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) Goods returned from Branch to Head office	a) Eliminate risk of bad debts
2) Debtors system of Branch Accounting	b) Credit to Branch Account
3) Del-Credere Commission	c) Slow moving goods
4) Rent paid by consignor	d) Deducted from Furniture
5) Carriage paid by consignor	e) Non-recurring expenses
6) Cash collected from debtors by consignee	f) Recurring expenses
7) Branch Debtors account	g) Added to Furniture
8) Loading on goods sent by Head office to Branch	h) Credited to consignee's Account
9) Depreciation on furniture	i) Debited to Goods sent to Branch Account
10) Purchase of furniture included in Purchases	j) Proportionate compensation
11) Abnormal goods	k) Branch Account
12) Average clause	l) Personal Account

Q:1   B)   State whether following statements are True or False (Any 10)   10
1) Credit Sales are debited to Debtors Account.
2) Credit Purchases are credited to Creditors Account.
3) Opening Capital Balance can be calculated by preparing Opening Balance sheet.
4) Expenses incurred by consignor are debited to Consignment Account.
5) Load at 1/5th of the cost Price is equal to Load at 1/6th of Sale price.
6) Load at 1/4th of the Cost Price is equal Load at 1/5th of Sale price.
7) Abnormal Goods are Slow Moving Goods.
8) Stock on the date of fire is computed by preparing Memorandum Trading Account.
9) Stock Reserve is unrealized Profit included in the stock.
10) Goods withdrawn by Proprietor are credited to Trading Account.
11) Stock on Consignment always valued at cost to Consignor.
12) Under Debtors method, Depreciation on Branch Assets is shown in Branch A/c separately.

Q:2   Answer (a) or (b) of the following: 20
a) Rohan commenced business as a food merchant on 1st April, 2022 with a capital of Rs. 1,80,000. On the same day he purchased furniture and fitting for cash Rs. 70,000. From the following particulars obtained from his books kept by single entry, you are asked to prepare Trading and Profit and Loss Account for the year ended 31st March, 2023 and Balance Sheet as on that date.

Particulars	Rs.
Sales (Inclusive of Cash Sales Rs. 1,70,000)	3,40,000
Purchase (Inclusive of Cash Purchase Rs. 1,03,000)	2,89,000
Rohan's Drawing (cash)	20,400
Salaries to Staff	30,600
Bad Debts	8,500
Business Expenses	11,900

Rohan took food worth Rs. 8,500 from the shop for private use, but omitted to record these transactions in his book. On 31 March, 2023 his sundry debtors were Rs. 88,000 and sundry creditors were Rs. 61,000. Stock in hand on 31 March, 2023 was Rs. 1,10,000.

OR

b) Mr. Rakesh maintain his accounts on single entry system. His balances for the year ended 31st March 2023 were as follows.

Particulars	31-03-2022	31-03-2023
Bills Receivable	26,000	15,600
Stock	51,300	57,200
Creditors	61,100	54,000
Cash	25,400	15,150
Bills Payable	22,500	32,800
Debtors	68,500	54,300
Machinery	13,000	13,000

From his cash book for the year 2022-23, you get the following information.
Wages - Rs. 5,900, Bills payable - Rs. 18,000, Bills Receivable - Rs. 28,000, Misc. Expenses - Rs. 4500, salary - Rs 4,800 Investment purchased - Rs. 6,500, Sales - Rs. 7,800, Purchase - Rs. 3,900, Received from debtors - Rs. 15,900, Paid to creditors - Rs. 9,000, Misc. Income - Rs. 150 and drawing - Rs. 9,500.

On enquiry you are told that in 2022-23, discount allowed and received were Rs. 2,500 and Rs. 2,300 respectively. During the period Mr. Rakesh accepted the bill for Rs 28,300 and received bills for Rs. 19,400. His bad debts were Rs.3,500 and bills receivable dishonoured Rs. 1,800.

You are asked to prepare Trading and Profit and Loss Account for the year ended 31st March, 2023 and Balance Sheet as on that date.

Q:3 Answer (a) or (b) of the following: **20**

a) Cylinder & Associates has a branch at Wadala. 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)	2,25,000
Sundry debtors	?
Motor Vehicle	30,000
Outstanding Repairs	20,000
Goods sent to branch (at invoice price)	12,00,000
Goods returned to head office (at invoice price)	15,000
Goods returned by debtors	7,500
Cash collection from debtors	4,75,000
Cash sales	7,50,000
Credit sales	4,50,000
Bad debts	750

Branch Expenses paid by Head Office:	
Advertisement	12,000
Salary	72,000
Petty cash expenses	6,000
Balances on 31-03-2023	
Stock on (at Selling price)	2,10,000
Prepaid Salary	10,000
Debtors	1,01,750
Motor Vehicle	?
Outstanding rent	5,000

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, 2023. (Follow Debtors method)

OR

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

Particulars	Rs.
Opening Balances at Branch on 01-04-2022	
Debtors	19,500
stock	11,340
Furniture	10,000
Goods sent to Branch	53,250
Goods returned by customers to Branch	2,250
Credit Sales	45,025
Cash sales	25,125
Goods returned by Branch to Head office	525
Cash paid by customers to Branch	36,900
Discount to customers	2,040
bad debts	450
Rent	1,350
Salaries	5,475
Closing balances as on at branch on 31-03-2023	
Stock	10,425
Debtors	?
Furniture	?

Provide depreciation @10% p.a. on furniture
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: **20**

a) The premises of Solitude Traders caught fire on 1.7.2022, and their stock was damaged. The stock was fully insured The concern has made accounts upto 31st December of each year. The following information is available:

Particulars	Rs.
Stock on 31.12.2021	66,360
Stock on 31.12.2020	48,070
Purchases from 1.1.2022 upto date of fire	1,74,135
Purchases for the year 2021	2,26,290
Sales for the year 2021	2,60,000
Sales from 1.1.2022 upto date of fire	2,45,850

Further Information

1. In May 2022, goods costing Rs. 5,000 were given away for advertising purposes, no entry being made in the books.
2. During 2022, a Clerk had misappropriated unrecorded cash sales of Rs.2,000.
3. The rate of Gross Profit is constant over the years.
4. Value of stock salvaged was Rs. 6,500.

From the above information, prepare a statement showing the claim for loss of stock.

OR

b) Sphere Ltd Andheri forwarded 25 Television sets to Pink & associates of Vasai to be sold on behalf of Sphere Ltd. The cost of each Television sets was Rs.45,000 but the invoice price was Rs.60,000. Sphere Ltd incurred Rs.20,000 on freight and insurance.

Pink & associates received the consignment and accepted a three month bill drawn upon him by Sphere Ltd for Rs. 8, 00,000.

Pink & associates paid Rs.10,000 as rent and Rs.12,500 as advertisement and sold of 20 Television sets at Rs.62,000 each(Cash sales 15 machines and credit sales 5 machines). Pink & associates is entitled to a commission of 5 percent on sales including a del credere commission of 1 percent.

Pink & associates was not able to recover sales proceeds of one Washing machine.

Prepare following Accounts to record the above transactions in the books of the Sphere Ltd.

1) Consignment Account 2) Pink & Associate Account

Q:5 Answer (a) or (b) of the following: **20**

(a) **Answer the following:(Ten marks each)**

I)   What is single entry system? State its features

II) Dependent Branch (Debtors method & Stock and Debtors Method) and Independent Branch

OR

(b) **Answer the following:(any four) (Five marks each)**

I)   Creditors Account

II)   Del Credere Commission

III) Consignment Account

IV) Valuation of Stock under Consignment.

V)   Memorandum Trading Account.

VI) Average Clause

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

SEAT NO._____

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

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

FYB. Com

Q:1 **A)** **Explain the following terms in 2-3 sentences (Any 5)** 10
   i) Open Question iii) Advisory committee
   ii) Keynote Speaker iv) House organ
   v) Complimentary Close vi) Agenda
   vii) Participation in Meeting viii) Solicited Proposal

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

Column-A		Column-B		5
i)	WASP Technique	a)	Online meeting of delegates	
ii)	Quorum	c)	Authenticity	
iii)	Webinar	d)	Selection Interview	
iv)	Findings	e)	Minimum attendance needed for a meeting	
v)	Signature block	f)	Part of a report	

Q:2 **Write short notes on any four of the following:** 20
   a) Types of questions asked in interview
   b) Grievance Interview
   c) Leadership in Group Discussion
   d) Importance of meetings
   e) Group dynamics in meetings
   f) Preparation for a meeting

Q:3 **Answer any two of the following questions** 20
   a) Discuss the role of Public Relations officer in crisis management in an organization.
   b) Define conference? Explain five types of conferences.
   c) What is a committee? Explain the importance of committees from an organization's point of view.

Q:4 **Write any four of the following letters:** 20
   a) Write a letter of inquiry to Ramiya Metal Works Limited enquiring about various types of crockeries that you wish to stock for your shop.
   b) Ajay Stores, Vile Parle has received a consignment of stationery from IRIS Manufacturing Limited, Kolhapur in a damaged condition. Write a complaint letter on their behalf.
   c) Write a sales letter for the promotion of any one of the following
      (i) A Book Stall (ii) A New Brand of Soap
   d) Ms. Minakshi Chaddha from Mumbai had paid an advance against an order for buying some wooden furniture from Classic Woodwork Limited. Despite frequent reminders, the goods have not been delivered and the company stopped replying as well. Write a letter to the Consumer Redressal Forum seeking justice.
   e) Your uncle has not received IT Refund for last year. Write an RTI query.

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

Instructions:
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)   **10**

i)	Open Question	iii)	Advisory committee
ii)	Keynote Speaker	iv)	House organ
v)	Complimentary Close	vi)	Agenda
vii)	Participation in Meeting	viii)	Solicited Proposal

Q:1 B) Match the following:

	Column-A		**Column-B**	**5**
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ii)	Quorum	c)	Authenticity	
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e) Your uncle has not received IT Refund for last year. Write an RTI query.

CODE: Duration: 3 Hours   Marks: 100

Instructions :- (1) All Questions are Compulsory
(2) Figures to the right indicate marks.

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

1) _____ restricts the geographical reach of the services.
   a) Intangibility   b) Tangibility
   c) Inconsistency   d) Inseparability

2) _____ is the highest level of expectation.
   a) Desired Service   b) Adequate Service
   c) Zone of Tolerance   d) Minimum Service

3) Higher _____, increases the prices.
   a) Scale of Operation   b) Supply
   c) Competition   d) Cost of Operation

4) First step in marketing research is _____.
   a) Collection of Data.   b) Creating Research Design
   c) Identifying the Problem   d) Preparing Research Report.

5) With entry of organized sector, emphasis is placed on _____ the retail personnel.
   a) Removing   b) Training
   c) Promoting   d) Transferring

6) _____ is a gigantic retail facility that carries a big range of products under one roof.
   a) Hypermarkets   b) Specialty Stores
   c) Discount Stores   d) Multi Brand Outlets.

7) _____ is a contract whereby a firm transfers its processes along with the associated operational activities and responsibilities to a third party.
   a) Partnership   b) Joint Venture
   c) BPO   d) Merger.

8) _____ is an integrated system that operates in real time, rather than depending upon periodic updates.
   a) BPO   b) KPO
   c) ERP   d) LPO

9) Debit Card allows _____ transactions.
   a) Unlimited   b) Credit
   c) Cashless   d) Delayed

10) E-Commerce is a / an _____ activity.
   a) Traditional   b) Organized
   c) Unorganized   d) Manual

11) Online Marketing Research suffers due to _____.
   a) Wide Reach   b) Limited Reach
   c) Speed   d) Outdated Technology

12) E-commerce facilitates _____.
   a) Anytime Shopping   b) Touch and Feel Experience
   c) Faulty Billing   d) Lack of Confidence

Q:1 B) State whether following statements are True or False (Any 10)   10
1) If service is within the zone of tolerance, customers are likely to be satisfied.
2) Services can be produced in anticipation of demand.
3) Service sector supports the Primary and Secondary sectors.
4) Unorganized retail outlets are mainly traditional retail stores.
5) 'Big Bazar' is an example of Departmental Store.

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Sem - II, ATKT
Commerce
6/10/2023
CODE:
Duration: 3 Hours
SEAT NO. _____
Marks: 100

6) A franchise usually covers broader package of rights and resources compared to licensing contract.

7) In case of Debit Cards, there is burden of interest paid on the amount spend through the card.

8) Insurance sector was privatized to attract FDI for expansion of the sector.

9) Transportation refers to storage of finished goods until they are delivered in the market.

10) E-marketer has to bear higher operating cost.

11) Volume of B2B transactions is lower than B2C transactions.

12) Rapid Growth of Internet users is responsible for transition of E-Commerce in India.

Q:2 Answer Any Two of the following 15

   a) Define term 'Services'. Elaborate on scope of services.
   b) Explain in detail factors influencing customer expectation.
   c) What are various stages in new service development cycle?

Q:3 Answer Any Two of the following 15

   a) Discuss new trends in Indian retailing.
   b) Elaborate on different store formats in India.
   c) Describe retail scenario in Indian context.

Q:4 Answer Any Two of the following 15

   a) Define term 'ERP'. What are the benefits of ERP?
   b) What are the reasons for opening of insurance sector for private players?
   c) What is meant by term 'Logistics'? describe importance of logistics.

Q:5 Answer ~~Any Two~~ Any Four of the following 15

   a) Define E-Commerce. What are the functions of E-Commerce?
   b) Enlist various advantages of B2C transactions.
   c) What are the factors responsible for the transition to E-Commerce in India?

Q:6 Write short notes on Any Four of the following 20

   a) People element in Promotion Mix.
   b) Advantages of Franchising to Franchisor.
   c) Challenges for logistic sector in India.
   d) Scope of e-commerce.
   e) Limitation of online marketing research.
   f) Levels of services.

----------------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
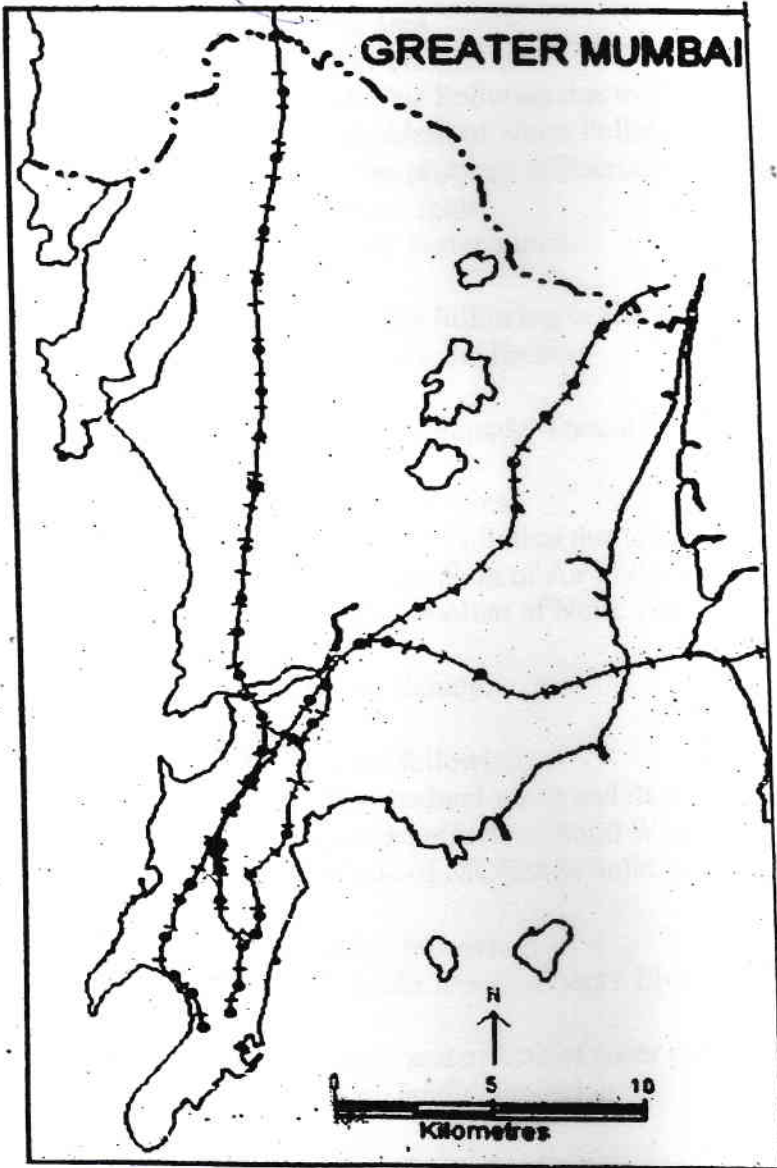*(4) Attach the Map supplement to the main answer book.*

Q:1 A) Mark and Name the following in the outline map of Mumbai provided to you 10
1) An area used for Dumping of Solid Waste
2) An area of Intensive Quarrying and Mining activities.
3) A Kharland.
4) A Flood Affected area.
5) A Perishable Products Market
6) An area subject to Air Pollution due to Textile Industries.
7) An area having problem of Noise Pollution due to Roadways.
8) A region having the problem of Recreation Noise
9) A major Pilgrimage Centre.
10) A place popular for Water sports.

Q:1 B) Mark and Name the following in the outline map of Konkan provided to you 10
1) A Place subject to Marine Erosion
2) A National Park
3) A place subject to Earthquake Tremors.
4) A Sinking area
5) A region rich in Mangroves.
6) An area subject to Air Pollution due to Urban Encroachment.
7) A place facing the problem of Air Pollution due to Fisheries.
8) A place having the problem of Noise Pollution due to Industrial Workshops.
9) A Beach Resort.
10) An area of Nature Beauty.

Q:2 Answer any two of the following: 20
a) Elaborate on Bio medical waste and its management.
b) Discuss in detail the effects of Solid Waste.
c) Discuss on the role of MCGM in Solid Waste Management in Mumbai.

Q:3 Answer any two of the following: 20
a) What is Sustainable Development? Elucidate sustainable industrial practices with suitable examples.
b) Explain the causes and effects of water pollution
c) Write an essay on land degradation.

Q:4 Answer any two of the following: 20
a) What are the advantages and disadvantage of tourism?
b) Elaborate on the tourism potentials of India and what are the challenges faced by the country?
c) Write a short note on the New Tourism Policy of India.

Q:5 Answer any two of the following: 20
a) Elaborate on the major environment protection acts in India.
b) What is GIS and how is it used in environmental management?
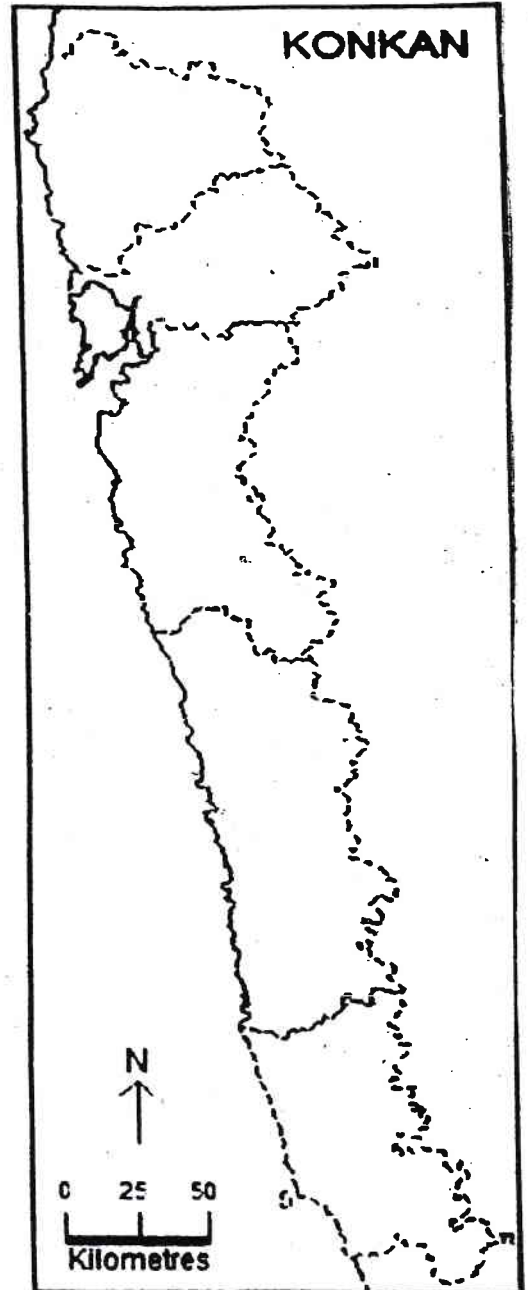c) Write a short note on Chipko Andolan.

Page 1 of 1

Q.1.A.   Q.1.B.

GREATER MUMBAI

Legend : -

KONKAN

Legend : -

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) Which of the following is not a feature of perfect competition?
   a) Price taker   b) Homogeneous product
   c) Free entry and exit   d) Government intervention

2) A competitive firm will maximize profit at the level of output at which Marginal revenue equals_____.
   a) Average cost   b) Average variable cost
   c) Total cost   d) Marginal cost

3) In the long run, a monopoly firm usually earns_____.
   a) Excess Profit   b) Normal profit
   c) Sub-normal profit   d) Zero Profit

4) Increase in selling cost, _____ the demand for the product.
   a) Decrease   b) Equates
   c) Increase   d) Constant

5) A kinked demand curve indicates _____.
   a) Price flexibility in non-collusive   b) Price flexibility in collusive oligopoly
      Oligopoly
   c) Price rigidity in collusive oligopoly d). Price rigidity in non-collusive oligopoly

6) Which of the following is not a characteristic of Monopolistic Competition.
   a) Many numbers of sellers   b) Firms are price taker
   c) There is free entry into the market   d) Product differentiation

7) While determining the full cost price, the firm uses _____.
   a) Fully allocated average cost   b) Only average variable cost
   c) Only overhead cost   d) Marginal cost

8) _____dumping takes place when there is a temporary sale of commodities at a lower price in the international market to drive out competition.
   a) Persistent   b) Predatory
   c) Sporadic   d) Standard

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

10) _____pertains to investment decisions for balancing sources of funds and use of funds.
    a) Capital Budgeting   b) Cost Budgeting
    c) Profit Budgeting   d) Outlay Budgeting

11) A Project is profitable if NPV is _____.
    a) Zero   b) Less than zero
    c) Negative   d) Positive

12) Pay-back period is also referred as _____ period.
    a) Pay-off   b) Pay-in
    c) Pay-on   d) Pay-some

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

1) Under Perfect Competition there is a single seller.
2) When AR=AC, the firm is making normal profit.
3) Demand curve for monopoly firm is downward sloping.
4) Products are homogeneous under monopolistic competition.
5) Selling cost does exist under perfect competition.
6) The concept of kinked demand curve is given by Paul Sweezy.
7) Under marginal cost pricing, price is determined on the basis of fixed costs.

8) Cost-plus pricing ignores firm's profit margin.
9) Transfer pricing is used to determine costs.
10) Capital budgeting decision have long–term implications.
11) Capital budgeting involves many stages.
12) Payback period method is simple and easy to calculate compare to other methods.

Q:2 Attempt A and B or C and D:
A) Explain the long run equilibrium of a firm under Monopoly market in detail.   7
B) Discuss meaning and characteristics of Perfectly Competitive market.   8
<div align="center">OR</div>
C) What is Monopoly? Describe its features.   7
D) Explain long run equilibrium of a firm under Perfect competition.   8

Q:3 Attempt A and B or C and D:
A) "A firm under Monopolistic competition tends to earn normal profit in the long run", Discuss.   7
B) Explain the salient features of oligopoly market.   8
<div align="center">OR</div>
C) Explain the different types of Price Leadership.   7
D) Write a note on selling cost and its effects on demand.   8

Q:4 Attempt A and B or C and D:
A) Explain advantages and disadvantages of Marginal cost pricing.   7
B) Explain the concept of Dumping with the help of diagram.   8
<div align="center">OR</div>
C) Explain briefly Full cost pricing.   04 Mark   7
And calculate it using following information.   03 Mark
Average Fixed Cost Rs 1000, Average Variable Cost Rs 200, and Expected profit Margin 10%.
D) Explain the Multiple Products Pricing method in detail.   8

Q:5 Attempt A and B or C and D:
A) Explain the meaning and importance of Capital Budgeting.   7
B) In the following table four projects with their initial investment and their annual cash inflow. Calculate the payback period for each project and select the most profitable project. Justify your answer.   8

Project	Initial Investment (Rs.)	Annual Cash Flow (Rs.)
A	1,00,000	20,000
B	1,50,000	15,000
C	200,000	10,000
D	80,000	40,000

<div align="center">OR</div>
C) Discuss Internal Rate of Return method with numerical example.   7
D) Explain the advantages and disadvantages of Net Present Value method.   8

Q:6 Attempt A and B OR Write short notes on any four:
A) Explain different Degrees of Price Discrimination.   10
B) Discuss the role of advertising highlighting its advantages and disadvantages.   10
<div align="center">OR</div>
Write Short notes on any four of the following: 20
a) Cartel formation.
b) TR, AR and MR under Perfect Competition.
c) Kinked demand curve.
d) Excess Capacity under Monopolistic competition.
e) Transfer pricing.
f) Steps of capital budgeting.

--xx--

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) Corporate sectors working with farmers and sharing their rewards is known as
_____.

     a) Liberalisation   b) Corporate Farming
     c) Contract Farming   d) Privatisation

2) Exchange of culture due to the migration leads to _____.

     a) Fusion of Culture   b) Cultural Traits
     c) Cultural growth   d) Cultural support

3) United Nations - General Assembly adopted UDHR in _____ year.
     a) 1948   b) 1999
     c) 1920   d) 1941

4) Article 17 of UDHR gives _____ rights to the people.
     a) Right to own property   b) Freedom of movement
     c) Right to nationality   d) Right to Know

5) The tertiary consumers are also known as _____.
     a) Omnivorous   b) Herbivorous
     c) Carnivorous   d) Biosphere

6) Living organisms comprises of _____ geo sphere of the environment.
     a) Biosphere   b) Hydrosphere
     c) Atmosphere   d) Lithosphere

7) The _____ stressors are also called as job related stressors.
     a) Group   b) Individual
     c) Organizational   d) Environmental

8) Stress caused because of lack of civic amenities is comprised under _____ stressor.

     a) Organizational   b) Group
     c) Individual   d) Environmental

9) Physical and Financial safety comes under _____ needs as per Maslow's theory.
     a) Physiological   b) Ego and Esteem
     c) Safety and security   d) Self and Safety

10) When family, friends, co-workers help to get rid of stress it is referred as............
     a) Proper welfare facilities   b) Networking
     c) Social support   d) Economic support

CODE: Duration: 2: 30 hours   Marks: 75

Q:1   B)   State whether following statements are True or False (Any 7)   07

   1)   Forced migration may also be called as forced displacement.
   2)   Disinvestment of public sector helps to improve the efficiency of PSUs.
   3)   Grotius defined natural law as a "dictate of right reason".
   4)   Human rights came with the signing of UDHR.
   5)   Environmental studies help us to understand only the causes and effects of pollution.
   6)   Sustainable development has three components: environment, society and economy.
   7)   Eustress is the term used to describe positive stress.
   8)   Basic human values help to improve standard of living in a society.
   9)   All individuals need not have same set of needs.
  10)   Smoothing refers to accommodating other party's interest.

Q:2   Attempt any one of the following: -
   A)   Explain the positive and negative impact of globalization on employment.   15
                              OR
   B)   Write the arguments for and against corporate farming.   15

Q:3   Attempt any one of the following:-
   A)   Explain in detail the Universal Declaration of Human Rights.   15
                              OR
   B)   Explain the Right to Equality enshrined in Indian Constitution.   15

Q:4   Attempt any one of the following: -
   A)   What are the forms of environmental degradation?   15
                              OR
   B)   What is sustainable development? Explain the principles of sustainable development.   15
Q:5   Attempt any one of the following: -
   What are the sources of conflict?   15
                              OR
   Write Short notes on any three of the following: (Any 03)   15
      a)   Impact of globalisation on industry
      b)   Fundamental rights in the Constitution
      c)   Poverty and environment
      d)   Levels of conflict
      e)   Esteem needs

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Extra

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) $y = 20x^3 - 2\sqrt{x} + \log x - 100$
     ii) $y = (4x^3 - x^2 + 7)(x - 1)$

b   The demand and supply functions for a commodity are given by P = 15 -3D and P =   5
     4+8D respectively. Find the equilibrium price and quantity.

c   The total cost function is given by $C = x^3 + 24x^2 - 12x + 20$. Find the average cost,   5
     marginal cost and the marginal average cost when $x = 5$.

d   The total revenue function is given by $R = x^3 - 24x^2 + 189x + 20$. Find x for which   5
     the total revenue is maximum.

e   The demand function is $D = 20 - p - p^2$, where D=demand and p = price. Find the   5
     elasticity of demand when price is 2.

Q.2   Attempt any FOUR of the following.

a   The difference between simple interest & compound interest on a certain principal   5
     amount for 2 years is Rs.76.80. The simple interest on the principal for 4 years is
     Rs.3,840. Find the principal amount and the rate of interest.

b   Mr. A deposits Rs. 15,000/- at the end of each year in a bank at 8% p.a. compound   5
     interest. Calculate the accumulated amount after 4 years.

c   Mr. B invested Rs.16,000/- in fixed deposit for 2 years at a certain rate of compound   5
     interest p.a. in a bank. After 2 years he got Rs.33,600/- as the accumulated amount.
     Calculate the rate of interest.

d   A car was purchased at a certain price. Its value after one year was Rs.5,52,000/- with a   5
     certain rate of depreciation. Further its value decreased to Rs.5,07,840/- after 2 years.
     Find original price of the car & rate of depreciation p.a.

e   Mr. C takes a loan of Rs. 1, 50,000/- from a bank for a period of 6 months. Calculate the   5
     EMI at 12% p.a. on reducing balance method.

Q.3   Attempt any FOUR of the following.

a   Explain the concept of correlation with the help of Scatter diagrams.   5

b   Calculate Spearman's rank correlation coefficient (correct up to 3 decimal places) for the   5
     following data.

X	260	250	260	240	256	290	251
Y	125	164	116	116	100	116	90

c   From the following data, calculate Karl Pearson's correlation coefficient   5
     (correct up to 2 decimal places)

X	11	12	13	14	15	16	17
Y	9	18	21	22	16	11	6

d   Given that means of two variable X and Y are 10 and 14 and their corresponding   5
     variances are 4 and 9 and coefficient of correlation is 0.60 find likely value of y when
     x=12.

e   If regression equation Y on X is $3x - 2y + 2 = 0$, and regression equation X on Y is   5
     $3x - y - 3 = 0$. Then find
     (i) The coefficient of correlation and (ii) The mean values of x and y.

Q.4   Attempt any FOUR of the following.

a   Write definition of time series, and describe the following components of time series.   5
         i)   Seasonal Variation.
         ii)   Irregular Variation.

b   Calculate 4 yearly moving averages from the following time series.   5

Year	2015	2016	2017	2018	2019	2020	2021	2022
Sales	40	75	80	90	110	100	70	30

c   Fit a straight-line trend for the following data and estimate the trend for the year 2023.   5
     (Note: Write all values correct up to 2 decimal places)

Year	2015	2016	2017	2018	2019	2020	2021	2022
Sale	10	18	25	30	32	38	40	50

d   Calculate Laspeyre's, Paasche's and Dorbish-Bowleys price Index Number from the   5
     following data

Commodities	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	10	20	60	30 .
B	30	15	80	10
C	45	10	90	20
D	40	20	100	10

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

Commodity	Base year price	Current year price	Weights
A	15	30	20
B	20	70	10
C	30	45	40
D	50	75	10

Q.5   Attempt any FOUR of the following.

a   If the Mean of a Binomial Distribution with 6 trials is 3, find the probability of i) Exactly   5
Three successes, ii) Less than Three successes, iii) More than Three successes.

b   A biased coin is tossed 5 times. The probability of head appear on its uppermost face on   5
any toss is 0.3. Find probability of getting:
   i)   Either 2 or 3 heads appear on its uppermost face
   ii)   At most one head appear on its uppermost face

c   If X follows Poisson distribution with mean is 4 then, find   5
i) P $(x = 0)$, ii) P $(x = 1)$, iii) P $(x \leq 1)$, iv) P $(x \geq 1)$ v) P $(x = 2)$
[Given $e^{-2} = 0.1353$, $e^{-4} = 0.0183$]

d   If X follows normal distribution with mean 60 and standard deviation 20.   5
Find i) P $(x \leq 20)$, ii) P $(x \geq 100)$, iii) P $(20 < x \leq 100)$. [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]

e   If X follows a normal distribution with mean μ and standard deviation σ then, State   5
characteristics of Normal Curve.

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