Hall Ticket Number :										

R-19

Code: 9P1A22

M.B.A. II Semester Supplementary Examinations February 2021

Financial Management

Max. Marks: 60 Time: 3 Hours

Answer *all five* units by choosing one question from each unit (5 x 12 = 60 Marks)

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		Marks	CO	Blooms Level
	UNIT–I			
1.	What are the functions of financial management? Explain them in brief	12M	CO1	L2
	OR			
2.	'The profit maximization is not an operationally feasible criterion.' Do you agree? Illustrate your answer	12M	CO1	L3
	UNIT–II			
3.	Explain the various steps in the process of capital budgeting.	12M	CO2	L2
	OR			
4.	XYZ Ltd is looking to take up the project. It has the following information:			

Particulars	Cash flows		
	C1	C2	C3
Cash receipts	20000	16000	14000
Cash payments	10000	8000	7000
Gross profit	10000	8000	7000
Depreciation	4000	4000	4000
Net profit	6000	4000	3000

The initial investment of the project is estimated as Rs.12000.

a) Calculate the project's payback period.

b) Of it is found that the initial investment will be Rs. 9,000 and cash expenses will be more by Rs. 1,000 each year, what will be the project's accounting rate of return. 12M CO2 L5

UNIT–III

5. What are the concepts of working capital? Discuss the factors that determine the working capital requirements of a firm. 12M CO3 L2

OR

6. How would you monitor receivables? Explain the pros and cons of various methods. 12M CO3 L3

UNIT–IV

7. Explain the assumptions and implications of the net income and net operating income approaches. 12M CO4 L2

OR

8. The capital structure of ABC Ltd., is as follows:

   8% Debentures = Rs. 1500000

   6% Preference shares = Rs. 500000

   100000 Equity share capital of Rs.20 each = 2000000

   The expected dividend on equity share capital is Rs.2 per share which will grow at 7% forever. Corporate tax rate is assumed to be 50%.

   You are required to compute the weighted average cost of capital of ABC Ltd., 12M CO4 L4

UNIT–V

9. Does dividend policy affect the value of the firm under Gordon's model? Explain its assumptions 12M CO5 L3

OR

10. Write brief notes on the following

    a) Types of dividends 6M CO5 L2

    b) Bird-in-the-hand argument 6M CO5 L3

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Hall Ticket Number :										

R-19

Code: 9P1A27

M.B.A. II Semester Supplementary Examinations February 2021

Operations Research

Max. Marks: 60 Time: 3 Hours

Answer *all five* units by choosing one question from each unit (5 x 12 = 60 Marks)

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			Marks	CO	Blooms Level

UNIT–I

1. a) Define OR and discuss its scope. 6M

   b) Solve the following L.P.P by using graphical method.

$$\text{Maximize } Z = 4x_1 + 3x_2$$
$$\text{subject to } 2x_1 + x_2 \le 1,000$$
$$x_1 + x_2 \le 800$$
$$x_1 \le 400 \text{ and } x_2 \le 700$$
$$x_1 \ge 0 \text{ and } x_2 \ge 0$$

6M

OR

2. a) Describe the types of OR models. 4M

   b) Using Penalty method solve the following LPP:

$$\text{Maximize } Z = 2x_1 + 3x_2$$
$$\text{subject to } x_1 + 2x_2 \le 4$$
$$x_1 + x_2 = 3$$
$$x_1, x_2 \ge 0$$

8M

UNIT–II

3. a) Illustrate MODI method to determine the optimum solution. 4M

   b) Find the starting solution in the following transportation problem by Vogel's Approximation Method. Also obtain the optimum solution :

					Supply
	D1	D2	D3	D4	
S1	**3**	**7**	**6**	**4**	5
S2	**2**	**4**	**3**	**2**	2
S3	**4**	**3**	**8**	**5**	3
Demand	3	3	2	2	

8M

OR

4. a) Explain the Mathematical model of transportation Problem. 4M

   b) Solve the transportation problem to maximize the profit

	A	B	C	D	
P	15	51	42	33	23
Q	80	42	26	81	44
R	90	40	66	60	33
	23	31	16	30	

8M

UNIT–III

5. A department head has four subordinates, and four tasks to be performed. The subordinates differ in efficiency, and the tasks differ in their intrinsic difficulty. His estimate, of the time each man would take to perform each task, is given in the matrix below:

	Men			
Tasks	E	F	G	H
A	**18**	**26**	**17**	**11**
B	**13**	**28**	**14**	**26**
C	**38**	**19**	**18**	**15**
D	19	26	24	10

How should the tasks be allocated, one to a man so as to minimize the total man-hours? 6M

b) Maximize the total sales of profit for the problem of assigning four sales persons to four different sales regions as shown in the following table

	R_1	R_2	R_3	R_4
s_1	**10**	**22**	**12**	**14**
s_2	**16**	**18**	**22**	**10**
s_3	**24**	**20**	**12**	**18**
s_4	**16**	**14**	**24**	**20**

6M

OR

6. a) Differentiate between Transportation problem and Assignment problem 6M

b) There are five jobs to be assigned one each to five machines. Find the minimum cost of the assignment.

Machine

job	**1**	**2**	**3**	**4**	5
A	11	17	8	16	20
B	9	7	12	6	15
C	13	16	15	12	16
D	21	24	17	28	20
E	14	10	12	11	15

6M

UNIT–I

7. a) Explain (i) Pure strategy (ii) Mixed strategy (iii)Dominance principle 6M

b) Consider the following payoff matrix with respect to player A and solve it optimally.

		Player B	
		B_1	B_2
Player A	A_1	**6**	**9**
	A_2	**8**	**4**

6M

OR

8. a) Solve the following 3×5 game using dominance property.

		Player B				
		B_1	B_2	B_3	B_4	B_5
	A_1	**2**	**5**	**10**	**7**	**2 2**
Player A	A_2	**3**	**3**	**6**	**6**	**4 4**
	A_3	**4**	**4**	**8**	**12**	**1**

6M

b) 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 distribution is also exponential with an average 36 minutes. Calculate the following:

I. the mean queue size(line length), and
II. the probability that the queue size exceeds 10.
III. If the input of trains increases to an average 33 per day, what will be the change in (i) and (ii)? 6M

UNIT–I

9. The following table lists the jobs of a networks with their estimates.

Jobs (i-j)	Duration (days)		
	Optimistic	Most likely	Pessimistic
1-2	3	6	15
1-6	2	5	14
2-3	6	12	30
2-4	2	5	8
3-5	5	11	17
4-5	3	6	15
6-7	3	9	27
5-8	1	4	7
7-8	4	19	28

i) Draw the project network,
ii) Calculate the length and variance of the critical path, and
iii) What is the approximate probability that the jobs on the critical path will be completed in 41 days? 12M

OR

10. Consider the following table summarizing the details of a project involving 10 activities.

Activity	**Immediate Predecessors**	**Duration (weeks)**
A	-	15
B	-	15
C	A	3
D	A	5
E	B,C	8
F	B,C	12
G	E	1
H	E	14
I	D,G	3
J	F,H,I	14

i) Construct a CPM network
ii) Determine the critical path and project completion time.
iii) Compute the total floats and free floats for non-critical activities. 12M

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