

(2½ Hours)

[Total Marks :75]

- Note : 1. All questions are compulsory. ( Subject to internal Choice )  
 2. Figures to the right indicate full marks.  
 3. Use non-programmable calculator is allowed  
 4. Normal distribution table is printed on the last page for reference.  
 5. Support your answers with diagrams / illustrations, wherever necessary.  
 6. Graph papers will be supplied on request.

**Q.1A) State whether following statements True or False: (Attempt any 8) (8)**

1. Operation Research is also termed as Management Science.
2. The objective function is a linear relationship reflecting the objective of an operation.
3. The feasible region is a convex set.
4. The value of  $\Delta_j = C_j - Z_j$  row in the simplex table tells us whether the current solution is optimal, and, if it is not, what variable will be in the optimal solution.
5. If the assignment elements are cost elements, then the objective of the optimal assignment is to maximize the cost.
6. MODI method is the best method to get Initial Feasible Transportation solution.
7. The dummy activity has an expected time of zero by definition.
8. The PERT pessimistic time estimate is an estimate of the minimum time an activity will require.
9. In solving a job sequencing problem, it is assumed that all jobs require the same sequence of operations.
10. If saddle point is available in a game, it is called as pure strategy game.

**Q.1 B) Match the right and closely related answer from Column Y with the text / term given in Column X. ( Attempt Any 7 questions ) (7)**

Column X	Column Y
1. Linear relationship of variables	a) Completely utilized resources
2. Infeasible region	b) Minimum cost in the table
3. Scarce resource	c) No feasible Solution possible
4. LCM	d) LPP
5. NWCR	e) In the game, gains of the winner are equal to total losses of all other players
6. Critical activity	f) Optimistic time
7. Zero sum game	g) Fair game
8. Shortest activity time in PERT	h) Zero float value
9. Value of game =0	i) The time during which a machine is waiting or not working
10. Ideal time	j) Top left side corner of the table

**Q.2 A)** M/S. Rajaram Pvt.ltd. and engineering firm has to decide profitable mix for its products i.e. Condenser, Transmitter and Connector with a profit (per 100 units) of ₹10, ₹6 and ₹4 respectively. To produce a shipment of condenser containing 100units required 1 hour of engineering 10 hours of direct labour and 2 hours of administration service. To produce one shipment of transmitter 1000 units require 1 hour of engineering 5 hours of direct labour and 6 hours of administration, similarly these figures for connectors are 1,4 and 2. There are 100 hours of engineering services available 600 hours of direct labour and 300 hours of administration. What is the most profitable mix find with the help of LPP formulation and simplex method.

From the above information Formulate as LPP

(7)

**B) Find the optimum solution with the help of simplex method**

(8)

OR

**Q.2 C)** Five salesmen are to be assigned to five territories. Based on past performance, the followingtable shows the annual sales (in Rs. lakh) that can be generated by each salesman in each territory. Find optimum assignment to maximize sales.

(8)

Salesman	Territory				
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>
S <sub>1</sub>	26	14	10	12	9
S <sub>2</sub>	31	27	30	14	16
S <sub>3</sub>	15	18	16	25	30
S <sub>4</sub>	17	12	21	30	25
S <sub>5</sub>	20	19	25	16	10

**Q.2 D) Solve by using graphical method**

(7)

$$\text{Max } Z = 4x_1 + 3x_2$$

Subject to constraints,

$$4x_1 + 3x_2 \leq 24$$

$$x_1 \leq 4.5$$

$$x_2 \leq 6$$

$$x_1 \geq 0 \quad x_2 \geq 0$$

**Q.3 A)** From the data given below

1. Draw a diagram

(2)

2. Find Critical path

(2)

3. Crash systematically the activities and determine optimal project duration

(4)

Activity	1-2	1-3	2-4	2-5	3-4	4-5
Normal time (days)	8	4	2	10	5	3
Normal cost (Rs.)	100	150	50	100	100	80
Crash Time (days)	6	2	1	5	1	1
Crashed Cost (Rs)	200	350	90	400	200	100

Indirect Cost is Rs. 70 per day

**Q.3 B)** You are given a solution for a transportation cost problem. Figures in each cell represent per unit transportation cost. Figures in circle within each cell represent number of units allocated for transportation. P1, P2 and P3 are the 3 Plants and W1, W2 and W3 are the 3 Warehouses. You are required to check the above solution for optimality, if it is not optimal, use MODI method to obtain optimal solution and Find optimal transportation cost. (7)

Plant\WH	W1	W2	W3	Supply
P1	500 18	20	1500 16	2000
P2	1000 26	1000 22	30	2000
P3	6	2000 2	0	2000
Demand	1500	3000	1500	Total=6000

OR

**Q.3 C)** A Project which is planned using PERT technique has following details of Average Expected Times calculated using the formula,  $t_e = (a + 4m + b) / 6$  and the details of standard deviation.

Activity	Average Expected Time in weeks ( $t_e$ )	Standard Deviation
1 - 2	3	4/6
1 - 3	4	4/6
2 - 5	5	4/6
2 - 4	6	2/6
5 - 6	7	4/6
4 - 6	8	4/6
3 - 6	9	4/6
6 - 7	3	2/6

- i) Construct the network diagram of PERT network and find expected completion time of the project. (3)
- ii) Calculate the Variance of each activity. (4)
- iii) Determine the probability of completing the project in 21 Weeks. (4)
- iv) if the project manager wants to be 99% certain that the project should be completed on schedule what will be the project duration? (4)

**Q.4 A)** You are given the pay-off (profit in ₹) matrix in respect of a two person zero-sum game as follows: (7)

Player: B

	I	II	III
Player: A	I	II	III

$$\begin{matrix} \text{Player: A} \\ \text{I} \\ \text{II} \\ \text{III} \end{matrix} \begin{pmatrix} 2 & 4 & 2 \\ 1 & -5 & -4 \\ 2 & 6 & -2 \end{pmatrix}$$

- i. Find the Maximin strategy.
- ii. Find the Minimax strategy.
- iii. What is the Value of the game.

Q. 4 B) Six jobs I, II, III, IV, V and VI are to be processed on two machine A and B in order AB

Jobs	Processing Time (Min)	
	Machine A	Machine B
i	5	8
II	2	6
III	10	3
IV	9	4
V	6	3
VI	8	9

- (i) Find the sequence that minimizes the total elapsed time required to complete the jobs. (2)
- (ii) Calculate the total elapsed time (3)
- (iii) Idle time on for each Machine (3)

OR

Q.4 C) Find the optimal sequence: (8)

JOB	I	II	III	IV	V
Machine-A	3	8	7	5	2
Machine-B	3	4	2	1	5
Machine-C	5	8	10	7	6

- a) Determine the optimum sequence for performing jobs
- b) Total minimum elapsed time
- c) Idle time for each machine.

Q4 (D) you are given the following pay-off matrix of a zero-sum game, determine the optimal strategies for the players and the value of the game. (7)

A' Strategy	B' Strategy			
	B1	B2	B3	B4
A1	5	-4	5	9
A2	6	2	0	-3
A3	9	15	10	11
A4	2	8	-6	5

- Q.5 A) Define Operations Research. Explain limitation of Operation Research. (8)
- B) Explain various cost involved in project crashing. (7)

OR

Q.5 C) Write a Short note (Attempt three) (15)

- i) Project crashing
- ii) Basis and non-basis variable in simplex table
- iii) Interfering float
- iv) Objectives of critical path
- v) NWCM

## NORMAL DISTRIBUTION TABLE

Area Under the Standard Normal Distribution

Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2518	0.2549
0.7	0.2580	0.2612	0.2642	0.2673	0.2705	0.2734	0.2764	0.2797	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4464	0.5473	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4938	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4846	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.7893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4820	0.4922	0.4925	0.4927	0.4931	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4958	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4988	0.4986
3.0	0.49865	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4996
4.0	0.49968									

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Duration: 2.5 Hours

Marks: 75

Note:

- 1) All questions are compulsory subject to internal choice.
- 2) Figures to the right indicate full marks.
- 3) Use of simple calculator is allowed

Q.1.

(a) Multiple Choice Questions(any 8):

(08)

- (1) A \_\_\_\_\_ is a regime where the currency price is set by the forex market based on supply and demand compared with other currencies.
  - (a) Gold Standard
  - (b) Floating exchange rate
  - (c) Bretton Woods System
  - (d) Fixed exchange rate
- (2) In BOP, under \_\_\_\_\_ account exports and imports of goods, services and unilateral transfers are recorded.
  - (a) Current Account
  - (b) Capital Account
  - (c) Errors & Omissions
  - (d) Foreign Exchange Reserves
- (3) \_\_\_\_\_ comprises of all those institutions and individuals who buy and sell foreign exchange which may be defined as foreign money or any liquid claim on foreign money.
  - (a) International Monetary Fund
  - (b) IBRD
  - (c) Foreign Exchange Market
  - (d) Bretton woods system
- (4) When a firm lists its equity shares on one or more foreign stock exchange in addition to its domestic exchange, it is called as \_\_\_\_\_.
  - (a) Cross Listing of Shares
  - (b) IPO
  - (c) Yankee Offering
  - (d) Efficient Market Hypothesis
- (5) \_\_\_\_\_ is a soft, liberal & simplified law that aims at boosting foreign trade and investment more in tune with Country's new economic environment of globalization of Indian economy. Price
  - (a) FERA
  - (b) FEMA
  - (c) SEBI Act
  - (d) Securities Contracts (Regulations) Act

- (6) The risk of loss in purchasing power because the value of investments does not keep up with inflation is called as \_\_\_\_\_  
 (a) Concentration Risk  
 (b) Inflation Risk  
 (c) Liquidity Risk  
 (d) Transaction Risk
- (7) \_\_\_\_\_ is a way of trading non-U.S. stocks on the U.S. exchange.  
 (a) ADR  
 (b) GDR  
 (c) IDR  
 (d) FDI
- (8) \_\_\_\_\_ is currency held on deposit outside its home market.  
 (a) Eurobond  
 (b) Eurocurrency  
 (c) Euro credit  
 (d) Zero Coupon Bond
- (9) \_\_\_\_\_ is the process of assessing, in a structured way, the case for proceeding with a project or proposal, or the project's viability.  
 (a) Project Appraisal  
 (b) Project Finance  
 (c) Project Measurement  
 (d) Project Performance
- (10) According to \_\_\_\_\_ technique of FOREX risk management, a company dealing in international transactions must make all its payments in its domestic currency and must have the policy of accepting only domestic currency from the debtors.  
 (a) Matching  
 (b) Leading and Lagging  
 (c) Hedging  
 (d) Invoice in Home Currency

**Q.1.(B) State whether the following statements are True or False (any 7):**

**(07)**

- 1) The Balance of Payment identity is  $CA+FA+RA = 0$
- 2) Gold standard has proved to be a "fair weather friend".
- 3) Nostro account points at "Our account with you"
- 4) Exporters sell foreign currencies for domestic currencies.
- 5) If AFM is positive, it represents premium on base currency.
- 6) The call option is the right to sell an asset at a fixed date and price.
- 7) In case of FPI, entry and exit are difficult.

- 8) Net Present Value = Present Value of Cash Inflow ÷ Present Value of Cash Outflow.
- 9) India is a tax haven country.
- 10) Dumping means selling goods at high price in international markets.
- Q.2.(A) What is International Finance? Describe the emerging challenges in international finance. (08)
- (B) What are the components of Balance of Payment? (07)
- OR
- (P) The following quote is given in Mumbai: 1USD = INR 81.2125-82.2325 (07)
- Is it a Direct Quote in India?
  - Find Mid Rate, Spread and Spread%
  - Calculate the inverse quote.
- (Q) Identify if triangular arbitrage exists and calculate the same: (08)
- USD CAD 1.1685-1.1695  
 USD CHF 1.3785-1.3795  
 CAD CHF 1.1885-1.1895  
 Note: Compare CAD CHF quotes for calculating Arbitrage &  
 Assume Capital CAD 1 Million
- Q.3.(A) Explain global money market instruments. (08)
- (B) What is Euro bank? What are its competitive advantages? (07)
- OR
- (P) Consider the following information: (08)
- |                 |             |        |          |
|-----------------|-------------|--------|----------|
| Spot            | 1 USD = SGD | 1.3320 | - 1.3390 |
| 1 Month Forward |             | 120    | - 220    |
| 2 Month Forward |             | 820    | - 940    |
| 3 Month Forward |             | 1120   | - 1220   |
| 6 Month Forward |             | 1980   | - 2080   |
- Calculate 1 Month Forward, 3 Month Forward and 6 Month Forward USD-SGD Rate.
- (Q) 60 Days Forward USD-CHF 0.9508 (07)
- Spot USD-CHF 0.9520  
 Calculate 60 Days AFM and interpret the results.
- Q.4.(A) What is FDI? How is it different from FPI? (08)
- (B) Describe the essential qualities of a FOREX manager. (07)
- OR
- (P) Given: (07)
- 6 Month Forward EUR/CAD 1.3493  
 EUR Interest Rate = 1.25% p.a.  
 USD Interest Rate = 1.75% p.a.  
 Calculate Spot EUR/CAD quotation



- (Q) From the following data, find the best alternative for borrowing INR 20 Million for a temporary period of 6 Months. Exchange rates are against INR. (08)

	Currency	Spot Rate	6 months forward rate	Interest rate
1.	USD	80.1250	80.8890	4.00 % p.a.
2.	EUR	91.2750	91.8950	4.50 % p.a.
3.	GBP	98.3575	98.3675	5.00 % p.a.

- Q.5.(A) What are tax havens? Explain their benefits. (08)

- (B) A&N Ltd. is considering to invest in a project requiring a capital outlay of Rs. 6,00,000. (07)

Forecast for annual income after tax is as follows:

Year	1	2	3	4	5
NPAT (Rs.)	3,00,000	3,00,000	2,40,000	2,40,000	1,20,000
Discount Factor @ 14% p.a.	0.8772	0.7695	0.6750	0.5921	0.5194

Depreciation is 20% on Straight Line Basis

Evaluate the project on the basis of Net Present Value and advise whether A&N Ltd. should invest in the project or not?

OR

- Q.5. Write Short Notes on (any three) (15)

- (P)
- i) Gold Standard
  - ii) Functions of FOREX market
  - iii) ADRs
  - iv) Role of FEDAI
  - v) Types of FOREX Risks

TIME: 2.5 Hours

MARKS: 75

Note: 1.Q1 is compulsory.

2. Q2 to Q5 are compulsory with internal choice.

3. Figures to the right indicate full marks.

4. Give working notes, wherever necessary

**Q1. (A) Select the correct answer from the multiple choice questions (Any 8)** (8)

1. \_\_\_\_\_ is a privilege of credit card offered to the family members.  
(a) Add-on cards (c) Debit cards  
(b) Credit cards (d) Health cards
2. It is mandatory that all public issues should be managed by \_\_\_\_\_ functioning as the lead managers.  
(a) Underwriters (c) Bankers  
(b) Brokers (d) Merchant Bankers
3. \_\_\_\_\_ is fund based services.  
(a) Credit Rating (c) Hire purchase  
(b) Stock broking (d) Custodian services
4. Apex institution of housing sector is  
(a) National Housing Banks (c) NABARD  
(b) SEBI (d) IDBI
5. Under forfaiting the client is able to get credit facility to the extent of \_\_\_\_\_  
(a) 60% of the value of the export bill  
(b) 80% of the value of the export bill  
(c) 100% of the value of the export bill  
(d) 20% of the value of the export bill
6. In accordance with the bill rediscounting scheme, the bill should have maximum of \_\_\_\_\_ days.  
(a) 60 (b) 90 (c) 180 (d) 360
7. Credit Protection is available in \_\_\_\_\_  
(a) Without Recourse factoring (c) Bill discounting  
(b) With recourse factoring (d) securitization
8. \_\_\_\_\_ is the process of updating the accounts of the trading parties.  
(a) Underwriting (c) Banking  
(b) Clearing (d) securitization
9. \_\_\_\_\_ refers to the raising of finance by individual for the acquisition of durable consumer goods.  
(a) Factoring (b) Leasing (c) Bill discounting (d) Consumer Finance
10. Category \_\_\_\_\_ Merchant banker can act only as advisor or consultant to an issue.  
(a) I (b) II (c) III (d) IV

**Q1. (B) State whether following statements are True or False (Any 7)** (7)

1. Bill Discounting is a short term source of finance.
2. A certificate of registration should be obtained from SEBI to act as a clearing member.
3. Lessor is the owner of the property or assets who gives it on lease.
4. Smart card is a tiny integrated circuit chip card.
5. The first credit rating agency in India is CRISIL.

6. PIN stands for Personal Identification Name.
7. The non-fund based services are called asset based services.
8. The rolling settlement system is adopted by RBI.
9. CIBIL Rank is between 1 and 10 with 1 being worst and 10 being best.
10. AAA long term debt instruments carry highest credit risk.

- Q2.** (A) What are the characteristics of financial services? (7)  
(B) Distinguish between Factoring and Bill Discounting. (8)

OR

- Q2.** (P) Explain types of Factoring. (7)  
(Q) Anita owes Neeta a sum of rs.6000. On 1<sup>st</sup> April,2021 Anita gives a promissory note for the amount for 3 months to Neeta who gets it discounted with her bankers for rs.5,760. On the due date the bill is dishonoured. The bank paid rs.15 as noting charges. Anita then pays rs.2000 in cash and accepts a bill of exchange drawn on her for the balance together with rs.100 as interest. The bill of exchange is for 2 months and on the due date the bill is again dishonoured. Neeta paid rs.15 as noting charges. Pass the journal entries to be recorded in Neeta's books. (8)

- Q3.** (A) What are the services provided by Merchant Banker? (7)  
(B) List out the function of stock broker. (8)

OR

- Q3.** (P) Define Securitisation. Explain the benefits of Securitization (7)  
(Q) Explain the Participants in Derivative markets. (8)

- Q4.** On 1st April, 2018, Trend Ltd purchased machinery from Reliance Ltd on hire purchase basis. The cash price of the machinery was rs.5,00,000. The payment was to be made rs.1,00,000 on the date of agreement and balance in four annual instalment of rs.1,00,000 plus interest at 8% p.a payable on 31st March each year. The first instalment being payable on 31<sup>st</sup> March, 2019. Prepare Machinery A/c and Reliance Ltd A/c in the books of Trend Ltd, assuming that the accounts are closed on 31st March every year and depreciation at 10%p.a is charged on the original cost. (15)

OR

- Q4.** (P) Explain the features of Venture Capital. (7)  
(Q). Explain, the Housing Finance Agencies in India. (8)
- Q5.** (A) Explain the various sources of Consumer Finance. (7)  
(B) Explain various types of plastic cards. (8)

OR

- Q5. Write a short notes on: (any 3)** (15)

1. Problems in Financial Services.
2. Stock brokers.
3. National Housing Bank
4. Benefits of Credit Cards.
5. Credit Rating Agencies

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Time: 2½ Hours

Total Marks: 75

Note – (1) All questions are compulsory.

(2) Figures to the right indicate marks.

Q. 1 (a) Multiple Choice Questions (Any Eight)

(8)

1. \_\_\_\_\_ project are those in which the ownership is shared by government and by private entrepreneurs.
  - a. Public
  - b. Private
  - c. Joint sector
  - d. Normal
  
2. A \_\_\_\_\_ is a problem scheduled for solution.
  - a. Project
  - b. Plan
  - c. Schedule
  - d. Workflow
  
3. In \_\_\_\_\_ matrix organizations, power and authority are shared between the functional managers and the project managers.
  - a. Strong
  - b. Weak
  - c. Balanced
  - d. Planned
  
4. A \_\_\_\_\_ study is used to determine the viability of an idea.
  - a. In deep
  - b. Feasibility
  - c. Overall
  - d. Detailed
  
5. \_\_\_\_\_ helps to simplify the business processes and make them faster and efficient.
  - a. Information
  - b. Communication
  - c. E-commerce
  - d. Digitalization
  
6. Product mix is also known as \_\_\_\_\_.
  - a. Marketing Mix
  - b. Product Analysis
  - c. Product Assortment
  - d. Product Allotment

7. \_\_\_\_\_ aid is provided to small as well as medium scale units promoted by eligible entrepreneurs
  - a. Seed capital
  - b. Preference shares
  - c. Subsidies
  - d. Equity shares
  
8. To reduce scheduling risk tools such as \_\_\_\_\_ is used
  - a. Work breakdown
  - b. Work structure
  - c. Breakdown structure
  - d. Work integration
  
9. Capacity is the ability of a given system to produce \_\_\_\_\_ within a specific time.
  - a. Output
  - b. Product
  - c. Guidelines
  - d. Rules
  
10. Once the initial level of maturity & areas of improvement are identified, \_\_\_\_\_ provides a roadmap, outlining the necessary steps to take towards project management maturity advancement & performance improvement.
  - a. Capacity
  - b. Continuous improvement
  - c. Procedural
  - d. PMMM

Q.1 (b) True or False

(7)

1. Profit maximization is the prime objectives of public sector project.
2. A strategic Business Unit is not a functional unit of a business.
3. IRR is the rate of returns that a project earns.
4. Time is not the most important constraint of any project.
5. Planning is an iterative process.
6. A feasibility study is used to determine the validity of an idea.
7. Strengths are the competitive advantage one has in the market place.
8. Lean manufacturing originated from the Toyota Production system.
9. Capital notes are one type of debt vehicle.
10. Risk – free rate is the borrowing rate of the investor.

Q. 2 (a) Star Limited is considering the Two mutually exclusive project. Both the project got an useful life of 5 years and the cost of capital is 10%. The initial outlay is Rs. 2,00,000/-.

(15)

The future cash inflow of Project I and II are as follows:

Year	Project I	Project II
1	35,000	1,18,000
2	80,000	60,000
3	90,000	40,000
4	75,000	14,000
5	20,000	13,000

	Year 1	Year 2	Year 3	Year 4	Year 5
PV of Rs. 1 @ 10%	0.909	0.826	0.751	0.683	0.621

You are required to evaluate the project based on NPV.

OR

Q. 2 (b) Discuss various types of organizational structure.

(8)

Q. 2 (c) What is the importance of project planning?

(7)

Q. 3 (a) Calculate the degree of operating leverage, degree of financial leverage and the degree of combined leverage for both the firms and give your opinion on the same:

(15)

Firms	ABC	PQR
Sales (Rs.)	3,60,000	7,50,000
Variable cost per unit (Rs.)	20	150
Fixed Cost (Rs.)	72,000	1,40,000
Output (Units)	6,000	1,500
Interest	40,000	80,000

OR

Q. 3 (b) Discuss the importance of Project Feasibility Study.

(8)

Q. 3 (c) Explain in detail Product Mix analysis.

(7)

Q. 4 (a) Following is the Balance sheet of Summer Ltd as on 31<sup>st</sup> March, 2021

(15)

Liabilities	Rs.	Assets	Rs.
50,000 Equity Shares of Rs.20 each	10,00,000	Machinery	4,80,000
Securities Premium	2,00,000	Furniture	2,00,000
General Reserve	4,78,800	Stock	12,40,000
Profit & Loss A/C	3,14,000	Debtors	4,12,000
Creditors	8,18,000	Cash in hand	6,800
Provision for Tax	3,96,000	Cash at Bank	8,68,000
	<u>32,06,800</u>		<u>32,06,800</u>

Company transfer 20% of profit after tax to general reserve.

Net Profit before Taxation for the last 3 years have been as follows:

1. For the year ended 31/03/2019 Rs. 5,44,000
2. For the year ended 31/03/2020 Rs. 7,32,000
3. For the year ended 31/03/2021 Rs. 7,88,000

Machinery is valued at Rs. 6,37,200. Average yield is 20%. The rate of Tax is 50%. Use simple average. Calculate value of equity share as per intrinsic value method and yield method.

OR

Q. 4 (b) Discuss in detail Project Management Maturity Model (8)

Q. 4 (c) What is project audit life cycle? Explain its phases. (7)

Q. 5 (a) Case Study (15)

Moon Ltd. intends to invest in a project where-in the capital investment would be to the extent of Rs. 5,000 lakhs depreciable equally over five years. The tax rate applicable to the company is 30%. It is considering availing a five year term loan from XY Bank Ltd. to the extent of 70% of the project cost. The principal amount of this loan would be repayable equally along with interest payable on reducing balance. The interest rate would be 9% per annum. The projected earnings before interest and tax for the next five years are – Rs. 1,120 lakhs, Rs. 1,260 lakhs, Rs. 1,400 lakhs, Rs. 1,470 lakhs and Rs. 1,610 lakhs.

You are required to prepare:

- a) Income statement for the 5 years.
- b) Amortization schedule for loan.
- c) Calculate debt service coverage ratio and interest coverage ratio for the above 5 years.

OR

Q. 5 (b) Short Notes (Any Three) (15)

- 1) Types of Risks in Projects
- 2) Work Breakdown Structure
- 3) Lean manufacturing.
- 4) Capacity planning.
- 5) Project Management Information System (PMIS)

[Time: 2 ½ Hours]

[Marks: 75]

- N.B. 1) Q. 1 is compulsory.  
 2) Q.2 to Q.5 are compulsory with internal choice.  
 3) Figures to the right indicate full marks.  
 4) Workings should form part of your answer.  
 5) Use of simple calculator is allowed.

- Q.1 (A) Choose correct alternative and rewrite the statement: (Any 8) (8)
1. Under Walter dividend policy if  $r < k_e$ , the firm should have \_\_\_\_\_ payout ratio
    - a) Zero dividend
    - b) 100% dividend
    - c) Any dividend
    - d) 50% dividend
  2. \_\_\_\_\_ is a situation where a constraint or budget is placed on the total size of capital expenditures during a particular period
    - a) Capital budgeting
    - b) Capital rationing
    - c) Cost of capital
    - d) Leverage
  3. The relationship between dividend per share and earning per share is \_\_\_\_\_
    - a) Dividend yield ratio
    - b) Dividend payout ratio
    - c) Book value per share
    - d) Price Earnings ratio
  4. PI of a project is the ratio of present value of inflows to \_\_\_\_\_
    - a) Initial cost
    - b) PV of outflows
    - c) Total cash inflows
    - d) Total outflows
  5. \_\_\_\_\_ represents those funds which are required to manage day-to-day business operations.
    - a) Long term capital
    - b) Short term capital
    - c) Working capital
    - d) None of above
  6. \_\_\_\_\_ is a schematic representation of several decisions followed by different chances of the occurrence.
    - a) Sensitivity analysis
    - b) Probability techniques
    - c) Risk Adjusted Discounting Rate
    - d) Decision Tree
  7. Net Profit for calculation of EVA is \_\_\_\_\_
    - a) NPAT
    - b) NPBT
    - c) NOPAT
    - d) NOP



8. If a profit-making company is absorbed into a loss-making company, then this is a case of \_\_\_\_\_  
a) Hostile takeover bid  
b) Horizontal merger  
c) Reverse Merger  
d) Takeover
9. In case of Sub-Standard Asset (unsecured), provision for NPA should be made at \_\_\_\_\_  
a) 15%  
b) 25%  
c) 40%  
d) 100%
10. Which among the following is short term sources of working capital financing?  
a) Bill discounting  
b) Letter of credit  
c) Commercial paper  
d) All of the above

**Q.1 (B) State whether given statements are True or False: (Any 7) (7)**

1. MM model deals with irrelevance of dividend decision.
2. Under Walter dividend policy, if  $r = k_c$ , the firm is indifferent between dividends and investments.
3. Capital budgeting deals with long term decisions.
4. An estimation of the present value of cash for high-risk investments is known as Risk adjusted discounting rate.
5. Corporate governance is the system of rules, practices and processes by which a firm is directed and controlled.
6. In order to protect the earnings available to shareholders, the swap ratio should be based on EPS.
7. Trade credit is a spontaneous source of finance.
8. In hostile takeover bid, the price of the merger depends upon the mutual consent.
9. Vertical merger involves a merger between two firms operating and competing in the same kind of business.
10. Working capital represent those funds which are required to manage long term business operations

**Q.2 (A) Butter Ltd provided you with the following information: (7)**

Earnings Per Share is Rs. 18

Rate of return expected by investors is 12%

Internal rate of return is 15%

Calculate the price per share by 'Gordon Approach', if dividend payout ratio is 25% and 75%.

- Q.2 (B)** Akshay Ltd. is considering new projects for investments. The two alternative investment proposals are Project 'Red' and Project 'Blue'. The cost of each project is estimated to be Rs. 75,00,000. The cash inflows from the projects are expected as follows: (8)

Year	Red	Blue
1	30,00,000	42,50,000
2	22,50,000	27,50,000
3	17,50,000	20,00,000
4	15,00,000	16,00,000

The current yield on government securities is 8% and the risk premium for Project Red is 5% and Project Blue is 7%. Which investment should be preferred by Akshay Ltd.?

Discounting Rate	Year 1	Year 2	Year 3	Year 4
13%	0.885	0.783	0.693	0.613
15%	0.870	0.756	0.658	0.572

OR

- Q.2 (A)** Porel Ltd. has an earning per share of Rs. 15 and an equity capitalisation rate of 10%. The company has an option of adopting either 40% or 60% dividend payout ratio. Compute the market price of the company's quoted shares as per Walter's Model if it can earn a return of 15% on its retained earnings. (7)

- Q.2 (B)** Sandeep Ltd is considering one of two mutually exclusive proposals. Project 'MI' and project 'CSK', which require cash outlay of Rs 76,50,000 and Rs. 86,25,000 respectively. The certainty equivalent (C.E.) approach is used in incorporating risk in capital budgeting decisions. The current yield on government bonds is 8% and this considered as the risk-free rate of return. The expected net cash flow and their certainty equivalents are as follows: (8)

Year	Project MI		Project CSK	
	Cash Flow (Rs.)	C.E.	Cash Flow (Rs.)	C.E.
1	40,50,000	0.9	50,50,000	0.8
2	45,00,000	0.7	40,50,000	0.7
3	50,00,000	0.6	45,00,000	0.9

Present value factors of Rs. 1 discounted at 8% at the end of year 1, 2 and 3 are 0.926, 0.857 and 0.794 respectively. You are required to suggest the company as to which project should be accepted.

- Q.3 (A)** Saloni Ltd has Rs. 70,00,000 allocated for capital budgeting purposes. The proposals and associated profitability indexes have been determined. (7)

Projects	Initial Investment (Rs.)	Profitability Index
A	21,00,000	1.22
B	10,50,000	0.95
C	24,50,000	1.20
D	31,50,000	1.18
E	14,00,000	1.20
F	28,00,000	1.05

- Calculate the Net Present Value for each of the projects
- Which of the above investments should be undertaken? Assume that projects are indivisible and there is no alternative use of the money allocated for capital budgeting.

Q.3 (B) Calculate Economic Value Added (EVA) with the help of the following information of Hypothetical Ltd. (8)

Particulars	
Financial leverage	1.4 times
Equity Capital	Rs. 170 lakhs
Reserves & Surplus	Rs. 130 lakhs
10% Debentures	Rs. 400 lakhs
Tax Rate	30%
Cost of Equity	17.5%

OR

Q.3 (A) Whale Ltd is studying the possible acquisition of Shark Ltd. by way of merger. The following data are available. (7)

Company	After tax earnings	No. of equity shares	Market price per share
Whale	Rs. 1,25,00,000	10,00,000	Rs. 187.50
Shark	Rs. 37,50,000	2,50,000	Rs. 150

- If the merger goes through by exchange of equity shares and exchange ratio is set according to the current market price, what is the new earnings per share of Whale Ltd. after merger.
- Shark Ltd wants to be sure that their earnings per share is not diminished by the merger, what exchange ratio is relevant to achieve the objective?

Q.3 (B) From the following information, compute the amount of provision to be made in the Profit & Loss Account of Bharosa Bank: (8)

Assets	Rs. (in Lakhs)
• Standard assets	50,000
• Sub-Standard assets (fully secured)	32,500
• Doubtful assets:	
➤ Doubtful for less than one year (Realisable value of security Rs. 3,500)	15,750
➤ Doubtful for more than one year but less than three years (Realisable value of security Rs. 1,500)	5,250
➤ Doubtful for more than three years (Unsecured)	2,500
• Loss Assets	1,750

Q.4 A company is considering taking up of one of two projects 'Alpha' and 'Beta'. Both the projects have the same life, require equal investment of Rs. 80 lakhs each and both are estimated to have almost the same yield. As the company is new to this type of business, the cashflows arising from the projects cannot be estimated with certainty. An attempt was, therefore, made to use probability to analyse the pattern of cashflow from either project during the first year of operation. The pattern is likely to continue during the life of these projects. The results of the analysis are as follows (15)

Project Alpha		Project Beta	
Cash Flow (Rs. in lakhs)	Probability	Cash Flow (Rs. in lakhs)	Probability
12	0.10	8	0.10
14	0.20	12	0.25
16	0.40	16	0.30
18	0.20	20	0.25
20	0.10	24	0.10

Which of the two projects would be riskier based on the criteria of coefficient of variation.

OR

- Q.4 Natsya Ltd. requests you to prepare a statement showing the working capital requirements forecast for a level of activity of 1,09,200 units of production. The following information is available for your calculation. (15)

Cost sheet	Rs. (per unit)
Raw material	63.00
Wages	28.00
Overheads	52.50
	143.50
Profit	42.00
Selling price	185.50

**Additional Information:**

- i) Raw materials are in stock on average one month.
  - ii) Materials are in process, on average 2 weeks.
  - iii) Finished goods are in stock, on average one month.
  - iv) Credit allowed by the suppliers - one month.
  - v) Credit allowed to debtors - 2 months.
  - vi) Lag in payment of wages - 1 ½ weeks.
  - vii) Lag in payment of Overheads - one month.
- 20% of the output is sold against cash. Cash in hand and at bank is expected to be Rs. 42,000. It is to be assumed that production is carried on evenly throughout the year. Wages and overheads accrue similarly and a time period of 4 weeks is equivalent to one month.
- Also Calculate Maximum Permissible Bank Finance as per Tandon committee assuming that core current assets are 25% of total asset.

- Q.5 (A) What is sensitivity analysis? What are its merits? (8)  
(B) Define working capital? Explain various strategies of working capital financing. (7)

OR

- Q.5 Write Short Notes on: (Any three) (15)
- a. Corporate Governance
  - b. Decision Tree Analysis
  - c. Advantages of XBRL
  - d. Types of Mergers
  - e. Commercial Paper

\*\*\*\*\*

Duration: 2½ hours

Marks:75

Note: Figures to right indicate marks

- Q.1.a. State whether the following statements are true or False:(Any 8) (8)
1. Micro finance institutions would like to provide financial services to high income clients.
  2. Compliance risk may include fire, natural disasters such as floods, draughts, earthquake, tsunami, epidemic etc.
  3. Market risk is the risk that an MFI cannot meet its obligations on a timely basis.
  4. Rebate on bills discounted of last year will be transferred to profit & loss account.
  5. The opening balance of Rebate on bills discounted is debit balance.
  6. Ceiling on the loan under the Credit Linked Capital Subsidy scheme is Rs.100 crore.
  7. IIE stands for Indian Institute of environment.
  8. The predominant proportion of MFIs is linked to the international financial market; rather they do not form part of their local financial system.
  9. Microfinance in India started in the 1990s.
  10. The two third population of Indians live in Urban areas.

Q.1.b. Match the following (any 7): (7)

Sr. No.	Column A	Column B
1	Internal working group	Improve the well-being and self-sustainability of rural people
2	PAR	To bridge the credit gaps in existing rural areas
3	Cash reserve ratio	Kerala
4	Schedule 06	Promotes business of the banks
5	Equity finance	1993
6	IIE	Ownership of business
7	Business Facilitator	Cash with RBI
8	Kudumbasree	Maintained in the form of liquid cash
9	Objective of RRBs	Loss of portfolio for MFIs
10	Rural Development	2014

Q.2. Calculate Breakeven point from the following details. (8)

Particulars	Rs.
Depreciation of tools	24,000
Rent	700
Stationery	350
Directors salary	600
Workman's salary	400
Variable cost-material per unit	150
Variable cost- labour per unit	100
Selling price per unit	400

Output is 1000 units

b. Briefly explain scope of Rural finance. (7)

**OR**

Q.2.c.Explain expectations of clients in rural India. (8)

Q.2.d.Explain principles of microfinance. (7)

Q.3.a. Describe the objectives and functions of National Institute for Micro, Small and Medium Enterprises (Ni-MSME) (8)

Q.3.b. Explain benefits of factoring to MSME enterprises. (7)

**OR**

Q.3.c. Prepare Profit & Loss account in the books of PNB Ltd. for the year ending 31-03-2020 (15)

Particulars	Amount
Auditors Fees	25,000
Law charges	58,000
Brokerage on sale of assets	50,000
Depreciation on Non-bank assets	50,000
Directors travelling expenses	6,000
Discount on Bills discounted	5,87,000
Repairs and Maintenance	58,000
Interest on Balances with RBI	5,87,500
Interest on inter bank borrowings	25,000
Income earned by way of dividend	75,400
Interest on current A/C	15,000
Interest on fixed deposit	1,60,000
Interest on investments	35,000
Interest on Loan	47,000
Interest on overdraft	54,000
Interest on saving bank A/C	2,50,000
Law charges	22,500
Loss on sale of investments	70,000
Postage & Telegram	95,000
Printing & Stationary	25,400
Profit of the previous year	3,25,000
Profit on sale of investments	69,000
Income from other sources	47,000
Rents and Taxes	98,000
Salaries to staff	3,55,000
Sundry expenses	90,000
Sundry income	8,000

Adjustments:

(a) Provision of Rs.1,85,000 has to be made for the current year as doubtful debts and taxation.

(b) Proposed dividend amounted to Rs.60,000

Q.4.a. Describe the objectives of risk management in rural finance. (8)

Q.4.b. Describe compliance of State Acts of MFIs. (7)

**OR**

Q.4.c. Describe objective and functions of Small Industries Development Bank of India (SIDBI). (8)

Q.4.d. Explain objectives of Ministry of rural development. (7)

Q.5.a. Explain objectives of Rural Development. (8)

Q.5.b.Explain role of microfinance institutions in rural development. (7)

OR

Q.5. Write short notes on any three. (15)

1. ROSCAs
  2. Categories of priority sector lending.
  3. Credit Guarantec Trust for Medium and small enterprises
  4. NPAs
  5. Apex institutions in Rural Finance
-

Duration: 2 ½ Hours

Marks: 75

- Note: 1. All Questions are Compulsory  
2. Figures to right indicate full marks  
3. Working Note should form part of your answer.

Q1(A) Multiple Choice:(Any 8)

(08)

1. Chairperson of GST Council is \_\_\_\_\_.
  - a) Union Minister of State in charge of Revenue.
  - b) Union Finance Minister
  - c) One elected person amongst the state Finance Minister's
  - d) Minister in charge of Finance or Taxation.
  
2. IGST shall be levied on \_\_\_\_\_ with effect from the date notified by the Government.
  - a) Alcoholic liquor for human consumption
  - b) Petroleum products
  - c) Natural Gas
  - d) Motor Spirit
  
3. For services such as Restaurant and catering, personal grooming, fitness, beauty treatment, health services etc. place of supply is the location \_\_\_\_\_.
  - a) of recipient
  - b) where service is actually performed
  - c) of supplier
  - d) of registered person
  
4. The Liability to pay tax on goods arise at the \_\_\_\_\_.
  - a) Dispatch of goods
  - b) Removal of goods
  - c) Time of supply
  - d) Delivery of goods
  
5. HSN Code Stands for \_\_\_\_\_.
  - a) Home Shopping Network
  - b) Harmonized System of Nomenclature
  - c) Harmonized System Number
  - d) Home State Number
  
6. GSTR 10 is \_\_\_\_\_.
  - a) Monthly return by input service distributors
  - b) Monthly return by input service distributors
  - c) Return to be filed by a person having UIN
  - d) Final Return
  
7. TDS certificate is to be issued by deductor in form \_\_\_\_\_.
  - a) GSTR 1A
  - b) GSTR 2A
  - c) GSTR 7B
  - d) GSTR 7A



8. The amount of tax collected is to the government within \_\_\_\_\_ days after the end of the month in which tax is collected.
- 5
  - 7
  - 10
  - 15
9. Interest @ \_\_\_\_\_ is payable on delayed payment of taxes.
- 18%
  - 15%
  - 28%
  - 24%
10. \_\_\_\_\_ is the application form for registration of casual taxable person.
- GSTR REG-4
  - GSTR REG-5
  - GSTR REG-01
  - GSTR REG-09

**Q1(b) State whether following is True or False: (Any 07) (07)**

- A Company and its sole agent are related persons
- Export of goods or services is considered as zero rated supply.
- Where goods are installed at site, place of the recipient becomes the place of supply.
- The prescribed limit for Karnataka is 1.5 crore under composition scheme.
- The date of issue of voucher is the time of supply of vouchers when the supply with respect to the voucher is identifiable.
- A certificate of Registration granted to tax deductor cannot be cancelled.
- Over the counter payment above Rs.10,000 is allowed by way of cheque or demand draft
- The Goods and Service Tax Identification Number is a 15 Digit unique number.
- E-Way bill once generated cannot be cancelled.
- GSTR 2 is details of inward supplies of taxable goods/services claiming input tax credit.

**Q2 (a) Mr. Manish gives you the following information of his transactions for November 2021. As per provisions related to goods and service Tax classify the following items as taxable or not taxable. (08)**

Sr. No	Particulars	Amount
1	Rent received for machinery in Factory	4,00,000
2	Express Parcel post services	1,00,000
3	A building was let out for Vidya vikas school	7,00,000
4	Interest received from reserve bank of India	10,000
5	Houses are let out to an individual for residential purpose	40,000
6	Royalty for authorship of books	2,00,000

Q2 (b) From the following details calculate the value of supply: (07)

Particulars	Rs.
Contracted value of supply of goods by Mr. Khan to Mr. Parag	4,00,000
The following expenses were incurred by Mr. Parag on behalf of Mr. Khan:	
1. Cost of Packing	15,000
2. Loading Charges	28,000
Other Information:	
(i) Delivery Charges paid to Mr. Gopi by Mr. Parag on instruction of Mr. Khan	12,000
(ii) Additional packing charges paid by Mr. Khan on behalf of Mr. Parag	15,000
(iii) Subsidy received from the ABC pvt Ltd	10,000

OR

Q2 (c) : Prapti Limited, a trading concern in Mumbai furnishes you with the following information for the financial year 2021-22 Find out whether Prapti Ltd is eligible to opt Composition Scheme (08)

Sr. No	Particulars	₹
1	Value of inward supplies on which tax is payable under RCM (GST @ 5%)	7,50,500
2	Intra state supplies which are wholly exempt under sec 11 of CGST act 2017.	6,00,000
3	Intra state supplies of goods Chargeable at 18% GST.	20,50,000
4	Intra state supply is made which are chargeable to GST at NIL rate.	4,00,000
5	Intra state supplies of Goods chargeable at 5% GST.	5,00,000

Q.2 D Rajapur Post Office provided the following services to person other than Government during the year ending 31-03-2022. classify the following items as taxable or not taxable (07)

Sr. No	Service Provided	₹
1	Transfer of money through money orders	6,50,000
2	Pension payment services	2,50,000
3	Operation of saving accounts	2,50,000
4	Rural Postal life insurance	3,50,000
5	Distribution of bonds	6,50,000
6	Issuance of postal orders	4,50,000
7	Collection of Telephone bills	2,50,000

Q.3 A From the following Transactions Find Out Place Of Supply. (08)

- Mr P of Mumbai, sell 15 air conditioners to Q of Pune for delivery at Mr Q place of business at Pune.
- Mr Pritesh located at Pune place an order to Mr. Kiran of Pune for installation of machinery at his factory in Madras
- Mr. Nitin purchase food packet in train at Ahmedabad, whereas train is running from Mumbai to Delhi. Food packets were loaded in train in Mumbai.
- Ms. Ashwini of Punjab places an order to Mr. Amol of Mumbai for delivery of certain goods. Ms. Ashwini directs Mr Amol to deliver goods to Mr. Rahul in Indore

**Q7(B):** Determine the time of supply in the following cases of supply of services. (Assuming Tax Payable on Reverse Charge Mechanism): Explain the Provisions relating to Supply of Services under RCM. (07)

Sno.	Date of Payment by Recipient for supply of services	Date of Issue of Invoice by the supplier of services
1	10/08/2022	29/06/2022
2	10/08/2022	01/06/2022
3	30/06/2022	29/06/2022
4	28/06/2022	01/06/2022
5	26/06/2022	29/06/2022
6	17/06/2022	22/07/2022

OR

**Q3(c):** Mr. Vikrant Rona supplies goods and services from Bangalore. He states that he is not required to register under GST Laws, Compute the aggregate turnover and advice whether he is liable to get registered. He furnishes the following details as under. (08)

a. Intra- state supplies.

Date of supply	Tax Rate	Amount
09/06/2021	12%	5,10,000
11/08/2021	5%	2,30,000
04/09/2021	28%	1,70,000
10/10/2021	18%	2,00,000

b. Exempted supplies to the extent of Rs.90,000 were made in Bangalore.

c. Mr. Vikrant Rona supplied agricultural produce worth Rs.90,000 that was cultivated by Mr. Pathak to whom wages of Rs.1,000 p.m. were paid and was supervised by Mr. Vikrant Rona's wife.

**Q3(d)** Determine Time of Supply in the following cases assuming the GST is payable on Reverse Charge basis (RCM). Write down the Provisions Relating to time of supply on RCM. (07)

Sno.	Date of Receipts of goods	Date payment by the recipient of goods	Date of issue on invoice by supplier of goods
1	01/07/2022	10/08/2022	29/06/2022
2	01/07/2022	25/06/2022	29/06/2022
3	01/07/2022	30/07/2022	29/06/2022
4	05/07/2022	28/06/2022	01/06/2022
5	01/07/2022	26/06/2022	29/06/2022
6	01/07/2022	01/08/2022	29/06/2022

**Q4 (A)** Mr. Gandhi is registered in the State of Gujarat and provides following details for the month of December. Calculate his net tax liability. (08)

Opening balance in Electronic Credit Ledger as on 1st December:

1. IGST - NIL
2. CGST - ₹ 500
3. SGST - ₹ 400

Sr. No	Transactions during the month	Amount
1	Sold goods @ 12% GST to Mr. Modi in Surat.	1,00,000
2	Sold goods @ 5% GST to Mr. Kumar in Rajkot.	2,00,000
3	Purchased goods @ 18% GST from Ahmedabad.	50,000
4	Purchased goods @ 5% GST from Baroda.	70,000

**Q4(B)** You are required to calculate, ITC available for the month of January, 2022. (07)

Sr No	Particulars	Amount
1	Repairs to Plant & Machinery	45,000
2	Goods used during testing of New batch of Finished goods	75,000
3	Plant & Machinery purchased.(Depreciation on Full Value Including GST)	1,05,000
4	Raw Materials Purchased under composition scheme	15,000
5	White Washing of Factory Building	60,000
6	Goods stolen from warehouse	90,000
7	Goods destroyed during fire	30,000

OR

**Q4 (c):** M/s Veera Associates registered in state of Uttar Pradesh provides following details for the month of May. Calculate its net tax liability for the month of May. As business commenced on 14<sup>th</sup> May, there is no Opening Balance in Electronic Credit Ledger. Transaction during the Month

Sold Goods @ 12% GST in Meerut, UP	1,75,000
Sold Goods @ 5% GST in Bareilly, UP	2,50,000
Sold Goods @ 28% GST in Mathura, UP	4,25,000
Sold Goods @ 18% GST in Agra, UP	5,00,000
Purchased goods @ 18% GST from Mumbai, Maharashtra	6,30,000
Provided Services @ 5% GST in Indore, MP	4,80,000
Availed Services @ 12% GST from Kanpur, UP	7,00,000
Availed Services @ 28% GST from Patana, Bihar	90,000

Excess credit of IGST to be utilized against CGST & SGST in the ratio 70:30. (15)

**Q5 (a):** Explain Business , Goods and E-Commerce Operator as per GST. (08)

**Q5 (b):** Explain Difference Between Mixed Supply and Composite Supply (07)

OR

**Q5: Write Short Notes (any 3)** (15)

- a) Electronic Cash Ledger
- b) E-Way Bill
- c) Credit Note
- d) Related Person
- e) Aggregate Turnover as per Registration Scheme