting primarily focuses on _____.
   - a) The current rate of interest
   - b) The rate of profitability assets
   - c) Time period required to recover original investment.
   - d) The cost of acquiring capital assets

Q:1 B) State whether following statements are True or False (Any 10) 10

1) In perfect competition seller is price maker.
2) MR=MC is an equilibrium condition of firm under monopoly market.
3) Advertising is a unique feature of monopolistic competition.
4) Selling cost is a feature of monopolistic competition.
5) A cartel is formed by oligopolist to avoid price war.
6) Price under monopolistic competition would be higher due to advertisement cost.
7) Transfer pricing is used to determine costs.
8) Full cost pricing ensures reasonable profit.
9) Price discrimination is not profitable if elasticity of demand is the same in different market.

CODE: **Duration: 2: 30 hours**   **Marks: 75**

Instructions: - (1) All questions are compulsory having internal options.
               (2) Figures to the right indicate full marks.

Q:1 **A)** **Choose the correct answer from the options given below (Any 08)**   **08**

1) Delicensing of Industries was under _____ policy.

    a) Industrial Policy 1991   b) Investment Policy
    c) Direct Insurance Policy   d) Education Policy

2) _____ is the main reason of farmer's suicide.

    a) Rural Lifestyle   b) Lack of Modern Facilities
    c) Crop Failure   d) Urbanization

3) Magna Carta was signed in _____ year.
    a) 1215   b) 1222
    c) 1225   d) 1230

4) Article 15 of the Indian constitution provides _____ equality and equal access to public areas.
    a) Legal   b) Judicial
    c) Social   d) Natural

5) Human environment is called as _____.
    a) Pedosphere   b) Biosphere
    c) Anthrosphere   d) Hydrosphere

6) The word Ecology was coined by _____.
    a) E.Haeckel   b) J. Muir
    c) R. Carson   d) J. Martin

7) _____ one another escalates the conflict.
    a) Blaming   b) Stereotypes
    c) Prejudice   d) Stress

8) _____ is also another source of aggression / violence.
    a) Media   b) Expectation of reward
    c) Punishment   d) Society

9) The _____ needs lies at the highest level of hierarchy in the Maslow's theory.
    a) Self - Actualization   b) Physiological
    c) Economic   d) Esteem

10) Physical or mental withdrawal from the conflict is referred as _____.
    a) Avoiding   b) Forcing
    c) Smoothing   d) Socializing

CODE: **Duration: 2: 30 hours**   **Marks: 75**

Q:1   **B)**   **State whether following statements are True or False (Any 7)**   **07**
1) Liberalization of Indian economy involves autonomy to public sector units.
2) Mass migration refers to the movement of a large group of people from one geographical area to another.
3) All minorities, religious or linguistic, can set up their own educational institutions in order to preserve and develop their own culture.
4) John Locke was recognized as a father of modern international law.
5) Natural environment provides renewable sources of energy.
6) Ecology is the abiotic and biotic elements that surround humans.
7) Individual factors are only cause of stress.
8) Regionalism causes intergroup conflicts.
9) Biofeedback involves the individual's attempt to control the stressful situation instead of allowing the situation to control him.
10) There should be proper time management so as to avoid work overload.

Q:2   **Attempt any one of the following:-**
   A)   Explain the concept of Globalization & Privatization and its impact.   15
                            OR
   B)   Explain the positive and negative impact of globalization on employment.   15

Q:3   **Attempt any one of the following:-**
   A)   What are Fundamental rights? Explain its significance.   15
                            OR
   B)   Write the concept and evolution of human rights.   15

Q:4   **Attempt any one of the following:-**
   A)   Explain the concept & scope of ecology.   15
                            OR
   B)   What are the causes of environmental degradation?   15

Q:5   **Attempt any one of the following:-**
Explain the meaning of stress along with the organizational and environmental causes of stress.   15

                            OR

Write Short notes on any three of the following: (Any 03)   15
   a) Causes of Migration.
   b) Significance of UDHR.
   c) Components of Sustainable Development.
   d) Causes of stress.
   e) Maslow's Theory of Self Actualisation.

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Maths-II Sem-II
Regular/ATKT March 2024
SEAT NO. 30-03-2024
CODE:
Duration: 3 hours
Marks: 100

N.B.:
1. All five questions are compulsory.
2. Each question carries 20 marks and each sub question carries 5 marks.
3. Use of a simple calculator is allowed.
4. Use of a scientific calculator, digital diary or a mobile phone is not allowed.
5. Graph papers will be provided on request.

Q.1   Attempt any FOUR of the following.

a   Find derivative of the following functions   5
i) $y = (2x^2 - 3x)(5x + 10)$
ii) $y = \frac{(5x^3 + 2)}{(x - 1)}$

b   The total cost function is $C = 400 + 2x$ and revenue is $R = 100 + 5x$. Find the point of   5
no profit, no loss.

c   The total revenue function is given by $R = 2x^3 - 36x^2 + 210x + 300$, find x for   5
which the total revenue is maximum.

.d   A manufacturer can sell x items at a price Rs. $(330 - x)$ each. The total cost of   5
producing x items is Rs. $(x^2 + 10x + 12)$. Find x for which the profit is maximum.

e   i)   Find the elasticity of demand if the marginal revenue is 20 and the price is 70.   5
ii) Find the marginal revenue if the average revenue is 65 and elasticity of demand is 5.

Q.2   Attempt any FOUR of the following.

a   A principal amount to Rs.11,880/- after 4 years and to Rs.14,040/- after 7 years. Find   5
the rate of simple interest and the principal amount.

b   A sum of Rs.36,000/- becomes Rs.51,840/- at 20% compound interest p.a. Find the   5
period.

c   i) Find the future value of Rs. 24,500 kept as a fixed deposit, after 7 years at 7% p.a.,   5
compounded annually.
ii) Find the present value of Rs.1,50,000 payable 2 years hence, if the interest is
compounded annually at 8%.

d   Ms. A took a loan of Rs. 3,00,000/- with 8% interest per month, to be repayment in 10   5
months. Calculate the EMI using reducing balance method.

e   Mr. B bought a tricycle with cash payment of Rs. 10,000/- and 5 monthly installments   5
of Rs. 4,000/- each. Find the cost of the tricycle, if the company charges 12% interest,
compounded annually.

Q.3   Attempt any FOUR of the following.

a   Write the short note on regression equation of Y on X.   5

b   For the following data calculate Karl Pearson's coefficient of correlation   5

X	15	16	17	18	19	20
Y	10	40	90	100	80	40

c   Calculate Spearman's rank correlation coefficient for the following data.   5

X	180	100	170	180	150	180
Y	25	21	18	25	22	20

d   From the following data find the regression equation Y on X, and also find Y when   **5**
     X=11 (Note: For calculations use values correct up to 2 decimal places)

X	2	4	6	8	10	12	14
Y	12	15	17	20	19	16	13

e   Estimate the marks in Statistics of a student who secured 55 marks in Economics from   **5**
     the following bivariate data:

	Economics	Statistics
Mean marks	80	70
Standard deviation	3	5
Correlation coefficient	0.3	

Q.4   Attempt any FOUR of the following.

a   Write definition of time series, and describe the following components of time series.   **5**
       i)   Secular Trend
       ii)   Cyclical Variation

b   Calculate 3 yearly moving averages from the following time series. Also plot the given   **5**
     data and the moving averages on a graph paper.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sales	9	14	16	18	23	25	21	17	10

c   Fit a straight-line trend for the following data,   **5**

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sale	10	15	19	22	25	28	34	39	40

d   Calculate Laspeyre's, Paasche's and Marshall Edgeworth price Index Number from the   **5**
     following data

Commodities	Base Year		Current Year	
	Price	Quantity	Price	Quantity
P	82	20	90	25
Q	70	10	85	20
R	63	40	70	50
S	82	20	100	30

e   Construct Cost of living Index Number using Family budget method for the following   **5**
     data:

Commodity	Base year price	Current year price	Weights
Food	5000	8000	30
Fuel	2500	4000	20
Clothing	2500	4500	10
House Rent	10000	14000	25
Miscellaneous	8000	10000	15

Q.5   **Attempt any FOUR of the following.**

a   A random variable X follows Binomial distribution with probability of success is 0.6   **5**
     and there are 4 trials, then find i) P $(x = 3)$, ii), P $(x = 4)$, iii) P $(x \geq 3)$.

b   A fair die is rolled 3 times with probability of successes is equal to 0.5. Find the   **5**
     probability of getting odd number on its uppermost face is
     i) exactly two times ii) exactly three times iii) less than two time.

c   Define Poisson Distribution for non-negative values by considering parameter 'm' and   **5**
     write properties of Poisson Distribution.

d   A discrete random variable X follows Poisson distribution with the condition   **5**
     P $(x = 1)$: P $(x = 2) = 2:3$. Find the mean and hence find
     i) P $(x = 2)$, ii) P $(x < 2)$, iii) P $(x \geq 2)$. [Given $e^{-2} = 0.1353$, $e^{-3} = 0.0498$]

e   If X is a normal variate with mean 20 and standard deviation 2. Find   **5**
     i) P $(x \geq 22)$ ii) P $(x \leq 16)$ iii) P $(16 \leq x \leq 22)$ [Given: area under the standard normal
     curve between $z = 0$ and $z = 1$ is 0.3413 and area under the standard normal curve
     between $z = 0$ and $z = 2$ is 0.4772]

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