

Exam. Code : 115305

Subject Code : 101301

B.Com. (Financial Services) 5th Sem. (Batch 2022-25)

OPERATIONS RESEARCH

Paper : II

Time Allowed—3 Hours]

[Maximum Marks—50

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. What do you understand by Operations Research ? Explain its scope and limitations.

2. (a) Solve the following LPP :

$$\text{Maximize } Z = 8x_1 - 4x_2$$

Subject to

$$4x_1 + 5x_2 \leq 20$$

$$-x_1 + 3x_2 \geq -23$$

$$x_1 \geq 0, x_2 \text{ unrestricted to sign}$$

(b) What do you mean by Linear Programming ? Discuss its applications.

SECTION—B

3. Solve the following transportation problem for optimal solution :

								Supply
	5	3	7	3	8	5		3
	5	6	12	5	7	11		4
	2	1	3	4	8	2		2
	9	6	10	5	10	9		8
Demand	3	3	6	2	1	2		17

4. A car hire company has one car at each of five depots D_1, D_2, D_3, D_4 and D_5 . A customer requires a car in each town, namely A, B, C, D and E. Distance (in kms) between depots (origins) and towns (destinations) are given in the following distance matrix :

	D_1	D_2	D_3	D_4	D_5
A	160	160	175	190	200
B	135	120	130	160	175
C	140	110	155	170	185
D	50	50	80	80	110
E	55	35	70	80	105

How should the cars be assigned to customers so as to minimize the distance travelled ?

SECTION—C

5. Use dominance principle to simplify the rectangular game with the following payoff matrix and then solve graphically :

		Player B			
		I	II	III	IV
Player A	1	18	4	6	4
	2	6	2	13	7
	3	11	5	17	3
	4	7	6	12	2

6. CD Ltd. sells an electric motor but finds that it runs out of stock on occasions and thus loses the contribution on missed sales. The following information is available :

Estimated demand = 12,000 per year

purchase price = Rs. 100 each

Selling price = Rs. 155 each

Lead time = 5 days guaranteed

Cost of holding a motor = Rs. 20 per year

EOQ = 1,200 motors

The company works a five-day week for 48 weeks a year, that is 240 days. The demand figures have been analysed for the last 27 weeks :

Motors sold	30	40	50	60	70	80	90	Total
Number of days level of sales occurred	10	20	50	30	15	5	5	135

At present, CD Ltd. uses a re-order level of 250 motors and does not carry any safety stock because of the guaranteed delivery time. Ideally, it wishes to satisfy customers on average at least 95% of the time whilst minimising the associated costs.

You are required :

- (a) To estimate the annual stockout costs of using the present re-order level.
- (b) To calculate what re-order level would enable the company to meet its 95% requirement.

SECTION—D

7. (a) In a railway marshalling yard, goods trains arrive at a rate of 30 trains per day. Assuming that the inter-arrival time follows an exponential distribution and the service time (the time taken to hump a train) distribution is also exponential with an average 36 minutes. Calculate the following :

- (i) The average number of trains in the queue.
- (ii) The probability that the queue size exceeds 10.

If the input of trains increases to an average 33 per day, what will be change in (i) and (ii) ? Establish the formula you can use in your calculations.

(b) A bank has one drive-in counter. It is estimated that cars arrive according to Poisson distribution at the rate of 2 every 5 minutes and that there is enough space to accommodate a line of 10 cars. Others arriving cars can wait outside this space, if necessary. It takes 1.5 minutes on an average to serve a customer, but the service time actually varies according to an

exponential distribution. You are required to find :

- (i) the proportion of time the facility remains idle.
- (ii) the expected number of customers waiting but currently not being served at a particular point of time.
- (iii) the expected time a customer spends in the system.
- (iv) the probability that the waiting line will exceed the capacity of the space leading to the drive-in counter.

8. A project has the following time schedule :

Activity	Time in months	Activity	Time in months
1-2	2	4-6	3
1-3	2	5-8	1
1-4	1	6-9	5
2-5	4	7-8	4
3-6	8	8-9	3
3-7	5		

Construct PERT network and compute : (i) Total float for each activity and (ii) Critical path and its duration. Also, find the minimum number of cranes the project must have for its activities 2-5, 3-7 and 8-9 without delaying the project. Then, is there any change required in PERT network ? If so, indicate the name.

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B.Com. (Financial Services) 5th Sem. (Batch 2022-25)

INCOME TAX LAW-I

Paper-III

Time Allowed—3 Hours]

[Maximum Marks—50

Note :—Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. State any four instances where the income of the previous year is assessable in the previous year itself instead of the assessment year.
2. Define the term “Incidence of tax liability”. Explain how the income tax liability of an assessee is determined with reference to his/her residence.

SECTION—B

3. Mr. Raman is a co-owner of a house property along with his brother holding equal share in the property :

Particulars	Rs.
Municipal value of the property	1,60,000
Fair rent	1,50,000
Standard rent under the Rent Control Act	1,70,000
Rent received	15,000 p.m.

The loan for the construction of this property is jointly taken and the interest charged by the bank is Rs. 25,000, out of which Rs. 21,000 has been paid. Interest on the unpaid interest is Rs. 450. To repay this loan, Raman and his brother have taken a fresh loan and interest charged on this loan is Rs. 5,000. The municipal taxes of Rs. 5,100 have been paid by the tenant.

Compute the income from this property chargeable in the hands of Mr. Raman for the A.Y. 2018-19.

4. Mr. Raj Kumar has the following receipts from his employer :

(1) Basic Pay	Rs. 3,000 p.m.
(2) Dearness Allowance (D.A.)	Rs. 600 p.m.
(3) Commission	Rs. 6,000 p.a.

- (4) Motor car for personal use
(expenditure met by the
employer) Rs. 500 p.m.
- (5) House Rent Allowance Rs. 900 pm.

Find out the amount of HRA eligible for exemption to Mr. Raj Kumar assuming that he paid a rent of Rs. 1,000 p.m. for his accommodation at Kanpur. DA forms part of salary for retirement benefits.

SECTION—C

5. What are the various provisions for allowing depreciation under the Income Tax Act, 1961 ? Discuss.
6. Discuss the concept of presumptive taxation under Section 44AD and Section 44AE.

SECTION—D

7. Write short notes on :
- (a) Deduction u/s 80G
- (b) Rebates and Reliefs.
8. Examine the following transactions in the context of Income-tax Act, 1961 :
- (i) Mr. B transferred 500 shares of Reliance Industries Ltd. to M/s. B Co. (P) Ltd. on 10.10.2017 for Rs. 3,00,000 when the market price was

Rs. 5,00,000. The indexed cost of acquisition of shares for Mr. B was computed at Rs. 4,45,000. The transfer was not subjected to securities transaction tax. Determine the income chargeable to tax in the hands of Mr. B and M/s. B Co. (P) Ltd. because of the above said transaction.

- (ii) Mr. A is employed in a company with taxable salary income of Rs. 5,00,000. He received a cash gift of Rs. 1,00,000 from Dev Charitable Trust (registered under section 12AA) in December 2017 for meeting his medical expenses. Is the cash gift so received from the trust chargeable to tax in the hands of Mr. A ? Explain.

Exam. Code : 115305
Subject Code : 101303

B.Com. (Financial Services) 5th Sem. (Batch 2022-25)
E-COMMERCE & E-REPORTING

Paper-IV

Time Allowed— 3 Hours] [Maximum Marks—50

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. What are the goals of e-commerce ? Describe the nature and scope of e-commerce.
2. Explain the functions of e-commerce. Discuss the framework of e-commerce.

SECTION—B

3. Discuss B2B and B2C model. Also explain the advantages and disadvantages of B2B and B2C model.
4. What is meant by e-payment system ? Explain the online payment mechanism.

SECTION—C

5. Discuss the provisions relating to penalties and adjudication under the Information Technology Act, 2000.
6. Explain the components of corporate reporting system. Explain in brief traditional formats of corporate disclosure.

SECTION—D

7. Explain the concept of corporate reporting through web. Discuss the stages of web-based corporate reporting.
8. Discuss the regulations of web-based corporate reporting. Briefly explain the role of outsiders in the distribution of information over the Internet.

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Subject Code : 101304

B.Com. (Financial Services) 5th Sem. (Batch 2022-25)
MARKETING OF FINANCIAL SERVICES
Paper-V

Time Allowed— 3 Hours] [Maximum Marks—50

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Write notes on changing environment of Financial Services and Services Marketing Mix.
2. Explain the Packaging and Branding of Financial Products.

SECTION—B

3. Discuss the Strategy of Pricing of Financial Products and Services.
4. Elaborate the factors influencing the Pricing Decisions.

SECTION—C

5. Discuss the function of Distribution Channel.
6. Elaborate the Promotion Mix and role of Promotion in Marketing.

SECTION—D

7. Explain the following terms in Marketing Financial System :
 - (a) Mutual Fund
 - (b) Credit Card.
8. Discuss about the Factoring Services and Quality Issues in Financial Services.

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B.Com. (Financial Services) 5th Sem. (Batch 2022-25)

FOREIGN TRADE

Paper-VI

Time Allowed— 3 Hours] [Maximum Marks—50

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. What do you understand by Foreign Trade ? Explain the importance of Foreign Trade for Developing Countries.
2. Explain Foreign Trade Policy. What are the salient features of India's current Foreign Trade Policy ?

SECTION—B

3. What is Globalization ? Discuss the importance of Globalization in the World Economy.
4. Define the balance of payments. Explain the components of the balance of payments.

SECTION—C

5. What do you mean by World Trade Organization (WTO) ? Explain the objectives and principles of the WTO.
6. Explain World Bank. Discuss the role and significance of the World Bank in the Global Economy.

SECTION—D

7. What do you mean by Commercial Policy ? Explain the rationale of a protectionist policy in a less developed area.
8. Define the rate of exchange and its types. Explain the mechanism for determining the rate of exchange.

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B.Com. (Financial Services) 5th Sem. (Batch 2022-25)

FINANCIAL MANAGEMENT

Paper-I

Time Allowed—3 Hours]

[Maximum Marks—50

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. What is Financial Management ? What are the objectives of Financial Management ? Discuss profit maximization versus wealth maximization.
2. A company is considering a project cost of Rs. 2,00,000. The project cost has an expected life of 5 years and zero salvage value. The company uses straight line method of depreciation. The company's tax rate is 40%. The estimated earnings before depreciation and before tax from the project are as follows :

Years	Earnings before depreciation and tax (Rs.)	Present value factor @ 10%
1	70,000	.909
2	80,000	.826
3	1,20,000	.751
4	90,000	.683
5	60,000	.621

Calculate NPV @ 10%.

SECTION—B

3. Define leverage. Explain the effect of leverage on EPS with the help of a suitable example.
4. Explain theories of capital structure that suggest that capital structure affects weighted average cost of capital.

SECTION—C

5. Write notes on :
 - (a) Types of capitalization
 - (b) Short term sources of finance.
6. How is cost of various sources of finance calculated ? Explain.

SECTION—D

7. Explain Modigliani and Miller approach of dividend decisions. Give its assumptions. What are its limitations ?

8. The following information has been extracted from the records of a company :

Product Cost Sheet	Amount (Rs. Per unit)
Raw material	45
Direct labor	20
Overheads	40
Total cost	105
Profit	15
Selling Price	120

- Raw materials are in stock on an average of two months.
- The materials are in process on an average for 4 weeks. The degree of completion is 50% with regards to each element of cost.
- Finished goods stock on an average is for one month.
- Time lag in payment of wages and overheads is 1½ weeks.
- Time lag in receipt of proceeds from debtors is 2 months.
- Credits allowed by suppliers is one month.
- 20% of output is sold against cash.
- The company expects to keep a cash balance of Rs. 1,00,000.
- The company proposes to manufacture 1,44,000 units in the year.

You are required to prepare a statement showing working capital requirement of the company.