2M5101

Roll No.

Total No of Pages: 3

2M5101

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-201A Human Resource Management

Time: 3 Hours

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates:

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
 - (iii) All questions carry equal marks.

	-	-
1		п

2. NIL

SECTION - A

- Q.1 (a) Explain the line and staff functions of HRM with suitable examples.
 - (b) Trace the evolution of HR functions and write a note on its relevance in the

organizations in the modern context.

[7]

Q.2 Write short notes an (Any two):

[7+7=14]

- (a) Job Analysis
- (b) Organizational Structure
- (c) 360° Appraisal System

Q.3 (a) Write a short note on the process of selection and selection techniques. [8]

(b) Explain sources of recruitment. [6]

Q.4 Write a short notes on: [3½×4=14]

(a) In basket training

(b) Sensitivity training

(c) T- group training

(d) Evaluation of training program

Q.5 Discuss the emerging statutory aspects of compensations and benefits.

Q.6 Compare and contrast any two traditional and modern performance evaluation techniques. If you were to choose among the two to evaluate employees of your organisation, which would it be? Why.

[14]

SECTION - B

Q.7 Case Study-

Ajay, a machine operator, worked as a mechanist for Vijay, the supervisor. Vijay told Ajay to pick up some trash that had fallen from Ajay's work area, and Ajay replied, "I won't do the Jaintor's work." Vijay replied, "When you drop it, you pick it up." Ajay became angry and abusive, calling Vijay a number of names in a loud voice and refusing to pick up the trash. All employees in the department heard Ajay's comments. Vijay had been trying for two weeks to get his employees to pick up trash in order to have cleaner workplace and prevent accidents. He talked to all employees in a weekly

departmental meeting and to each employee individually atleast once. He stated that he was following the instructions of the general manger. The only objection came from Ajay.

Ajay has been with the company for five years, and in this department for six months.

Vijay had spoken to him twice about excessive alcoholism, but otherwise his record was good. He was known to have quick temper.

This outburst by Ajay hurt Vijay badly. Vijay told Ajay to come to the office and suspend him for one day for insubordination and abusive language to a supervisor. The decision was within company policy, and similar behaviors had been punished in other departments. After Ajay left Vijay's office, Vijay phoned the HR manager, reported what he had done, and said that he was sending a copy of the suspension order for Ajay's file.

Questions:-

- (a) Do you think that there should be any punishment for such kind of indisciplined behavior? Support your views accordingly. [4]
- (b) How would you rate Ajay's behavior? What method of appraisal would you use?
- (c) Do you think that there is any alternative punishment for Ajay's behavior? Give your views in support of your answer. [4]

2M5102

Roll No.

Total No of Pages: 4

2M5102

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-202A Cost Accounting For Management

Time: 3 Hours

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates:

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
- (iii) All questions carry equal marks.

1. NIL

2. NIL

SECTION - A

- Q.1 "Report is not a statement of complaint but a statement of information for managerial decisions". Comment & narrate the characteristics of good reporting. [7+7=14]
- Q.2 Explain the term Management Audit and Cost Audit? Differentiate between Cost

 Audit and Management Audit.

 [4+10=14]
- Q.3 Define Cost Management. Briefly discuss the various tools of Cost Management. [4+10=14]
- Q.4 ABC Ltd. produces an article by mixing two raw materials. The following standards have been set up for raw materials:

 [14]

[2M5102]

Page 1 of 4

[2920]

Material	Standard Mix	Standard price per kg.
X	40%	4.00
Y	60%	3.00

The standard loss in processing is 15% of input. During Jan, 2018 the company produced 3,400 kg. of finished output.

Information regarding purchases and stock for January, 2018 was as under:

Material	Stock on 1.1.2018	Stock on 31.1.2018	Purchases in Jan., 2018
X	70kg.	20kg.	1600kg. at ₹7,200
Y	80kg.	100kg.	2400kg. at ₹ 6,000

Find different material variances assuming that opening stock is always valued at price equal to standard price.

Q.5 A Company has a maximum capacity of producing 4,20,000 units per year. Normal capacity is regarded as 3,60,000 units per year. Variable manufacturing costs are ₹22 per unit and fixed manufacturing costs are ₹10,80,000. Variable selling costs are ₹6 per unit, while fixed selling costs are ₹5,04,000 per year. Selling price per unit is ₹40

What is the Break Even Point expressed in units?

- (a) The volume of sales in rupees to earn a target net income of ₹ 1,20,000 per year?
- (b) How many units must be sold to earn a net income of 10% on sales?

[2M5102]

Page 2 of 4

[2920]

- (c) What should be the selling price per unit to bring down the BEP to 1,60,000 units?
- (d) Margin of Safety at a profit of ₹ 90000.
- Q.6 Prepare an estimated Cost Sheet on the following data and consider the price to be quoted for 25000 pieces of export order. [14]

Raw Material: 10000 kgs @ 6.95 ₹ per kg.

Direct Labour: 15000 hours normal @ ₹2.00 per hour, 25% overtime at double the normal rate.

Factory Overheads: Normally recovered at 80% of direct wages.

Selling and distribution cost: Normally recovered at 60% of direct wages.

Additional fixed capital investment to be made: ₹50,000

Normal Net Return on Capital Employed Expected: 25%

Increase in Working Capital: 20% of the sales value

SECTION - B

Q.7 Case Study -

[14]

Pragati Ltd. a newly started company wishes to prepare cash budget from January, 2017 to June, 2017. Prepare a cash budget for the first six months from the following estimated revenue and expenses:

1,00,1 101 9	dawn, the Be	unit of the	alterd a	Overheads	e) What should
Months	Total	Materials (₹)	Wages	Production	Selling and
	Sales (₹)		(₹)	(₹)	Distribution (₹)
January	2,00,000	2,00,000	40,000	32,000	8,000
February	2,20,000	1,40,000	44,000	33,000	9,000
March	2,80,000	1,40,000	46,000	34,000	9,000
April	3,60,000	2,20,000	46,000	35,000	10,000
May	3,00,000	2,00,000	40,000	32,000	9,000
June	4,00,000	2,50,000	50,000	36,000	12,000

Cash balance on 1st January was ₹1,00,000. A new machinery is to be installed at ₹2,00,000 on credit, to be repaid by two equal instalments in March and April.

Sales Commission @ 5% on total sales is to be paid within a month following actual sales. ₹1,00,000 being the amount of second call may be received in the month of March. Share premium amounting to ₹2,000 is also obtainable with the second call.

Delay in payment of wages ½ month

Period of credit allowed by suppliers 2 months

Delay in payment of overheads 1 month

Period of credit allowed to customers 1 month

Assume cash sales to be 50% of total sales

2M5103

Roll No.

Total No of Pages: 4

2M5103

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-203A Financial Management

Time: 3 Hours

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates:

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
- (iii) All questions carry equal marks.

1	NIL		
	1 1111		

2. NIL

SECTION - A

- Q.1 "The profit maximisation is not an operationally feasible criterion." Do you agree?

 Illustrate your views.

 [14]
- Q.2 (a) Distinguish between Nominal rate of interest and Effective rate of interest.
 - (b) What are the steps involved in a venture capital investment process? Explain them briefly. [4+10=14]
- Q.3 A plastic manufacturer has under consideration the proposal of production of high quality plastic glasses. The necessary equipment to manufacture the glasses would cost
 ₹1 lakh and would last 5 years. The tax relevant rate of depreciation is 25 percent on

[2M5103]

Page 1 of 4

[3000]

written down value. There is no other asset in this block. The expected salvage value is ₹ 10,000. The glasses can be sold at ₹ 4 each. Regardless of the level of production, the manufacturer will incur cash cost of ₹ 25,000 each year if the project is undertaken. The overhead costs allocated to this new line would be ₹ 5,000. The variable costs are estimated at ₹ 2 per glass. The manufacturer estimates it will sell about 75,000 glasses per year, the tax rate is 35 percent. Should the proposed equipment be purchased? Assume 20 percent cost of capital and additional working capital requirement, ₹ 50,000.

- Q.4 A company has to acquire a new car for the use of its Chief Executive Officer for 5 years. It can be acquired in either of the two ways. It can be purchased outright for ₹3,00,000 with a bank loan with 16% interest payable annually, and the principal repayable in full at the end of the 5 years. The car will have a resale value of ₹1,00,000. Alternatively, the car could be leased for 5 years, the annual rental being Rs. 90,000 payable at the beginning of each year. The company pays 50 percent tax on its income and uses the straight line depreciation method. [14]
 - (a) Using the present value method, evaluate the alternative proposals.
 - (b) Evaluate the above proposals from the point of view of the loss or, assuming:
 - (i) Required rate of 12%.
 - (ii) Straight line method of depreciation, and
 - (iii) Salvage value of Rs 1,00,000 after 5 years.

- Q.5 (a) Describe in brief the various factors which are taken into account in determining the working capital needs of a firm. [8+6=14]
 - (b) What are the differences between forward and futures contract.
- Q.6 The following information is provided related to the acquiring firm A Ltd. and the target firm T Ltd. [14]

Particulars	Firm A	Firm T
EAT (₹ Lakhs)	1,000	200
Number of shares outstanding (in lakhs)	100	50
EPS (₹)	10	4
P/E ratio (Times)	10	5
MPS (₹)	100	20

- (a) What is the swap ratio based on current market prices?
- (b) What is the EPS of A Ltd after acquisition?
- (c) What is the expected market price per share (MPS) of A Ltd. after acquisition, assuming P/E ratio of firm A remains unchanged.
- (d) Determine the market value of the merged firm
- (e) Calculate gain/loss for shareholders of the two independent companies, after acquisition.

SECTION - B

Case Study-

- Q.7 The following facts relates to the Exide Industries Ltd. (EIL):
 - (a) Annual credit turnover in the current financial year, ₹ 1200 lakhs;
 - (b) Average collection period, 75 days;
 - (c) Variable cost ratio, 0.75
 - (d) Cost of funds 0.21 per annum
 - (e) Annual credit and Collection expenditure, Rs. 20 Lakhs of which three fourth is avoidable;
 - (f) Bad debts 1 percent of sales.

The Foremost Factors Ltd. offers a factoring deal to the EIL. It proposes to charge a commission as percentage of the value of book debts of 2 percent for recourse factoring and 3.5 percent for non-recourse factoring. In addition, it would charge 22 percent per annum as discount/interest for prepayments (advance against uncollected and not due receivables) to the extent of 80 percent of the value of receivables. The guaranteed payment date/collection period is 60 days.

What advice would you give to EIL to continue with the in-house management of receivables or accept the factoring arrangement? [14]

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Roll No.

Total No of Pages: 4

2M5104

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-204A Marketing Management

Time: 3 Hours

2M5104

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates:

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
- (iii) All questions carry equal marks.

4	TA T	TT

2. NIL

SECTION - A

- Q.1 'Modern Marketing concept is applicable to all business organisations irrespective of their size or, the nature of goods or, services marketed'. Give reasons for your answer.
- Q.2 What is meant by marketing mix in present day business environment? "Pricing and Promotion are integral elements of marketing mix of a firm.", comment [4+10=14]
- Q.3 "Strategic planning develops strategic fit between Organization's goals and capabilities." Comment upon this statement. Explain BCG matrix with suitable example. [6+8=14]

[2M5104]

Page 1 of 4

[2760]

- Q.4 Examine the salient factors that ought to be taken into account while introducing a new product, Illustrate your answer. [14]
- Q.5 Prepare a list of five products at each of the following stages of the product life cycle in the Indian market-
 - (a) Introductory stage
 - (b) Growth stage
 - (c) Maturity stage
 - (d) Decline stage
- Q.6 Write short notes on-

[5+4+5=14]

- (a) Retail Distribution system in India
- (b) Marketing through Internet
- (c) Sales promotion

SECTION - B

Q.7 Case Study-

[7+7=14]

Advertising Campaign-

The times of India is the largest circulated national daily in India. It is the flagship product of the Bennett & Coleman Co. They launched an initiative called Teach India in which people who were literate had to spend two hours of their time once a week to teach people who were illiterate. Instead of asking people to teach directly, their emphasis was on let us learn to teach which removed some of the apprehensions

[2M5104]

Page 2 of 4

[2760]

people had about teaching. They targeted housewives, students, bankers, actors, anybody who could teach.

The Campaign-

They involved Aamir Khan a superstar of Bollywood (Hindi films) whose movie Taare Zamin Par (stars on the ground) was a huge success and he had played the role of a teacher who teaches a dyslexic child. Aamir Khan appearing in their television advertisements, requesting people to be a part of the Teach India Campaign was a booster to the strategy. The campaign material consisted of 28 direct response advertisements in print, 3 TV commercials with multiple edits, 10 outdoor creatives, bookmarks, car stickers, elevator stickers.

The campaign was supported by print (The times of India-The largest circulated English national daily in India), television, internet, outdoor, on ground events and PR. There was a website dedicated to the cause, "www.teach.timesofindia.com", which acted as a resource. They had a media mix of everything that was required to make a campaign successful. The emotive power of T.V, the persuasiveness of print, the drama-on ground activation, the one-to one power of the web, the urgency of direct response and the appeal of the personal example.

Results-

The internal target was 10,000 but they had to stop their process of recruiting volunteers at 100,000 due to the paucity of resources. A partnership with NGO's has been developed and schools have provided space to conduct the programme, corporate

supported with the resources. Another highlights of the initiative was that it trained volunteers, helping them to overcome their anxiety apprehensions. Aamir Khan still spends two hours a week teaching for the cause. The Campaign success was when over two million Indian illiterate kids became literate and raised the slogan, "Jai Ho". The initiative still continues but no more campaigning is done for the cause.

Teach India initiative of The Times of India is an example of how social causes can also be achieved with the help of multimedia. Usage of multimedia for a focused period reinforces the message in the minds of the public from various sources. In this case, people were willing to teach but they did not know how to do, whom to approach etc. The Initiative by 'Times of India' also added a trust value in the minds of the public & they were willing to work for the cause.

Questions-

- (a) Can the readership of Times of India increase due to such initiative?
- (b) Can such types of activities add to the image building of the Organisation, how and at what cost?

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[2760]

[2M5104]

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Total No of Pages: 3

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2M5105

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-205A Operations & Supply Management

Time: 3 Hours

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates;

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
- (iii) All questions carry equal marks.

	NIL	
1000	NII	

2. NIL

SECTION - A

Q.1 (a) "Supply chain Management is considered as a strategy for differentiation".

Comment on this statement highlighting the competitive priorities in SCM. [10]

(b) Differentiate between Job Production system & Mass production system, using relevant examples. [4]

Q.2 (a) "Plant layout involves allocation of space & arrangement of equipment minimizing the overall cost". Explain this statement highlighting the factors relevant in the choice of layout & the types of it.

(b) Explain capacity planning & functions of it.

[4]

[2M5105]

Page 1 of 3

[2840]

Q.	write Short Notes	on:-			[/+/=14	1
E	(a) Acceptance S	amplii	ng and an			
	(b) TQM			e same	dia.	
Q.4	(a) What is Sale	s & C	Operations planning? I	How SOP coordinate	es manufacturing	
	logistics, serv	rice &	marketing plans?		[8	1.
	(b) Explain Lean	Produ	ction System.	2011/25/22	[6]
0/5	Following informa	tion in	an inventory problem	is available:	[14]
	Annual demand	=	2400 units			
	Unit price	=	₹2.40			
进	Ordering cost	=	₹4.00	THE RESERVE		27
	Storage cost	=	₹2% per year			
	Interest rate	=	10% per annum			
	Lead time ORE	E EC	15 days TION 25 days 55 eq er level & total annua	98299595. 5834 1 inventory cost. Ho	w much does the	e
			ne unit price is charged		SERVED THE	
Q.6	Write short notes of	n:		[31/2	+3½+3½+3½=14	1
	(a) Scheduling					
	(b) MRP		•			i
	(c) Sourcing Sys	tem De	esign Matrix			
	(d) Shingo System	m				

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[2M5105]

[2840]

QA Case Study-

[14]

A time study was conducted for a worker in shipping.

The observations are as under (in minutes)

	Element	Cycle			Performance Rating	
	****	1	2	3	4	
(i)	Obtain the case	.15	.25	.20	.17	90%
(ii)	Place 3 dozen	1.56	*	1.80	1.75	105%
	bottles in case		H			
(iii)	Set case aside	.20	.10	.10	.15	95%
(iv)	Smoking a cigarette		50			

^{*}Dropped bottles

346.5

MORE EDUCATION 9829959536. 879
Find the normal time for the task. Also compute the standard time, if the factory's allowance factor is ten percent.

-

6

[2840]

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Total No of Pages: 3

2M5106

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-206A Research Methods in Management

Time: 3 Hours

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates:

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
- (iii) All questions carry equal marks.

I. NIL

2. NIL

SECTION - A

Q.1 (a) Discuss the various methods of research.

[7]

Briefly describe the different steps involved in research process.

[7]

What are the important concepts relating to research design? Explain.

[7]

(b) What do you mean by Sample? Discuss the various types of Sampling techniques.

Q3 Write short notes on the following:

[5+5+4=14]

- (a) Primary and Secondary data.
- Questionnaire and Schedule.
- Bibliography,

[2M5106]

Page 1 of 3

[2900]

- Q.4 What is testing of hypothesis? Explain how it is useful for illustrating a research problem with examples. [4+10=14]
- Q.5 (a) What is Chi-square test? Explain the significance in statistical analysis of any research problem. [7]
 - (b) Suppose that the thickness of a part used in a semiconductor is its critical dimension and that measurements of the thickness of a random sample of 18 such parts have the variance s²=0.68, where the measurements are in thousandths of an inch. The process is considered to be under control if the variation of the thickness is given by a variance not greater that 0.36. Assuming that the measurements constitute a random sample from a normal population, test the null –hypothesis σ²=0.36 against the alternative σ²>0.36 at the α=.05 significance

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Q6 Draft the layout of Research Report.

[14]

[7]

SECTION - B

Off Case Study-

[14]

A common admission test was conducted in four colleges. 5 students were selected at random from each college and the marks scored by them are given below. Make an analysis of variance.

[2900]

S	Sample X ₁	Sample X ₂	Sample X ₃	Sample X ₄		
	15	20	11	14		
	18	24	15	16		
	20	25	17	25	018	
	24	18	19	1		
	13	13	18	22	15,03,05 15,19,835	
					1,631	

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[2M5106]

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[2900]

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Roll No. Total No of Pages: 2 2M5107 M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-207A New Enterprise and Innovation Management (NE & IM) Time: 3 Hours **Maximum Marks: 70** Min. Passing Marks: 28 Instructions to Candidates: (i) The question paper is divided in two sections. (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory. (iii) All questions carry equal marks. 1. NIL 2. NIL **SECTION - A** Describe Entrepreneurial compotencies in brief. [7] Discuss International Entrepreneurial opportunities and give their significance for a new entrepreneur. [7] Explain 'Creative Problem Solving' techniques of generating idea with suitable example. [7] Discuss key marketing issues elated to a new venture. [7]

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- Q.3 Give details of any two of these sources of finance available for a new enterprise, with their advantages and disadvantages [7+7=14]
 - (a) Angel Investor
 - (b) Venture Capital.
 - (c) Equity Finance
- Q.4 What do you understand by 'Feasibility Study'? Explain Operational and Financial feasibility analysis for any new venture of your choice. [14]
- Q.5 Discuss any two institutions in India which are supporting a Start-up. Explain the incentives and types of support, provided by these institutions. [14]
- Q.6 Write short notes on (any two) -

[7+7=14]

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- (a) Statutory obligations in starting a New Enterprise
- (b) Organizational Set-up and Innovation.
- (c) Incubators and Accelerators.

SECTION - B

Case Study-

Prepare a detailed Marketing and Organizational plan for starting a 'Children Party Planning' services.

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Roll No.

Total No of Pages: 4

2M5108

M.B.A. II-Sem (Main / Back) Exam., May - 2018 M-208A Operation Research

Time: 3 Hours

Maximum Marks: 70

Min. Passing Marks: 28

Instructions to Candidates:

- (i) The question paper is divided in two sections.
- (ii) There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.
- (iii) All questions carry equal marks.

1. NIL

2. NIL

SECTION - A

Q.1 A certain company needs five repair jobs which have to be assigned to five machines. The estimated time in hours that each machine requires to complete the repair jobs is given in the following table:
[14]

Job Machine	J ₁	J ₂	J ₃	J_4	J_5
M ₁	7 2	5	9 61	8	11
M_2	9	12	(7)	11	10
M_3	8	5	(4)	6	9
M_4	7	(3) 0	6	9	5
M_5	00	6	7	5 *	11

Assuming that each machine can be assigned to only one job, determine optimal assignment.

[2M5108]

Page 1 of 4

[3100]

Q.2	2.2 Find the dual of the following problem and then obtain its solution:						
	s) isolay to curtous!		Holl Ho.				
	$Minimize Z = 20x_1 + 10x_2$						
	vam. May - 2018	m (Main / Bark) E		-			

Subject to $x_1 + x_2 \ge 10$

$$3x_1 + 2x_2 \ge 24$$

$$x_1, x_2 \ge 0$$

Min. Passing Markst 28

Q.3 A firm manufactures two products X and Y by using three types of raw materials A, B and C. The details have been given in the table given as follows: [14]

Raw Material	. Pro	oduct	No. of units available		
	X	Y	corruse .		
A plant	5 units	2 units	170		
В	4 units	5 units	170		
C	3 units	8 units	180		

If per unit profits from products X and Y are ₹ 5 and ₹ 3 respectively. Find the optimal product mix.

- Q.4 (a) Differentiate between Transportation and Assignment methods. [7]
 - (b) Consider the following unbalanced transportation problem. [7]

То	1	2	3	Supply
From	5	1	7	10
В.	6	4	6	80
С	.3	2	5	15
Demand	75	20	50	105

Since there is not enough supply, some of the demands of the destinations may not be satisfied. The penalty for unsatisfied demand at destinations 1, 2 and 3 is $\mathbf{\xi}$ 5, 3 and 2 respectively. Find the optimum solution.

Q.5 (a) Solve the following game:

[7]

$$\begin{pmatrix}
2 & 4 & 11 \\
7 & 4 & 2
\end{pmatrix}$$

(b) Explain the concept of dominance in game theory.

[7]

- Q.6 (a) What is the difference between decision making under uncertainty and risk? [7]
 - (b) A boy purchases a news magazine for ₹3 and sells it for ₹5 per magazine. He can return the unsold stock for ₹1.00 per magazine. Past records of sales are as follows:
 [7]

Sale of Magazine 20, 21, 22, 23, 24, 25, 26

Probability 0.03 0.05 0.17 0.23 0.30 0.18 0.04

Find the optimal ordering quantity.

SECTION - B

Q.7 Case Study -

[14]

A project consists of the following activities -

Activity	1-2	1-3	1-4	2-5	2-6	3-6	4-7	5-7	6-7
t _o	3	2	6	2	5	3	3	1	2
t _p	15	14	30	8	17	15	27	7	8
t _m	6	5	12	5	11	6	9	4	5

- (a) Draw the network.
- (b) Determine the expected time and variance for each activity.
- (c) Find the critical path.
- (d) What is the probability that project will be completed by 27 days.

[2M5108]