

TIME : 3 HRS.

(TOTAL : 100 MARKS)

1. ALL QUESTIONS ARE COMPULSORY.
2. MARKS ARE INDICATED AGAINST EACH QUESTION

1. (A) Select the most appropriate answer from the options given below (ANY TEN) (10)

1. _____ concept of marketing aims at balancing between profit, customer satisfaction and society's welfare.

- | | |
|---------------|--------------|
| a) Production | b) Marketing |
| c) Selling | d) Societal |

2. Marketing Decision Support System is an important component of _____.

- | | |
|---------------------------------|----------------------|
| a) Marketing Research | b) Product Research |
| c) Marketing Information System | d) Consumer Research |

3. _____ is an important element of Demographic Segmentation.

- | | |
|--------------|---------------|
| a) Age | b) Culture |
| c) Lifestyle | d) Usage rate |

4. A _____ passes through different stages or phases during the lifetime.

- | | |
|-----------|--------------|
| a) Plan | b) Product |
| c) Market | d) Promotion |

5. Service sector faces challenges due to _____.

- | | |
|---------------|------------------|
| a) Quality | b) Productivity |
| c) Efficiency | d) Intangibility |

6. Both cost oriented factors and market oriented factors influence _____.

- | | |
|--------------|--------------|
| a) Pricing | b) Promotion |
| c) Placement | d) Branding |

7. Warehousing creates _____ utility

- | | |
|---------|---------------|
| a) Time | b) Place |
| c) Form | d) Possession |

8. _____ is a form of consumer-oriented promotion techniques.

- | | |
|-------------------|-------------------------|
| a) Push Strategy | b) Exchange Offer |
| c) Trade Discount | d) Dealers' Conferences |

9. _____ is the first step in personal selling
a) Presentation b) Approach
c) Prospecting d) Follow-up

10. Identifying the weakness of the competitor and attacking is called as _____ Strategy
a) Frontal attack b) Flank attack
c) By pass attack d) Encirclement attack

11. _____ packets help in increasing sales in rural markets
a) Elegant b) Sophisticated
c) Large d) Sachet

12. Seeking protection against harmful goods is Right to _____
a) Safety b) be heard
c) education d) redressal

(B) State whether the following statements are True OR False: (ANY TEN) (10)

1. Exchange concept is the oldest concept of Marketing.
2. Marketing Research is a one-time activity.
3. In a single segment concentration strategy, the company selects a specific single market segment and offers a single product to that segment.
4. A company adopts the same marketing mix for all the products.
5. The main objective of penetration pricing is to capture a large market share.
6. Ease in identification is one of the essentials of good packaging.
7. Channel of distribution creates only place utility.
8. Advertising is a personal tool of communication.
9. Objection handling is one effective skill in personal selling.
10. Lowering the price to restrain competition is known as skimming the cream.
11. VOICE is the name of a Multinational firm.
12. Copying something of the leader is known as imitating strategy.

Q.No.2 Answer ANY TWO of the following:

(15)

- a) What do you mean by Marketing? Explain its Features.
- b) Discuss the process of Marketing Research.

- c) What is Consumer Behaviour? Discuss briefly various factors influencing consumer behaviour.

Q.No.3 Answer ANY TWO of the following:

(15)

- a) What is Product Life Cycle? Explain how to manage different stages in the Product Life Cycle?
b) What are various strategies of product positioning?
c) Explain different objectives of pricing.

Q.No.4 Answer ANY TWO of the following:

(15)

- a) Define the concept of Physical Distribution. What factors influence Physical Distribution?
b) Define Promotion-Mix. Discuss the elements of Promotion-Mix.
c) Define the concept of Sales Management. Discuss components of Sales Management

Q.No.5 Answer ANY TWO of the following:

(15)

- a) Explain the role of consumer organizations in protecting consumers.
b) Explain the marketing strategies effective in Rural marketing
c) What are the skill sets needed for career in marketing?

Q.No.6 Write short Notes (ANY FOUR)

(20)

- a) Strategic Marketing.
b) Data Mining.
c) Brand Equity.
d) Importance of Service Positioning.
e) Personal Selling.
f) Digital Marketing.

Duration: 2 Hours 30 min

Max Marks: 75

Note : All questions are compulsory

- Q 1 A** Attempt any Two sub questions from a),b) & c) in MS-Excel (True or False) **2**
- a If a cell display ##### it means that it contains invalid data
- b The default cell reference is an absolute cell reference
- c Every formula must begins with \$ sign
- B** Attempt any Two sub questions from d),e) and f) in My SQL (Multiple Choice) **2**
- d To make changes in the structure of the existing table we use _____
- 1) Alter 2) Update 3) Set 4) Create
- e To save the transaction we use _____
- 1) Commit 2) Rollback 3) Select 4) Cancel
- f A data base contains one or more _____
- 1) Rows 2) Tables 3) Columns 4) Databases
- C** Attempt any Six sub questions from g),h),i),j),k),l),m),n), and o) in Data Communication ,Networking and Internet (True or False) **6**
- g HTTP is a protocol on the internet
- h A bus topology uses a single cable
- i A fiber optic cable carries data using Electric current
- j MAN is spread over many countries
- k Google.com is a search engine
- l Failure of a node bring down the entire network in a star topology
- m A blog is a digital diary
- n A cyber crime means cheating through computer or internet
- o An email address can contains 7 layers
- D** Attempt any Five sub questions from p),q),r),s),t),l),u),v), and w) in Data Communication ,Networking and Internet (Multiple Choice) **5**
- p Each web page has a unique address called a _____
- a) Bridges b) URL c) Email d) None of these
- q _____ is used to create Web pages
- a) HTTP b) HTML c) SMTP d) FTP
- r A hyperlink can appear as _____
- a) Only Text b) Only Images c) Code d) Both text and Images
- s The fastest transmission media is _____
- a) Twisted pair b) Fiber Optics c) Co-axial d) Wireless
- t The exchange of information between computers is governed by a set of rules called _____
- a) Media b) Protocol c) Channel d) Sender
- u A _____ joins multiple computers together to form a single network
- a) Bridge b) Switch c) Hub d) Router
- v In _____ topology all nodes are connected directly to the central system
- a) Bus b) Ring c) Star d) Mesh
- w A place on the web page that signals a connection to another webpage is called _____
- a) Protocol b) Blog c) Link d) Google

Q 2 A Attempt any one sub questions from a) & b) in Data Communication ,Networking and Internet 8
a Explain briefly the topologies Star and Ring used in networking.
b Write short notes on i) LAN ii) WAN

B Attempt any one sub questions from c) & d) in Data Communication ,Networking and Internet 7
c What is OSI model? Explain the three layer of OSI model.
d What is hacking and explain any three types of hackers

Q 3 A Answer any one sub question from a) and b) in My SQL 8
a Write MySQL statement to create a table called sales_details having the columns Customer id(Cid, integer, Primary key, Not Null), Name (CName character with variable width 30 columns),order no (OrderNo Integer),Item name(Item_name character 20),quantity ordered(Qty_order Integer),unit price(Unit_price Integer),date of order(DOA date).

b Write MySQL statement to create a table called STUDENTS
Columns in the table: Admission number (Adm_no Integer Primary key),first name (Fname character(15), Last name (Lname character(15)),Date of birth(Dob date), marks in HSC(Hsc_Marks Integer), gender (Gender Enum),Admission no. should be automatically generated every time you enter a record

B Answer any one sub question from c) and d) in My SQL 7
c There exists a table called Student containing the columns Roll Number (RNO, integer, Primary Key), Name (NAME, character variable width 20), Date of birth (DOB, Date), Gender (GENDER, character width 1) and Division (DIVISION, character variable width 4).

Write MySQL statements for the following.
i) Display the structure of the table student.
ii) Display all the information from the table student.
iii) Add a new column Mobile Number (MOB, integer) at the end of the table Student
iv) Delete the row where roll number of the student is 96.
v) Change the Divison of students with roll number 95 to Div B
vi) Update Mobile number 8652007978 of student whose rollno is 10.
vii) Rename the table Student as Student_Info.

d Explain the following built in function in My SQL
1)LEFT() 2) RIGHT() 3) MID() 4) NOW() 5) POW()
6)LENGTH() 7) CONCAT ()

Q 4 A Answer any one sub question from a) and b) in My SQL 8

a There exists a table LIBRARY containing accession number (ASNO, integer), book name(BNAME, character), author's name (AUTHOR, character) and number of pages (NUM, Integer). There exists another table BOOKS containing columns student number (SNO, integer), accession number (ASNO, integer) and date of issue (DOI, date)

Write MySQL queries for the following:
i) Display the book name, author name, student number and date of issue for LIBRARY having more than 150 pages using both the tables
ii) Display the book name, accession number and date of issue for all the books using both the tables
iii) Display book name, author name and number of pages from the table LIBRARY for those books where the number of pages is above the average number of pages.
iv) Display student number, accession number and date of issue for student number 101 from the table BOOKS

b There exists a table CUSTOMER containing the following columns: customer number (CNO, integer), customer name (CNAME, character), balance due (BD, numeric)

and date of transaction (DT, date)

Write MySQL statements to

- i) Display the customer number, maximum balance due and total of balances due grouped by customer number
- ii) Display the customer number, minimum balance due and number of balances due grouped by customer number
- iii) Display all the rows where the balance due is more than average balance due
- iv) Display all the rows where the name starts with 'R'
- v) Display the customer number, balance due and date of transaction for date of transaction before 20 July 2022

B Answer any one sub question from c) and d) in My SQL

C There exists a table called BANK containing columns bank account number (BAN, integer), name of the depositor (DNAME), Amount deposited (ADEP) and date of deposit (DOD)

Write My SQL statements for the following:

- i) Display the bank account number, name of the depositor, number of amount deposited and minimum amount deposited group account number wise
- ii) Display the bank account number, name of the depositor maximum amount deposited and total of amount deposited grouped account number wise for bank account no 123

iii) Display the bank account number, name of the depositor, and date of deposit in descending order of date of deposit

iv) Display all information of bank account numbers 3 to 7

D There exists a table COMPANY containing the columns employee number (ENO, integer) employee name (ENAME, character) salary (SAL, 5 integer and 2 decimal) and income tax (ITAX, numeric)

Write MySQL queries for the following:

- i) Display employee number, employer name and salary
- ii) Display employee name, income tax and 2% of the Income-Tax as 'Exemption' for all the employees
- iii) Display all the rows where the salary is above 2 lacs
- iv) Display employee number employer name and income tax in descending order of employee number
- v) Display employee number, employer name and salary of the employees whose name is Shyam
- vi) Display all the rows where the employee name contains 'a'
- vii) Display all the rows from this table where the income tax is between 20000 and 50000

Q 5 A

Answer any one sub question from a) and b) in MS- EXCEL

C The following data has been entered in a worksheet.

	A	B	C	D	E	F
1	PRODUCT	UNIT PRICE	QTY SOLD	TOTALA MOUNT	DISCOUNT	NETAMO UNT
2	A	6000	10			
3	B	8500	2			
4	C	400	15			
5	D	8050	14			
6						
7						

8	RATE OFD ISCOUNT	5%				
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Write the steps to obtain

The Total Amount, Discount Amount and Net Amount in columns D, E and F respectively.

b The following data has been entered in a worksheet

	A	B	C	D
1	Emp No	Emp Name	Department	Salary
2	555	Virat	HR	24000
3	665	Sachin	ADMIN	15600
4	458	Sahil	HR	34500
5	255	Rahul	SALES	23500
6	125	Anish	HR	35900
7	488	Rupali	ADMIN	60000

Write the steps to do the following:

- 1 Arrange the data in alphabetical order of employee name.
- 2 Obtain the department wise subtotal of Salary.

B

Answer any one sub question from c) and d) in MS- EXCEL

Consider the following worksheet showing the cost of machinery find the depreciation using WDV (Written Down Value) Method.

	A	B	B	D	E	F
1	Cost	500000		Years	Depreciation	WDV
2	Dep. Rate(%)	10		1		
3	No. of Years	5		2		
4				3		
5				4		
6				5		

d Explain the following built-in functions in MS-EXCEL

- | | | | |
|------------|-----------|-----------|--------------|
| 1. PMT() | 2. RATE() | 3. MOD() | 4. ROUNDUP() |
| 5. COUNT() | 6. SUM() | 7. SQRT() | |

Nov 22

Cost Accounting

19/11/2022

Time: 3 Hrs

Marks 100

Note:

- All Questions are compulsory.
- Figures to the right indicate full marks allotted to the questions.
- Working Notes wherever necessary should form a part of your answer.
- Calculate figures up to the two decimal points wherever required.

Q1 a) Select the most appropriate option and rewrite the full sentence (Any Ten) (10Marks)

- 1) Royalty on production is _____.
 - (a) Fixed cost
 - (b) Semi-Variable cost
 - (c) variable cost
 - (d) Semi-Fixed cost

- 2) _____ = Direct Material+ Direct labour+ Direct expenses.
 - (a) Prime cost
 - (b) administration cost
 - (c) selling cost
 - (d) Overhead

- 3) At _____ new order for material is placed.
 - (a) Maximum level
 - (b) Minimum level
 - (c) danger level
 - (d) Reorder level

- 4) _____ is the maximum of stock which can be held in stock at any time during the year.
 - (a) maximum level
 - (b) minimum level
 - (c) reorder level
 - (d) danger level

- 5) Labour Turnover is _____.
 - (a) Productivity of Labour
 - (b) Efficiency of the Labour
 - (c) Change in Labour Force
 - (d) Total Cost of the Labour.

- 6) Bonus under Halsey plan is paid at _____.
 - (a) 50% of time saved
 - (b) 75% of time saved
 - (c) 80% of time saved
 - (d) 90% of time saved

- 7) Tea & Lunch break is _____.
 - (a) Overtime
 - (b) Normal idle time
 - (c) Abnormal idle time
 - (d) Standard time

- 8) When the amount of overhead absorbed is less than the amount of overhead incurred, it is called _____
(a) under absorption of overhead
(b) over absorption of overhead
(c) proper absorption of overhead
(d) lower absorption of overhead
- 9) Indirect Cost _____
(a) Can Be traced to a particular cost object
(b) Cannot Be traced to a particular cost object
(c) Are not important
(d) Are always variable cost.
- 10) The process of charging the traceable overheads to cost centre is called as _____
(a) overheads allocation
(b) overheads charging
(c) overheads allotment
(d) overheads apportionment
- 11) Costs which are incurred on the basis of time and are charged to the period in which they are incurred are called as _____
(a) Fixed Costs
(b) Variable Costs
(c) Normal Cost
(d) Abnormal Cost
- 12) Selling & Distribution Overheads does not include _____
(a) Director's Fees
(b) Carriage on Sales
(c) Rent of Warehouse
(d) Advertisement

Q1 (b) State whether the Following Statements are True or False (Any 10). (10 Marks)

- Office rent is Prime cost
- Administration Cost is not included in cost of Work in Progress.
- Variable cost is the cost which does not vary with the changes in the volume of activity in the short run
- Re-order level is calculated as Maximum level - Minimum level
- Under the weighted average method, a new issue price is determined after each purchase
- Materials are issued from one process to another, on the basis of Goods Received Note
- Reconciliation of Cost and Financial Accounts is necessary in case of non-integrated system of accounts.
- Profit on sale of investment is considered in cost accounts
- Transit Insurance relates to Value of Goods in Transit
- Preliminary expenses written off appears only in financial accounts.
- In Halsey Plan, Time wages are guaranteed.
- Idle time arises when workers are paid on piece basis.

Q2. a) The following information is available from the books of MK Ltd. for the year 2020 and 2021.

(10 Marks)

Particulars	2020	2021
Stock Turnover Ratio	4 Times	?
Opening Stock Rs.	40,000	30,000
Closing Stock Rs.	80,000	50,000
Purchases Rs.	?	3,40,000

From the above information find out

1. Purchases and Cost of Goods sold for the year 2020.
2. Stock Turnover Ratio and Cost of Goods sold for the year 2021.

Q2. b) Vosco Ltd. has collected the following data for one of its material X which is as follows:

(10 Marks)

Annual demand 48,000 units. Cost per item Rs. 20.
Interest of the locked-up capital 3%, pilferage while holding inventory 2%, other holding cost 5%,
Order processing cost Rs. 120 for each order

1. What should be the EOQ?
2. Calculate the Number of orders to be placed in a year.
3. Calculate the Total Annual Ordering Cost
4. Calculate the Total Annual Carrying Cost
5. Calculate the Total annual Material Cost

Or

Q2) Trading and Profit and Loss Accounts of X Ltd. for the year ended 31st March 2021.

(20 marks)

Particulars	Rs.	Particulars	Rs.
To Materials Consumed	3,50,000	By Sales (12,500 units)	18,75,000
To Direct Wages	2,25,000		
To Factory Overheads	3,00,000		
To Gross Profit c/d	10,00,000		
	18,75,000		18,75,000
To Office Rent	75,000	By Gross Profit b/d	10,00,000
To General Expenses	75,000	By Dividend Received	13,500
To Management expenses	62,500	By Interest on Investment	6,500
To Advertisement	1,25,000		
To Salesmen Commission	1,50,000		
To Goodwill w/off	22,500		
To Interest on Loan	14,500		
To Net Profit c/d	4,95,500		
	10,20,000		10,20,000

For the year ending 31st March 2022 following estimates have been made:

1. Production and sales units will be doubled.
2. Direct material cost per unit will rise by 20%.

3. Direct wages per unit will increase by 40%.
4. Of the factory overheads Rs 1,50,000 are Fixed and would remain same. And variable Overhead Per unit would also remain same as in 2020-21
5. Total office and administrative overheads would be Rs. 2,80,000
6. Selling and Distribution overheads per unit will remain same.
7. Selling price per unit would rise by 10%.

You are required to prepare:

- 1) Cost Sheet for the year ended 31st March 2021 showing cost per unit and total cost and
- 2) Estimated cost sheet for the year ending 31st March 2022 showing cost per unit and total cost.

Q.3 The company has Three production departments X, Y and Z and Two service departments S-1 and S-2.

The following estimates of expenses are available. **(20 Marks)**

Particulars:	Rs.
Staff Canteen Expenses	5,40,000
Insurance on Machinery	7,68,000
Insurance on Buildings	7,04,000
Staff Welfare Expenses	10,80,000
Power	5,28,000
Rent and Rates	2,56,000
Depreciation on Machinery	7,20,000
Building Repairs	1,65,000
General expenses(proportionate to direct Wages)	5,00,000

Other technical details about departments are as under:

Particulars	X	Y	Z	S-1	S-2
Floor Space ('000 sq. ft.)	10	20	30	10	10
Number of Workers	10	15	15	5	5
H.P. of Machine	30	20	25	15	10
Cost of Machine (Rs. in Lakhs)	5	2	1	1	1
Direct Wages (Rs In '000)	20	25	25	15	15

Show Primary Distribution of Overhead Expenses.

OR

Q.3 (a) A worker produced 200 units in a week's time.
Working Hours in a week are 45

(10 Marks)

The guaranteed weekly wage payment is Rs.81.

The expected time to produce one unit is 18 minutes

What will be the earnings of that worker under Halsey (50% sharing) premium plan and Rowan bonus schemes?

Q.3 (b) A machine costs Rs.12,00,000 and is deemed to have a scrap value of 10% at the end of its effective life (12 years). **(10 Marks)**

Ordinarily the machine is expected to run for 1,800 hours per year, but it is estimated that 200 hours of the time will be lost for normal repairs and maintenance. Other details in respect of machine shop are as under:

Details	Rs.
Annual wages, bonus, and provident fund contribution of operators for the Shop	1,60,000
Rent of shop per year	1,20,000
General lighting of the shop per month	6,000
Insurance premium for one machine per annum	28,000
Shop Supervisor's monthly remuneration	15,000
Cost of repairs and maintenance per machine	24,000
Power consumption of one machine per hour 10units @ Rs. 5 per unit	

There are Two identical machines in the shop.
Compute the machine hour rate from the above details.

Q.4 (a) The Net Profit of Satish Limited for the year ended 31st March 2022 as per financial Records was Rs 5,00,000. **(10 marks)**
A scrutiny of the figures of the financial accounts and the cost accounts revealed the following facts.

Sr. No	Particulars	Rs
1	Administrative overheads under recovered in cost accounts	14,000
2	Over recovery of depreciation in financial accounts	30,000
3	Loss due to fire as per financial accounts	20,000
4	Abnormal wages charged in financial accounts	1,00,000
5	Income Tax provision as per financial records	2,00,000
6	Loss due to depreciation in stock values charged in financial records	40,000
7	Factory overheads over recovered in cost accounts	30,000
8	Interest on Investment credited in financial account	20,000
9	Bank interest credited to financial accounts	5,000

Prepare a Reconciliation statement and find out the profit or loss as per cost records.

Q.4(b) from the following particulars, prepare stock record by FIFO Method **(10 Marks)**

Date	Transaction	Units	Rate Rs
4-1-2014	Purchase	40	30
17-1-2014	Purchase	60	28
20-1-2014	Sale	50	35

22-1-2014	Purchase	80	29
25-1-2014	Sale	80	33
28-1-2014	Sale	20	34
30-1-2014	Purchase	100	26
31-1-2014	Sale	90	35
The stock on hand on 1st January 2014 was 50 units @ Rs. 25 each.			

OR

Q.4 Calculate the earnings of Workers A, B and C for the particular month. Also Calculate Labour Cost of Worker A, B, C and allocate the labour cost to each Job

Sr. No.	Particulars	A	B	C
1	Basic Wages (Rs.)	200	300	400
2	Dearness Allowance	50%	50%	50%
Contribution to provident fund of the Employer as well as that of the employee (8% of Basic and D.A.)				
Contribution to ESI Of the Employer as well as that of the employee (2% of Basic and D.A.)				
The three workers were employed on jobs X, Y, and Z in the following proportions.				
Sr. No.	Particulars	Job X	Job Y	Job Z
1	Worker A	20%	30%	50%
2	Worker B	40%	20%	40%
3	Worker C	60%	10%	30%

Q5 A. Distinguish between Financial Accounting and Cost Accounting? (10 Marks)
 Q5 B. State the features of Halsey and Rowan method of payment of remuneration? (10 Marks)

OR

Q5. Write Short Notes (Any Four out of Six) (20 Marks)

- 1) Causes of Labour Turnover
- 2) Material Turnover Ratio
- 3) Gantt Task Bonus Plan
- 4) Direct Cost
- 5) Selling and Distribution Overhead
- 6) Allocation Of Overhead and Apportionment of Overhead

Time : 3 Hours

Total Marks : 100

1. All Questions are compulsory carrying 20 marks each
2. Exercise internal options wherever given
3. Figures to the right represent full marks to the question
4. All questions should be answered w.r.t assessment year 2022-23.
5. All workings shall form part of the main answer.
6. Use of simple calculator is allowed

Q.1 A : Multiple Choice questions (any ten)

(10)

1. Surat Gram Panchayat is a _____
 - a. Company
 - b. Firm
 - c. Local Authority
 - d. Artificial Juridical Person
2. For a newly set up business, previous year can be _____
 - a. of 12 months only
 - b. more than 12 months
 - c. 12 months or less than 12 months
 - d. more than 24 months
3. Gratuity for non-government employees is exempt upto a maximum of _____
 - a. Rs. 5,00,000 –
 - b. Rs. 10,00,000
 - c. Rs. 15,00,000
 - d. Rs. 20,00,000
4. Employer Contribution to Recognised Provident Fund (RPF) is allowable upto a maximum of _____
 - a. 10 % of salary
 - b. 12% of salary
 - c. 15% of salary
 - d. 9.5% of salary
5. In the case of Income under the head "Income from House Property", the Municipal taxes will be allowed as a deduction only if it is paid by _____
 - a. Owner
 - b. Tenant
 - c. both owner and tenant equally
 - d. either by owner or tenant
6. Rent from letting out of a open plot of land for marriage, is taxable under the head of _____
 - a. Income from Salary
 - b. Income from House Property
 - c. Income from Capital gains
 - d. Income from Other sources
7. Depreciation is allowed in case of _____
 - a. Tangible fixed assets only
 - b. intangible assets only
 - c. Tangible and Intangible assets
 - d. Wasting assets
8. Gift received from a non-relative of Rs. 50000 is _____
 - a. Taxable
 - b. Non-Taxable
 - c. a Business expenditure
 - d. a business receipt
9. Mr. Nishi spends Rs. 5000 on the medical treatment of his dependent brother, who is physically handicapped to the extent of 65%. The deduction available to Mr. Nishi u/s 80DD will be Rs. _____
 - a. Rs. 125000
 - b. Rs. 75000
 - c. Rs. 5000
 - d. Rs. 150000
10. Salary of Member of Parliament is taxable under the head _____
 - a. Income from Salary
 - b. Income from House Property
 - c. Income from Capital gains
 - d. Income from other sources
11. Bonus to employees is taxable in the year of _____
 - a. Accrual
 - b. Receipt
 - c. Accrual or receipt whichever is later
 - d. Accrual or receipt, whichever is earlier

12. Professor Phadke, who is employed with AJ College of Commerce, received exam remuneration of Rs. 5300 during the previous year. The amount shall be taxed under the head of _____
- Income from Salary
 - Income from House Property
 - Income from Capital gains
 - Income from Other sources

Q.1 B State whether the following statements are True or False (any ten)

(10)

- Deduction for Entertainment Allowance is available to all employees.
- Agricultural Income in Nepal is exempt from tax.
- Deduction U/s 80E is available to a Hindu Undivided Family.
- Uncommuted pension received by Government employee after retirement is fully exempt from tax.
- Unlisted Shares held for 18 months is a long term capital asset
- Municipal tax paid by tenant is allowed as deduction for deemed to be let out property.
- Cost inflation index is applicable for transfer expenses incurred on transfer of capital assets
- Mediclaime premium paid by cash Rs. 15,000 is allowed as deduction U/s 80D.
- Dividend received from Indian company is fully exempt.
- Income from Sub-letting of house property is taxable under the head of Income from Other Sources.
- Capital gain on transfer of depreciable business assets is always short-term capital gain.
- Thirumalai Devasthanam Temple is an example of Artificial Juridical Person.

Q.2 A:

Mr. Shastry works with M/s XYZ Traders. He gives you the following information for the year ended 31st March, 2022.

(20)

Particulars	Rs.
1. Basic salary	8,00,000 per annum
2. Dearness allowance	25% of Basic salary
3. Commission received	1,00,000
4. Bonus	75,000
5. Advance salary received	87,500
6. House rent allowance [Exempt u/s 10(13A) Rs.25,000]	85,000 per annum
7. Entertainment allowance received	75,000 per annum
8. Medical Allowance	44,000
9. Profession tax deducted from salary	2,500 per annum
Other Information:	
10. Lottery prize received	
11. Interest on term deposit with bank	55,000
12. Received maturity proceeds of Life Insurance policy	66,000
13. Interest on Income Tax refund	85,000
14. Gift from brother	10,000
15. Dividend from mutual fund	70,000
16. He paid contribution to LIC Pension Fund	22,000
17. Expenses incurred on maintenance of his dependent son, who is suffering from severe physical disability to the extent of 90%	17,500
	1,00,000

Compute his taxable income for the Assessment year 2022-23.

OR

Q.2 B : Mr. Kushal is partially blind (55% disability). He gives the following details for previous year 2021-2022. (20)

Particulars	House 1	House 2
Nature	Self Occupied	Let out
Fair Rent	8,00,000	10,00,000
Municipal Valuation	10,00,000	12,00,000
Standard rent	10,00,000	12,00,000
Interest on Loan taken for construction of property	3,00,000	3,50,000
Municipal tax paid by tenant	-	10,000
Municipal tax paid by Kushal	12,000	12,000
Rent per month		1,50,000

Other information: Interest received on Saving Bank Account Rs.25,000. Winning from Lottery Net Rs.1,20,000 (TDS Rs.50,000). Dividend from the Tata Ltd Rs.5,000. Compute taxable income of Mr. Kushal for the Assessment year 2022-23.

Q.3 A : Following is the Profit and Loss Account of "Nilkanth Homes" owned by Mr. Prem Vijay, for the year ended 31st March, 2022. (20)

Particulars	RS(₹)	Particulars	RS(₹)
To Salaries (including 3,60,000 Proprietor's salary)	6,60,000	By Gross Profit	14,32,000
To Profession Tax	2,500	By Refund of Income Tax	18,000
To Loss by Theft	11,200	By Bank FDR Interest (Net of TDS of Rs. 2000)	18,000
To Conveyance Exps.	1,300	By Savings Bank Interest	12,000
To Printing & Stationery	2,500	By NSC Accrued Interest	20,000
To Interest on Capital	30,000		
To Rent	12,000		
To Depreciation on :			
Furniture 10,000			
Computers 17,000	27,000		
To Interest on loan for son's Marriage	30,000		
To Personal Drawings	30,000		
To Net Profit	6,93,500		
TOTAL	15,00,000	TOTAL	15,00,000

Additional Information :

- He contributed to Pension Fund Rs. 60000.
- Depreciation as per Income Tax Rules is Rs. 47000.
- Loss by theft represent "shop-lifting" by customers.
- Drawings include Life Insurance Premium for self of Rs. 15000/-

Compute the Taxable Income of Mr. Prem Vijay for the Assessment year 2022-23.

OR

Q.3 B : Mr. Quinton Dsouza is the owner of "Bakes and Cakes". He provides you the following information for the year ended 31st March, 2022.

(20)

Profit and Loss for the ended 31st March, 2022			
Particulars	₹	Particulars	₹
To Salaries	2,75,000	By Gross profit	12,60,000
To Travelling Expenses	15,000	By Savings Bank Interest	12,500
To Advertisement	35,500	By LIC Maturity Proceeds	3,00,000
To Interest on Capital	18,000	By LIC Monthly Annuity	21000
To Depreciation	17,500	By Bank FDR Interest	27000
To Bad Debts	12,500		
To Misc. Expenses	40,000		
To Net Profit	12,07,000		
TOTAL	16,20,500	TOTAL	16,20,500

Following further information has been provided:

- Depreciation allowed as per Income Tax Rules is Rs. 21,000/-.
- Advertisement expenses includes Rs. 25,500/- spent for the advertisement in souvenir of a political party.
- Rs. 10,000/- paid as penalty imposed by Income-tax Officer, has been wrongly included in salaries.
- Miscellaneous expense include expense of Rs. 9,500 paid in cash for purchase of stationery and Rs.10,000 paid towards life Insurance premium for wife.
- During the year, he had invested in Public Provident Fund account Rs. 150000

Compute the taxable income of Mr. Quinton Dsouza for the assessment year 2022-23

Q.4 A : Mr Parag Dabke purchased a house property on 20th June 1998 for Rs 19,50,000. He made the following additions/ alterations to the house property.

Cost of construction of 1st floor in the financial year 2011-12 Rs 10,00,000

Cost of construction of 2nd floor in the financial year 2017-18 Rs 4,50,000

He sold the property on 21st January 2022 for Rs. 2,85,50,000 paying brokerage of Rs 2,00,000

He invested Rs1,55,00,000 in a new residential property on 18.3.2022

He invested Rs 65,00,000 in Bonds of Power Finance Corporation Limited (Eligible) on 30th March 2022. The Fair market value of the property on 1.4.2001 was Rs 25,75,000

Relevant Cost Inflation Indices are as follows

Previous Year	Cost Inflation Index
2001-02	100
2011-12	184
2017-18	272
2021-22	317

Compute his Capital Gains for the Assessment Year 2022-23

(10)

Q.4 B : Mr. Rishi is a citizen of U.K., came to India for the first time on 1st April, 2017 and started a business in Pune He went back to U.K. on 1st May 2021 and came back to India on 22nd January, 2022.

Determine his Residential status for the Assessment year 2022-23.

(10)

OR

Q.4 C : Mr Padmanabh Sathe purchased a House property on 21st June 1999 for Rs 29,75,000 and paid Rs. 25000 for its registration.

He made the following additions/ alterations to the house property

Cost of construction of 1st floor in the financial year 2011-12 Rs 7,75,000

Cost of construction of 2nd floor in the financial year 2017-18 Rs 3,50,000

He sold the property on 21st February 2022 for 1,95,20,000 paying brokerage of Rs 2,50,000

He invested Rs1,05,00,000 in a new residential property on 18.3.2022

He invested Rs 15,00,000 in Bonds of Power Finance Corporation Limited (Eligible) on 30th March 2022. The Fair market value of the property on 1.4.2001 was Rs 32,00,000

Relevant Cost Inflation Indices are as follows

Previous Year	Cost Inflation Index
2001-02	100
2011-12	184
2017-18	272
2021-22	317

Compute his Capital Gains for the Assessment Year 2022-23

(10)

Q.4 D : Mr. Surendra has earned the following income during the previous year ended on 31st March, 2022.

(10)

Particulars	Rs.
1. Rent from house in Pune, received in Japan	6,00,000
2. Income from business in Spain, being controlled from India	4,00,000
3. Salary earned and received in Bangladesh	3,00,000
4. Professional fees received in India	2,00,000
5. Interest received from State bank of India, in Nagpur	1,00,000
6. Past untaxed profit earned outside India, brought to India	1,50,000
7. Agriculture Income earned in India received in Sri Lanka	1,00,000
8. Dividend from an American company received in Rome	1,50,000

Compute his total income for the assessment year 2022-23 assuming as follows:

- He is Resident and Ordinarily Resident
- He is Resident but not Ordinarily Resident

Q.5 A. Explain the provisions of Depreciation u/s 32 and the concept of Block of Assets as per the Income tax Act. (10)

Q.5 B. Explain 'Perquisites' u/s 17(3) of the Income Tax Act 1961 and state any eight items of Tax-free perquisites. (10)

OR

Q.5 C : Write Short Notes (Any 4)

(20)

- Taxability of Gift from Relatives under Income Tax Act, 1961.
- Annual Value of a Property
- Deduction for Interest on Housing Loan under Income tax Act
- Commutation of Pension
- Explain the term "Person" and "assessment year"
- Deduction u/s 80U of Income Tax Act

21-11-2022

Time: 3 hours

Marks: 100

- N.B.
1. All questions are compulsory
 2. Figures to the right indicate full marks.
 3. Draw a neat diagram wherever necessary.

Q1 A. Choose the correct answer and rewrite the statement (Any Ten)

10

1. Capital adequacy norms help to _____
 - a. Increase bank's profits
 - b. Maintain financial stability
 - c. Control inflation
 - d. Reduce balance of payments deficit
2. _____ is responsible for coordinating the Sustainable development goals in India.
 - a. Planning Commission
 - b. Home ministry
 - c. NITI Aayog
 - d. Ministry of Finance
3. Which of the following is not one of the benefits of FDI?
 - a. Culture of consumerism
 - b. Infrastructural development
 - c. Transfer of technology
 - d. Sectoral development
4. The average agricultural growth rate since 2000 is _____.
 - a. Less than 4%
 - b. 4%
 - c. 5%
 - d. Above 5%
5. Fair price shops protect the interest of _____.
 - a. Land lords
 - b. consumers
 - c. traders
 - d. businessman
6. Major part of the agricultural credit is supplied by _____.
 - a. Money lenders
 - b. Commercial banks
 - c. Co-operative banks
 - d. Landlords

7. Industrialisation doesn't involves
 - a. Technological innovation
 - b. Social changes
 - c. The relative decline of agriculture's share in the GDP
 - d. Green Revolution
 8. Only financial institutions can participate in _____
 - a. Initial Public Offering
 - b. Offer for Sale
 - c. Further Public Offering
 - d. Strategic Sale
 9. Which of the following activities do not belong to the services sector in India?
 - a. Retail trade
 - b. Real estate
 - c. Insurance
 - d. Automobile
 10. Financial inclusion aims at providing financial services to _____.
 - a. Industrialists
 - b. Poor people
 - c. Foreign investors
 - d. Indian investors abroad
 11. Which of the following is a part of the organised sector of Indian money market?
 - a. Indigenous bankers
 - b. Loan companies
 - c. Call money market
 - d. Money lenders
 12. The primary market does not include-----
 - a. Equity issues
 - b. GDR issues
 - c. Screen based trading
 - d. Debt issues
- Q1.B. State whether the following statements are TRUE or FALSE. (Any 10)
1. The macroeconomic stabilization aimed at demand management.
 2. Social infrastructure has positive externalities.
 3. Make in India has succeeded in achieving all its objectives.
 4. Issue price is lower than procurement price.
 5. Finance from traditional sources is easy to access.
 6. A good and efficient marketing system is a must for agricultural progress.
 7. MSMEs are, by and large, labour intensive.
 8. Toxic waste cause pollution.
 9. Tourism encourages the growth of other sectors.
 10. In the initial stage of development of an economy, the services sector dominates.
 11. FDI is not permitted in the insurance sector in India.
 12. Capital market is a market for lending and borrowing short-term funds.

- Q2. Answer any two of the following: 15
- A. Explain the rationale of new economic policy 1991.
 - B. Define social infrastructure. Discuss the role of social infrastructure in promoting inclusive growth in India.
 - C. Explain the benefits of FDI to the host country.
- Q3. Answer any two of the following: 15
- A. Explain the implications of National Agricultural Policy 2000.
 - B. Discuss the government measures to stabilize agricultural prices.
 - C. Explain the problems existing in Indian agricultural marketing.
- Q4. Answer any two of the following: 15
- A. Critically evaluate the progress made in the disinvestment process in India.
 - B. Discuss the recent policies and measures taken by the government for the development of the MSME sector.
 - C. What are the problems faced by the Indian healthcare industry? Discuss.
- Q5. Answer any two of the following: 15
- A. Discuss the challenges faced by the banking sector in India.
 - B. Explain the objectives and functions of IRDA.
 - C. Explain reforms introduced in Indian money market.
- Q6. Write short notes on any four of the following: 20
- A. Skill India
 - B. Non institutional sources of Agricultural finance
 - C. Agricultural market- enabling environment
 - D. Measures to promote tourism industry
 - E. Limitations of Indian money market
 - F. Role of SEBI

XXXXX

24/11/22

Paper / Subject Code: 23116 / Export Marketing Paper - I

(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) Export or Perish is a slogan given by _____ for India.
 - a) Ptd. Jawaharlal Nehru
 - b) Mahatma Gandhi
 - c) Indira Gandhi
 - d) Sardar Patel
 - 2) The exporters face _____ risk due to insolvency of buyers.
 - a) IP
 - b) Cargo
 - c) Commercial
 - d) Political
 - 3) Agricultural goods are part of India's _____ exports.
 - a) Merchandise
 - b) Consultancy
 - c) Software
 - d) Transportation
 - 4) A complete ban on imports from a certain country is called _____.
 - a) Courtyard
 - b) Embargo
 - c) Nation restricts
 - d) Quota
 - 5) GATS agreement was signed to open up the _____ sector.
 - a) Transportation
 - b) Manufacturing
 - c) Services
 - d) Merchandise
 - 6) India is a member of _____.
 - a) NAFTA
 - b) ASEAN
 - c) SAARC
 - d) EU
 - 7) Industrial clusters are given recognition as _____ in order to maximize their export potential
 - a) Towns of Excellence
 - b) Trade for Excellence
 - c) Industry for Excellence
 - d) Entry for Excellence
 - 8) _____ are transactions in which goods supplied do not leave country
 - a) Deemed exports
 - b) Dumped exports
 - c) Potential exports
 - d) Cancelled exports
 - 9) _____ are allowed to self-certify their manufactured goods as originating from India
 - a) Medium exporter
 - b) All exporters
 - c) Micro exporters
 - d) Status Holders
 - 10) The headquarter of IIP is in _____ of packaging
 - a) New Delhi
 - b) Mumbai
 - c) Kolkata
 - d) Chennai
 - 11) ASIDE included Critical _____ Balancing Scheme for export development.
 - a) Parks
 - b) Zones
 - c) Star house
 - d) Infrastructure

- 12) Duty remission scheme consists of _____.
- DBK
 - DEPB
 - MIA
 - EPC

- Q:1 B) State whether following statements are True or False (Any 10)** **10**
- Compared to domestic marketing, export marketing involves higher risk.
 - Saturation of domestic market and recession influence export business.
 - India does not export to Asian countries at all.
 - Trade barriers help free movement of goods and services at the global level.
 - GATT was replaced by IMF in 1995.
 - AOA agreement treats foreign investment at par with domestic investment.
 - Foreign Trade policy 2015-20 gives boost to 'Make in India' of Government of India
 - Goods purchased under deemed exports can be used for export purpose and not for domestic sales
 - Special Economic Zones provides value addition to basic agricultural produce.
 - FIEO acts as apex body of manufacturing organisations.
 - MAI Allows infrastructure subsidy.
 - Under GST regime exports would be considered as Zero-rated supply.
- Q:2 Answer any two of the following:** **15**
- Define Export Marketing. Explain the features of Export Marketing.
 - Discuss the problems faced by India's export sector.
 - Explain the India's services exports since 2015.
- Q:3 Answer any two of the following:** **15**
- What are trade barriers? Explain the Non- tariff barriers in export trade.
 - Discuss the positive impact of regional economic groupings on international trade.
 - Explain the steps involved in market selection process.
- Q:4 Answer any two of the following:** **15**
- What are the highlights of India's Foreign Trade Policy 2015-20?
 - Illustrate the role of Directorate General of Foreign Trade in India's export trade.
 - Discuss the benefits available to Status Holders.
- Q:5 Answer any two of the following:** **15**
- What is MDA? Explain its features.
 - Elucidate the role of EPCG in export marketing.
 - Describe ITPO as important organisation in Indian export.
- Q:6 Write Short Notes on (Any 4)** **20**
- Benefit of export marketing to the nation
 - Domestic marketing v/s Export marketing
 - SAARC
 - TRIPs Agreement
 - Negative List of Exports
 - IRMAC

TIME: 3 HOURS

MARKS: 100

- N.B.: 1. Figures to the right indicate full marks.
2. Working notes to form a part of your answer.

Q.1 A) Select the appropriate answer from the following. [Any 10]

(10)

- 1) Interest Accrued but not due on bank loan appears in Balance Sheet under the head of
 - a) Trade Payables
 - b) Short Term Borrowings
 - c) Other Current Liabilities
 - d) Short Term Provisions
- 2) Arrears of Preference dividend is not paid in the Internal Reconstruction Scheme,
 - a) Debited in Capital Reduction Account
 - b) Credited in Capital Reduction Account
 - c) No entry appears
 - d) Debited in Preference share Capital Account
- 3) Investment Accounting is governed by
 - a) AS 13
 - b) AS 11
 - c) AS 14
 - d) AS 2
- 4) Buy back of shares results in
 - a) Reduction of Share Capital
 - b) Increase in Share Capital
 - c) Increase in Goodwill
 - d) Increase in General Reserve
- 5) One of the following is not regarding the Internal Reconstruction
 - a) No Formation of a New Company
 - b) Reduction of Liability
 - c) Reduction of Capital
 - d) Liquidation of Company
- 6) Whistle Blowing is
 - a) Whistle for Traffic clear
 - b) An act of involving in illegal Activities
 - c) Not Reporting illegal activities
 - d) An act of reporting illegal Activities
- 7) CSR stands for
 - a) Co Operative Social Responsibility
 - b) Corporate Social Responsibility
 - c) Common Service Responsibility
 - d) Corporate Service Reporting
- 8) Copy Rights is shown in Company Balance Sheet under the head of
 - a) Other Non Current Assets
 - b) Intangible Assets
 - c) Inventories
 - d) Current Investments.
- 9) One of the following is not a fixed income investment
 - a) Debentures
 - b) Equity Shares
 - c) State Government Bonds
 - d) Central Government Bonds
- 10) One of the following is not the sources of buy back of shares
 - a) Capital Redemption Reserve
 - b) Capital Reserve
 - c) Profit and Loss Account
 - d) Statutory Reserve
- 11) Ex interest price and Cum interest price are the prices relating to
 - a) Goodwill
 - b) Equity Shares
 - c) Preference Shares
 - d) Debentures
- 12) One of the following is not the ethics of Professional Accountant
 - a) Accuracy
 - b) Accountability
 - c) Values
 - d) Frauds

Q.1 B) Match the following items from table A and B (Any 10)

Column A	Column B
1. Balance in Capital Reduction Account	a) Added to the cost of investment
2. Goodwill written off	b) Increase in number of shares
3. Partly paid Equity Shares	c) Set of Standards and Principles
4. Wages and Bonus	d) Premium on buy back of shares written off
5. Loose tools	e) Excluding interest
6. Pre-Acquisition dividend	f) Transferred to Capital Reserve Account
7. Post-Acquisition Dividend	g) Cannot be bought back
8. General Reserve	h) Employees Benefit Expenses
9. Security Premium	i) Inventories
10. Code of ethics	j) Revenue Receipts
11. Sub-division of Shares	k) Debited to Capital Reduction Account
12. Ex-Interest price	l) Free Reserve
	m) Transferred to General Reserve Account

Q.2 Following is the list of balances extracted from books of Canisha Ltd. as on 31st March, 2022.

Particulars	Rs.	Particulars	Rs.
Premises	20,00,000	Sales	23,40,000
Stock (1 st April, 2021)	4,50,000	6% Debentures	18,00,000
Furniture	43,200	Surplus A/c (Credit)	87,000
Debentures Interest Paid	54,000	Sundry Creditors	3,00,000
Plant and Machinery	18,00,000	Bills Payable	2,28,000
Interim Dividend Fund	2,25,000	General Reserve	1,50,000
Sundry Debtors	5,02,000	Provision for Doubtful Debts (On 1 st April, 2021)	21,000
Bad Debts	12,660	Subscribed and Paid up Capital	24,00,000
Goodwill	2,03,000		
Cash and Bank balance	1,09,900		
General Expenses	41,010		
Purchases	11,10,000		
Preliminary Expenses	6,000		
Wages	5,09,190		
Advertising	60,000		
Freight Outward	78,690		
Salaries	87,000		
Director's Fees	34,350		
	73,26,000		73,26,000

The following adjustments have to be made:

1. Stock on 31st March, 2022 was valued at Rs. 6,00,000.
2. Goods to the value of Rs. 15,000 were distributed as free samples during the year. But no entry in this respect has been made.
3. Provide for half year's debenture interest.
4. The provision for doubtful debts on 31st March should be equal to 1% on sales.
5. Director's Fee is outstanding to the extent of Rs. 2,000 and Salaries Rs. 5,000.
6. Depreciate Premises by 2%, Plant and Machinery by 5% and write off Rs. 7,200 on Furniture.
7. Write off Preliminary expenses.

You are requested to prepare Statement of Profit and Loss for the year ended 31st March, 2022 and the Balance Sheet as at that date.

OR

Q.2 A) The following is an abstract of Balance Sheet of X Ltd as on 31st March, 2022. (10)

Liabilities	Amount
1,00,000 Equity Share Capital of Rs. 10 each	10,00,000
4,000 8% Preference Share Capital of Rs. 100 each fully paid	4,00,000
9% Debentures of Rs. 100 each	2,00,000
Creditors	1,00,000
	17,00,000

Note: Preference Dividend is arrears for a year

It was decided to reconstruct the company for which the following scheme was approved by court:

1. Equity share capital be reduced to Rs. 6 each fully paid up.
2. Preference Shareholders agreed to accept 10% Preference Share Capital amounting to Rs. 3,00,000 and arrears of preference dividend were to be paid off completely.
3. 9% Debentures shall be converted into equal numbers of 12% Debentures of Rs. 75 each.

You are required to:

Pass Journal Entries and prepare Capital Reduction A/c

Q.2 B) Following is the Balance Sheet of Manish Ltd. as on 31st March, 2022. (10)
Balance Sheet As on 31st March, 2022

Liabilities	Rs.	Assets	Rs.
Equity Share Capital (Share of Rs. 10 each)	3,20,000	Fixed Assets	5,60,000
6% Preference Share Capital	80,000	Investments	1,20,000
Security Premium	80,000	Bank balance	6,00,000
Profit and Loss A/c	1,20,000	Other Current Assets	1,20,000
8% Debentures	1,60,000		
Bills Payables	5,60,000		
Creditors	56,000		
Other Current Liabilities	24,000		
	14,00,000		14,00,000

Keeping in view of all the legal requirements, ascertain the maximum number of equity share, the company can buyback at Rs. 12 per share, being the current market price. Assuming that buyback is actually carried out. Pass necessary journal entries to record the above transactions.

Q.3 Following is the summarised Balance Sheet of Akansha Ltd. as on 31st March 2022 (20)

Liabilities	Rs	Assets	Rs
Equity shares of Rs. 10 each fully paid	5,00,000	Goodwill	1,50,000
8% Cumulative Preference shares of Rs.10 each fully paid	4,00,000	Building	3,00,000
7% Debentures of Rs. 100 each	2,50,000	Equipments	1,30,000
Creditors	2,10,000	Investments	60,000
Loan from directors	30,000	Inventories	2,25,000
		Debtors	1,60,000
		Cash & Bank	50,000
		Profit and Loss Account	3,15,000
	13,90,000		13,90,000

There is contingent liability of Rs. 10,000.

Following scheme of Internal Reconstruction was approved by the Court:

1. 8% Preference Shares to be reduced by Rs.4 per share and final call was made immediately to make it fully paid of Rs.10.
2. Equity shares to be reduced by Rs. 6 per share. Face value being the same.

3. The Debenture holders agreed to forego their claim by 20% and to accept 8% Preference Shares of Rs.10 each for the remaining.
 4. Contingent liability was settled at Rs. 5,000.
 5. Investments were sold for Rs.50,000.
 6. Loan from directors was settled at 50%.
 7. Tangible Fixed assets be revalued as under: Building at Rs.3,20,000 ; Equipments at Rs.1,20,000.
 8. Accumulated loss and Intangible assets to be written off.
- Pass Journal Entries (without narration) and prepare Capital Reduction A/c and Notes on Share capital in the books of Akansha Ltd. after Reconstruction.

OR

Q.3 A) From the following information of Mahesh Ltd. prepare the Statement of Profit and Loss of the Company for the year ended 31st March 2022 as per the provisions of the Companies Act 2013.

(10)

Particulars	Rs.
Sales	20,50,000
Interest Received on Fixed Deposits	2,00,000
Cost of Materials Consumed	5,00,000
Opening Stock of Finished Goods	2,00,000
Closing Stock of Finished Goods	1,00,000
Salaries and Wages	1,20,000
Staff Welfare Expenses	30,000
Interest on Debentures	50,000
Interest on Loan from SBI	30,000
Depreciation on Machinery	30,000
Depreciation on Office Furniture	20,000
General Expenses	5,000
Electricity Charges	12,000
Salesman Commission	15,000
Discount Allowed	5,000
Carriage Outward	6,000
Sales Return	50,000
Repairs and Maintenance	25,000
Insurance	20,000
Rent	24,000
Audit Fees	25,000
Advertisement Expenses	30,000
Provision for Income Tax	2,53,000

Q.3 B) On 1st April 2021, Mansi had 8,000 Equity shares of Precious Ltd. at a book value of Rs. 15 per share (Face value Rs.10 each). She provides you the further information.

(10)

- i. On 10th April 2021 she purchased another 4,000 Equity Shares of Precious Ltd. at Rs.16 per share.
- ii. On 31st August, 2021 the Directors of Precious Ltd. announced a right issue which entitled the holders to subscribe three shares for every twelve shares held at Rs. 15 per share. Shareholders can transfer their right in full or in part. Mansi sold 1/6th of entitlement to Ajay for a consideration of Rs. 2 per share and subscribe the rest on 5th September, 2021.
- iii. Dividend for the year ended 31st March, 2021 was declared @20% by Precious Ltd. and received by Mansi on 30th September, 2021.

You are required to prepare Investment in Equity Shares of Precious Ltd A/c in the books of Mansi for the year ending 31st March, 2022. (Apply AS-13)

10377

Q.4 On 1st June, 2021 Mr. Abhay Kumar purchased Nominal Value Rs. 1,00,000, of 6% Government Bonds (interest payable on 1st April, 1st July, 1st October and 1st January) at Rs.91 cum-interest each (face value Rs 100). (20)

On 1st November, Rs. 20,000 Bonds are sold at Rs. 93 cum-interest per bond.
 On 1st December Rs. 10,000 Bonds are sold at Rs. 100 ex-interest per bond.
 On 31st March 2022, the market price per Government Bond was Rs. 80.

Prepare Investment in 6% Government Bonds Account in the books of Mr. Abhay Kumar for the year ended on 31st March, 2022. (Apply AS-13)

OR

Q.4 Following is the Balance Sheet of Vasant Ltd. as on 31st March 2022. (20)
 Balance Sheet As on 31st March, 2022

Liabilities	Rs.	Assets	Rs.
Equity Share capital (Shares of Rs. 100 each)	50,00,000	Fixed Assets	80,00,000
Securities Premium	10,00,000	Investments	30,00,000
General Reserve	22,00,000	Debtors	15,00,000
Profit and Loss A/c	28,00,000	Stock	25,00,000
8% Debentures	40,00,000	Bank balance	40,00,000
Creditors	30,00,000		
Bills Payables	10,00,000		
	1,90,00,000		1,90,00,000

Keeping in view all the legal requirements ascertain:

1. The maximum number of equity shares that Vasant Ltd. can buy back.
2. The maximum price it can offer.

Pass journal entries and prepare its Balance Sheet thereafter. Show necessary notes.

- Q5) a) Discuss and explain the concept of Ethics with reference to Corporate Ethics. (10)
 b) Distinguish between Internal Reconstruction and External reconstruction. (10)

OR

Q5) Write Short Notes (Any Four) (20)

- 1) Methods of Internal Reconstruction
- 2) Disclosure of Reserves & Surplus in Company Balance Sheet
- 3) Maximum Limits of Buyback
- 4) Ex-Interest & Cum-Interest Price
- 5) CSR

Financial Management

19/11/2022

Time: 3 Hrs

Marks: 100

- NB: 1** All questions are compulsory with internal options.
2 Q. 1 and Q.6 carry 20 Marks and Q.2 to Q.5 carry 15 Marks each.
3 Working note from a part of the answer and have to be solved after Questions and not on the last page of the answer sheet.

Q. 1 A Choose the appropriate answer from the following (Any Ten)

10

i. To achieve wealth maximization, the finance manager has to take careful decision in respect of _____.

- (a) Investment (b) Financing
(b) Dividend (d) All of the above

ii. The objective of financial management is to _____.

- (a) Maximise the revenues (b) Minimise the expenses
(b) Maximise the return on investment (d) Minimise the risk

iii. In the notes on fixed assets of a company, closing WDV + Depreciation for the year is equal to _____.

- (a) Opening Gross Block (b) Opening WDV
(c) Closing WDV (d) Closing Gross Block

iv. Following are examples of vertical analysis _____.

- (a) Ratio Analysis (b) Cash flow statement
(c) Trend percentages (d) (a) & (b)

v. Following is not a quick asset _____.

- (a) Loose tools (b) Advance tax
(c) Bills Receivable (d) Interest Accrued

vi. X Ltd presented the following information

- a) Shareholders fund 12,50,000
b) Loan Fund 10,50,000
c) Fixed Assets 9,50,000
d) Investments. 10,00,000
e) Net Current assets 3,50,000

~~vii~~ The total of the balance sheet under vertical analytical format is _____.

- (a) 22,00,000 (b) 23,00,000
(c) 24,00,000 (d) 25,00,000

vii. Capital Gearing Ratio is _____.

- (a) Balance Sheet Ratio (b) Revenue Statement ratio
(c) Composite Ratio (d) Functional Ratio

viii. Commercial paper is a type of _____.

- (a) Fixed coupon bonds (b) Unsecured short term debt
(c) Equity share capital (d) Government bond

ix. Which of the following is not a spontaneous source of short term funds.

- (a) Trade Credit (b) Accrued Expenses
(c) Provision for Dividend (d) All of the above

x. Commercial paper are generally issued as a prices _____.

- (a) Equal to Face Value (b) More the than face value
(c) Less than the face value (d) Equal to redemption value

xi. Refund of income tax is _____.

- (a) Cash Inflow from investing activities (b) Cash Inflow from financing activities
(c) Cash Inflow from operating activities (d) Cash outflow from operating activities

xii. For the purpose of cash flow statement cash _____.

- (a) includes only cash (b) Include cash and saving account with bank
(c) Include cash and current account with bank (d) Includes Cash , saving account as well as current account with bank

Q. 1 B) State whether the following statements are True or False (any Ten)

10

- i. The wealth of corporate owners is measured by the share price of the stock.
- ii. Owned funds is an Internal source of finance.
- iii. One of the few assets that is not usually depreciated is Plant and Machinery.
- iv. Dividend can be paid out of capital but interest cannot be paid out of capital.
- v. Common size analysis is used for comparing performance of the company in one year with that of another year.
- vi. High stock Turnover ratio indicates high cost of Goods sold
- vii. High Proprietary ratio indicates low risk for the creditors.
- viii. In India, all types of short term financing from banks must be secured.

- ix. Bill discounting is a good source of short term finance to all firms.
- x. The statement of cash flows shows the relationship of assets to cash flows.
- xi. Cash equivalent includes investments that cannot be readily converted in to cash.
- xii. Increase in current assets will always result in inflow of cash.

Q.2 Following is the balance sheet of Silver Ltd. as on 31st March, 2022. You are required to re arrange the balance sheet in vertical form to show the following.

15

- a) Proprietor 's Funds
- b) Borrowed Fund
- c) Fictitious Assets
- d) Intangible assets
- e) Quick Liabilities
- f) Working capital

Liabilities	Amount	Assets	Amount
Equity Share Capital	4,50,000	Goodwill	35,000
Share Premium	45,000	Land & Buildings	2,75,000
General reserves	1,60,500	Plant & Machinery	3,60,800
Profit and Loss	1,28,500	Furniture & Fixtures	1,28,200
12% Debentures	2,60,000	Long term Investment	1,75,000
Bank Loan	1,50,000	Short term Investment	48,500
Bank Overdraft	49,800	Sundry Debtors	1,69,700
Creditors	68,000	Bills receivable	12,500
Bills Payable	5,400	Closing Stock	98,000
Provision for tax	35,800	Prepaid Expense	27,500
Outstanding expenses	17,000	Cash Balance	29,300
		Preliminary Expenses	10,500
Total	13,70,000	Total	13,70,000

OR

Q.2 Following is the Trial Balance of EKNATH Ltd. as on 31st March, 2022.

15

Debit balance	Amount	Credit balance	Amount
Stocks (at cost)	5,00,000	Share Capital (Equity shares of Rs.100 each)	20,00,000
Fixed Assets (Net Block)	12,35,000	General reserves	70,000
Sundry Debtors (Unsecured & good)	4,00,000	Loans from State-Financial Corp.	3,00,000
Staff Advance	97,400	Provision for taxation	11,000
Cash on hand	60,000	Net Profit for the year	2,70,000
Bank balance	4,94,000	Profit and Loss A/c (Opening balance)	1,00,000
Share issue Expenses	26,600	Short Term Loans	50,000
Bills Receivable – Trade	58,000	Sundry Creditors	1,40,000
Investment (at cost)	75,000	Unclaimed Dividend	5,000
Total	29,46,000	Total	29,46,000

Additional Information:

1. Transfer to General Reserve Rs. 50,000.
2. Directors recommended 6% dividend.
3. Out of debtors, debts due for more than six months were Rs. 52,000.
4. Sundry Creditors included creditors for goods Rs. 1,05,000, while the remaining are for expenses.
5. Loan from state financial corporation is secured against stock.
6. Market value of investments is Rs. 78,000 while its face value is Rs. 60,000.
7. Ignore previous year's figures and corporate dividend tax.

Prepare balance sheet as on 31st March, 2022 as per legal requirement, after considering the above adjustments.

Q.3 You are furnished with the following revenue statements for the year ended 31st March. You are asked to prepare the Trend Analysis.

Particulars	2019	2020	2021	2022
Sales	50,00,000	60,00,000	72,00,000	86,40,000
Less : Cost of Sales	32,00,000	38,00,000	46,00,000	56,00,000
Gross Margin	18,00,000	22,00,000	26,00,000	30,40,000
Management Expenses	3,00,000	3,50,000	4,00,000	4,50,000
Sales Expenses	5,00,000	6,00,000	7,20,000	8,64,000
Interest on Borrowings	3,00,000	4,00,000	5,00,000	6,00,000
Total Expenses	11,00,000	13,50,000	16,20,000	19,14,000
Net Profit before Depreciation & Taxation	7,00,000	8,50,000	9,80,000	11,26,000
Depreciation	5,00,000	4,50,000	6,00,000	6,50,000
Profit before Taxation	2,00,000	4,00,000	3,80,000	4,76,000
Income Tax	80,000	2,00,000	1,85,000	2,40,000
Profit after Tax	1,20,000	2,00,000	1,95,000	2,36,000

OR

Q.3 Prepare a common size Balance sheet in vertical form from the following details. 15

Balance sheet of M/s Ashok Ltd as on 31st March, 2022

Liabilities	Amount	Assets	Amount
Equity Share Capital	2,50,000	Land & Building	2,00,000
10% Preference Share Capital	1,50,000	Machinery	2,50,000
General Reserves	2,00,000	Furniture	2,00,000
8% Debentures	1,50,000	Investment	90,000
Creditors	1,00,000	Stocks	35,000
Bills Payables	50,000	Debtors	50,000
		Cash	40,000
		Bills receivable	30,000
		Preliminary Expenses	5,000
Total	9,00,000	Total	9,00,000

Q.4 Calculate the following ratios.

- | | | |
|----------------------|-------------------------|---------------------|
| a) Current ratio | b) Stock Turnover Ratio | c) Liquidity Ratio |
| d) Debt Equity Ratio | e) Gross Profit Ratio | f) Net profit Ratio |

15

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Balance sheet as at 31st March, 2022

Liabilities	Amount	Assets	Amount
Bills Payable	25,000	Fixed Assets	1,25,000
Sundry Creditors	50,000	Sundry Debtors	50,000
Debentures	1,00,000	Bank Balance	25,000
Reserves	50,000	Inventory	1,25,000
Equity Share Capital	50,000		
Preference Share Capital	50,000		
Total	3,25,000	Total	3,25,000

Profit and Loss Account for the year ended 31st March, 2022

Particulars	Amount	Particulars	Amount
To Opening inventories	75,000	By Sales	5,00,000
To Purchases	1,50,000	By Closing Inventories	1,25,000
To Manufacturing Expenses	50,000	By Profit on sale of shares	25,000
To Direct wages	1,00,000		
To Administrative Expenses	25,000		
To Selling Expenses	25,000		
To Loss on Sale of assets	27,500		
To Interest on Debentures	5,000		
To Net Profit	1,92,500		
Total	6,50,000	Total	6,50,000

OR

Q.4 Following is the balance sheet of X Ltd as on 31st March, 2022 together with supplementary information for the year ended on that date.

15

You are required to compute the following ratios.

- a) Current Ratio b) Liquid Ratio c) Proprietary Ratio
 d) Stock Turnover ratio e) Debtors turnover ratio

Balance Sheet as on 31st March, 2022

Liabilities	Amount	Assets	Amount
Paid-up share capital	2,00,000	Goodwill	30,000
Reserves	50,500	Building	1,20,000
Profit and Loss A/c	12,250	Plant and Machinery	29,000
Bank Overdraft	11,250	Stock	66,000
Sundry Creditor	36,000	Debtors	85,000
Provision for taxation	20,000		
Total	3,30,000	Total	3,30,000

Additional information :

Particulars	Amount
Sales for the year	8,40,000
Stock on 31 st March, 2021	60,000
Gross profit	21,000

Q.5 From the following summary balance sheet of Zebra Ltd. Prepare a cash flow statement 15 as per AS-3 for the year ended 31st March, 2022 by indirect method.

Liabilities	2021	2022	Assets	2021	2022
Equity Share Capital	2,00,000	2,50,000	Fixed Assets	3,02,500	2,85,000
10% Preference Share Capital	1,00,000	-	Debtors	60,000	70,000
5% Debentures	-	50,000	Stock	1,00,000	90,000
Capital Redemption Reserve	-	50,000	Bank	45,000	30,000
Profit & Loss A/c	1,25,000	30,000	Preliminary expenditure	30,000	20,000
Creditors	75,000	70,000			
Bills Payable	37,500	45,000			
Total	5,37,500	4,95,000	Total	5,37,500	4,95,000

Additional Information

1. Preference shares were redeemed at 10% premium on 1-10-2021 with half yearly dividend.
2. Fixed assets were purchased for 97,500/- on 01-01-2022.
3. Interim dividend of Rs. 20,000 /- on equity shares was paid.
4. Fixed Assets having original cost of Rs. 1,00,000 on which accumulated depreciation was Rs. 30,000/- was sold on 31st December, 2021 at Rs. 40,000/-

OR

Q.5 Prepare cash flow statement from the following summary balance sheet of Ritesh Ltd.

15

Balance Sheet as on 31st March

Liabilities	2022	2021	Assets	2022	2021
Creditors	25,000	32,000	Cash	2,000	-
Reserves	23,000	47,000	Debtors	45,000	60,000
Debentures	60,000	50,000	Stocks	45,000	55,000
Outstanding expenses	6,000	6,000	Prepaid Expenses	4,000	3,000
Share Capital	1,33,000	1,14,000	Investments	27,000	20,000
Bank Overdraft	-	12,000	Staff Loan	4,000	3,000
			Fixed Assets	1,20,000	1,20,000
Total	2,47,000	2,61,000	Total	2,47,000	2,61,000

Additional Information:

1. Balance of Depreciation A/c as at 1-04-2021 and 1-04-2022 was 15,000/- and 20,000/- respectively.
2. Machinery of Rs.5,000/- on which depreciation of Rs. 1,000/- was charged was sold for Rs. 4,500/-
3. Staff loan of Rs. 1,000/- were written off during the year.

- Q.6 a) Explain the functions of Chief Financial Officer. 10
b) What is Business Finance? Classify sources of finance. 10

OR

- Q.6) Write short notes on (any four). 20

- a) Cash flow from financing activity.
- b) Income Statement ratios.
- c) Importance of financial management.
- d) Wealth Maximisation
- e) Common size statement
- f) Net worth.

Time: 3 Hours

Marks: 100

N.B:

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

Q1 A. Complete the following statements by selecting the appropriate answers (Any 10) (10)

- i. A manager performs the _____ role to represent the organization to an outsider.
 - a) resource allocator
 - b) negotiator
 - c) spokesperson
 - d) figurehead
- ii. _____ skills encompass the ability to apply specialized knowledge or expertise.
 - a) Human
 - b) Technical
 - c) Conceptual
 - d) Interpersonal
- iii. The science that seeks to measure, explain and sometimes change the behaviour of humans and animals is a called _____.
 - a) Psychology
 - b) Social Psychology
 - c) Anthropology
 - d) Sociology
- iv. The _____ component of an attitude is a description of or belief in the way things are.
 - a) behavior
 - b) motive
 - c) affective
 - d) cognitive
- v. _____ is the degree to which employees believe the organization values their contribution and cares about their well-being.
 - a) Organizational Commitment
 - b) Psychological Empowerment
 - c) Perceived Organizational Support
 - d) Job Engagement
- vi. _____ response passively allows conditions to worsen.
 - a) Exit
 - b) Voice
 - c) Loyalty
 - d) Neglect
- vii. Affection, belongingness, acceptance, and friendship are elements of _____ need.
 - a) basic
 - b) safety
 - c) esteem
 - d) social

- viii. In McClelland's theory _____ is the drive to excel, to achieve in relation to a set of standards, to strive to succeed.
- nAch
 - nPow
 - nAff
 - nCom
- ix. The perceived fairness of the amount and allocation of rewards among individuals is known as _____.
- interactional justice
 - organizational justice
 - distributive justice
 - procedural justice
- x. _____ theories consider personal qualities and characteristics that differentiate leaders from non-leaders.
- Behavior
 - Trait
 - Contingency
 - Situational Leadership
- xi. Fiedler developed the _____ questionnaire to identify the style of leadership.
- LPC
 - CPL
 - PBL
 - BLP
- xii. _____ is a characteristic of transactional leaders.
- Idealized influence
 - Intellectual stimulation
 - Contingent reward
 - Unconventional behavior

Q1 B. State whether the following statements are true or false (Any 10)

(10)

- Managers who act as a conduit to transmit information to organizational members are performing the role of a monitor
- The study of people in relation to their social environment or culture is called Psychology
- When a manager has the ability to work with, understand and motivate other people or group he has human skills.
- Job involvement describes a positive feeling about a job resulting from an evaluation of its characteristics.
- Employee Engagement is the individual's involvement with, satisfaction with and enthusiasm for the work she does.
- The voice response means passively but optimistically waiting for conditions to improve.
- A theory that relates intrinsic factors to job satisfaction and associates extrinsic factors with dissatisfaction is known as Equity Theory
- Goal setting theory says that specific and difficult goals, with feedback, lead to higher performance
- Expectancy theory of motivation focuses on three relationships.
- Agreeableness has been found to be the most important trait of effective leaders.
- Relationship oriented leaders perform better in extremely favourable situations.
- A protégé. is a senior employee who sponsors and supports a less experienced employee, called a mentor.

Q2 Answer any Two of the following

(15)

- a) Define Organizational Behaviour. What are the functions of a manager?
- b) "Managers are faced with the challenge of dealing with workplace diversity and globalization" Discuss.
- c) How do organizations help their employees achieve work-life balance in a bid to motivate them?

Q3 Answer any Two of the following

(15)

- a) Explain the concept of attitude and discuss the relationship between its components
- b) Define job satisfaction and discuss in detail how it can be measured.
- c) Discuss the relationship between job satisfaction, workplace deviance and absenteeism.

Q4 Answer any Two of the following

(15)

- a) Define motivation. Explain Maslow's hierarchy of needs theory.
- b) Explain Herzberg's two factor theory of motivation
- c) Discuss in detail the concept of organizational justice in relation to Equity theory.

Q5 Answer any Two of the following

(15)

- a) Define leadership. Explain the Trait theories of leadership.
- b) What are the key characteristics of charismatic leaders and how do they influence their followers?
- c) Explain the concept of mentorship. Discuss the functions associated in a mentor and protégé relationship.

Q6 Write short notes on (Any Four)

(20)

- a) Creating a positive work environment
- b) Coping with temporariness
- c) Exit Voice Loyalty Neglect Framework
- d) Theory X Theory Y
- e) Characteristics of high achievers
- f) Michigan State Leadership Studies

Time: 3 hours

Marks: 100

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

Q.1 (A) Fill in the Blanks with appropriate words and rewrite the same. (Any 10) **10 marks**

1. The lower level-management requires _____ skill more than other skills.
(Technical, Human, Legal, Conceptual)
2. _____ is a systematized body of knowledge that is universally accepted.
(Art, Science, Profession, Planning)
3. _____ is known as the Father of Modern Management.
(Henry Fayol, F.W. Taylor, Robert Kahn, W.G. Scott)
4. _____ Plans are meant for repeated use. (Forecast, Decision, Single use, Standing)
5. In _____ both superior and subordinate collectively formulate the plans.
(Decision Making, Management by Objectives, Span of Control, Delegation of Authority)
6. _____ is a process of identifying and selecting a course of action to solve a specific problem.
(Directing, Communicating, Decision Making, Leading)
7. In _____ organization people are consciously coordinated towards achieving a common goal.
(Informal, Formal, Traditional, Department)
8. _____ is a number of subordinates who can be supervised and managed effectively.
(Delegation of authority, Departmentation, Leadership, Span of control)
9. Unity of _____ implies one subordinate should receive instructions from one superior.
(Direction, Objective, Command, Control)
10. _____ is concerned with the measurement of the cost and value of people in the organization. (HRP, HRA, Job Analysis, Motivation)
11. _____ is a process of evaluating the work performance of employees.
(MBO, Delegation of authority, Performance appraisal, Recruitment)
12. _____ is the first step in the selection process.
(Job analysis, Recruitment, Staffing, Advertising)

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

1. Management is a social science. •
2. Theory Y assumes that the people are self-motivated and seek responsibilities. •
3. Contingency approach is also known as situational approach.
4. Objectives are single use plans. •
5. Corporate planning is related with a specific department planning. •
6. Planning is secondary function of management. •
7. Matrix organization structure is also known as hybrid structure.
8. In delegation of authority, superior transfers both authority and responsibility to his subordinate.

9. Virtual organization is temporary in nature.
10. Job description includes minimum qualities required from the candidate.
11. Campus recruitment is an internal source of management.
12. Refresher training includes the introduction of a person to the job and to the organization.

Q.2 Answer any two of the following

(15 marks)

- a) Define management. Discuss different managerial skills.
- b) Describe the administrative approach of management.
- c) Discuss different functions of management.

Q.3 Answer any two of the following

(15 marks)

- a) State and explain the meaning and merits of planning.
- b) Briefly explain the components of planning.
- c) Describe the steps in the decision-making process

Q.4 Answer any two of the following

(15 marks)

- a) Define Organizing. Discuss its principles.
- b) Explain the bases of departmentation.
- c) Describe the barriers in the delegation of authority.

Q.5 Answer any two of the following

(15 marks)

- a) Discuss the merits and demerits of Human Resource Accounting (HRA)
- b) State and explain the different methods of training.
- c) Describe techniques of performance appraisal.

Q.6 Write Short Notes on :(Any four)

(20 marks)

- a) Management as an art
- b) Characteristics of Planning
- c) Advantages of Strategic Business Unit
- d) Features of Matrix Organisation
- e) Internal Sources of recruitment
- f) Importance of job analysis

Time 3 hours

Total Marks : 100

Note:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Use of non-programmable scientific calculator is allowed.
4. Graph papers will be supplied on request.

- Q.1 A Answer whether following statements are True or False. 8
- i) In group replacement policy, group replacement as well as individual replacement is done.
 - ii) Small firms can derive maximum profit from the use of operations research techniques.
 - iii) As the life of a mechanical machines increases, its operational efficiency also increases with time.
 - iv) Linear programming is the mathematical technique used to solve the problem of allocating limited resources among the competing activities.
 - v) Each and every linear programming problem always has an unique solution.
 - vi) The feasible region of a linear programming problem is always a convex set.
 - vii) Allocation in a dummy destination, represent the surplus at the corresponding source.
 - viii) In Vogel's approximation method (VAM), the difference between least cost and next least cost in each row or column denote the penalty of not using the least cost route.
- B Select most appropriate choice for the following: 7
- i) Operations Research approach is _____.
 - a) intuitive
 - b) objective
 - c) multidisciplinary
 - d) all of these
 - ii) Operations Research techniques are powerful tool for _____.
 - a) Decision making
 - b) Astrology
 - c) Music
 - d) Genetics
 - iii) When all the values of replacement ratios (or minimum ratio) in a simplex table, are negative or infinite then it indicates that the solution is _____.
 - a) unbounded
 - b) degenerate
 - c) infeasible
 - d) none of these
 - iv) To covert ' \leq ' type constraint into ' $=$ ' type, _____ variable is used.
 - a) slack
 - b) surplus
 - c) artificial
 - d) none of these
 - v) The transportation problem is a balanced transportation problem if _____.
 - a) number of sources is equal to number of destinations
 - b) number of sources is not equal to number of destinations
 - c) total demand is equal to total supply
 - d) none of these

- vi) An alternative optimal solution exists to Transportation problem whenever opportunity cost corresponding to unused route is _____.
- greater than zero
 - less than zero
 - equal to zero
 - not equal to zero
- vii) North-West-Corner Rule is used to find _____.
- an optimum solution.
 - an initial solution depending on cell location only and irrespective of cost of the cell.
 - initial allotments by considering the minimum cost of the cells.
 - all of these.

- C Answer in one or two sentences:
- State different types of sudden failure.
 - Define surplus variable in L.P.P.
 - What is meant by group replacement policy?
 - What is meant by feasible solution of a transportation problem?
 - What cost is assigned to a prohibited route in transportation problem solution?

Q. 2 A A company has three distribution centers A, B and C, from which it supplies 180 units, 120 units and 300 units of a product respectively to four retail shops P, Q, R and S with demands 90 units, 75 units, 75 units and 165 units respectively. The transportation cost per unit is given in following table:

Distribution Centers	Retail shops			
	P	Q	R	S
A	4	5	5	2
B	3	8	8	4
C	7	4	4	7

Determine optimum distribution plan.

OR

B Solve the following transportation problem for maximum profit.

Warehouses	Profit in Rs. Per unit				Availability
	Markets				
	M1	M2	M3	M4	
W1	12	25	6	18	200
W2	8	18	10	7	500
W3	14	20	11	3	300
Demand	180	400	100	320	

2 5 5 11
6 2 1 4

7
8 8 2 3
6 6 3 8

Q.3 A. A factory has three departments to manufacture three products namely A, B and C. Each unit of product A requires 6 hours in department I, 4 hours in department II and 2 hour in department III. Each unit of product B requires 8 hours in department I, 2 hour in department II and 6 hours in department III. Each unit of product C requires 4 hours in each of the three departments. The working time of these three departments is 180 hours, 108 hours and 186 hours respectively. The per unit profit contribution of the three products A, B and C is Rs. 6, Rs. 8 and Rs. 7 respectively. Formulate the above problem as linear programming problem and solve it by simplex method. 20

OR

B. i) Two types of cattle feed A and B containing nutrients N_1 , N_2 and N_3 are available at Rs. 30 per Kg and Rs. 40 per Kg. One Kg of cattle feed A contains 1 unit of each N_1 , N_2 and N_3 respectively. Whereas one Kg of cattle feed B contains 1 unit of N_1 and 3 units of N_2 and 2 units of N_3 respectively. Daily minimum requirement of N_1 and N_2 is 200 units and 400 units respectively. Whereas the daily intake of N_3 should not exceed 350 units. Formulate the L.P.P. and solve it graphically to find optimum solution. 15

ii) Write the dual of the following linear programming problem: 5

$$\begin{aligned} \text{Maximize } Z &= 15X_1 + 13X_2 + 17X_3 \\ \text{subject to } 7X_1 + 5X_2 - 6X_3 &= 28, \\ 2X_1 - 3X_2 + 4X_3 &\leq 24, \\ 4X_1 + 5X_2 + 2X_3 &\geq 21, \\ X_1 \geq 0, X_2 \geq 0, X_3 &\geq 0 \end{aligned}$$

Q.4 Attempt ANY TWO of the following:

A A factory has 500 light bulbs. The failure rate of the light bulbs is given below: 10

Year	1	2	3	4	5
Probability of failure:	0.1	0.2	0.4	0.2	0.1

If the light bulbs are to be group replaced the cost per bulbs is Rs. 20. The cost of individual replacement is Rs. 80 per bulbs. Find the optimum replacement policy for the light bulbs.

B The initial cost of a machine is Rs. 25000 and the running cost increases with the age of the machine is given below: 10

Year	1	2	3	4	5	6	7	8
Running cost(Rs.)	5000	6000	7000	8000	10000	12000	14000	18000

It is given that money is worth 10% per year and the scrap value is nil. Find the optimum period of replacement for the machine.

C For the following data find the optimum period of replacement: 10
Initial cost of the machine Rs.48000

Year	1	2	3	4	5	6	7	8
Operating cost: Rs.	8000	10000	11000	13000	15000	17000	19000	24000
Scrap value:Rs.	30000	18000	12000	6000	3000	2000	2000	2000

Q.5

Attempt ANY FOUR of the following

- A What is replacement? Describe some important replacement situations. 5
- B Explain the scope and methodology of Operations Research techniques. 5
- C Explain multiple optimal solutions with reference to Linear Programming Problem. How to identify this in simplex method. 5
- D Explain artificial and surplus variables with reference to Linear Programming Problem. 5
- E Explain in brief about prohibited routes in transportation problem and how to solve a restricted transportation problem? 5
- F A company has three plants and four warehouses. The demand and supply for the product in units and the corresponding transportation costs are given below: 5

Plants	Warehouses				Supply
	I	II	III	IV	
A	10	15	9	10	20
B	11	13	12	7	50
C	9	7	10	12	25
Demand	50	20	30	10	

Find the initial solution only by least cost method (Matrix Minima). Is it degenerate solution?
