

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 4107

Roll No.....

Unique Paper Code : 101331

Name of the Paper : (301) Marketing Management

Name of the Course : Bachelor of Business Studies (BBS), 2015

Semester : III

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

2. Attempt **all** questions.

1. (a) What are different marketing management orientations ? Explain each of them with appropriate examples. (7)

(b) Compare and contrast customer needs, wants, and demands. Describe the need-versus-the-demand for **any two** the following products : (8)

(i) Mountain Dew

(ii) Nike shoes

(iii) iPod

2. (a) Coca-Cola has sustained in the maturity stage of the product life cycle for many years. Identify ways that Coca-Cola can continue to evolve to meet changing consumer needs and wants. (7)

(b) Amul is planning to introduce a frozen yoghurt based product in Delhi during the current festival period. The product is a new option for those who are fond of sweets. What promotional strategy would you recommend to Amul and Why ? (8)

P.T.O.

3. (a) Describe the major sets of variables that might be used in segmenting consumer markets. (7)
- (b) Giving reasons suggest which segmenting variable(s) do you think can be appropriate for **any two** of the following :
- (i) A new Pizza Chain (Dine- in and home delivery)
 - (ii) Dishwashers for domestic use
 - (iii) A new brand of Protein shake (Nutritional supplement) (8)
4. (a) What are the different levels in a distribution channel ? Explain each with an example from Indian context. (7)
- (b) Waterless shampoo is targeted at girls unable to wash their hair daily, who exercise in the middle of the day, go camping, travel, or have long, thick hair that makes it hard to reach the roots while shampooing. Waterless shampoo is an aerosol spray that can be used to remove oil from problem areas in your hair. You need to spray it on the roots of your hair and only in areas that are seen, such as bangs or the top layer around your head. This is not a substitute for traditional water and shampoo. It is simply a “patch” product that can help get you through until you are able to wash your hair again.
- Discuss an appropriate strategy to distribute this shampoo in urban metros in India. (8)
5. Write short notes on **any two** of the following :
- (i) New Product Development Process
 - (ii) Promotional Pricing
 - (iii) Unique characteristics of the Service Industry
 - (iv) Consumerism (7.5×2=15)

[This question paper contains 6 printed pages.]

Sr. No. of Question Paper : 4108

Roll No.....

Unique Paper Code : 101332

Name of the Paper : Quantitative Techniques for Management

Name of the Course : Bachelor of Business Studies (BBS); 2015

Semester : III

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt 5 questions in all.
3. Question No. 1 is compulsory.
4. All questions carry 15 marks.
5. Answer all parts of a question together.
6. Show your workings clearly.
7. Attempt any **four** questions from Q.2 to Q.6.

1. Krishna Furnishings, a furniture manufacturer, produces and sells desks, chairs and bookshelves. They have no difficulty in selling their products, however limited availability of machine time, labour and floor space restrict production. Details about the usage of resources, supplies and profits on items are given below :

Resource/ Profit	Processing Time (in hours)			Supply
	Desk	Chairs	Bookshelf	
Machine hrs/unit	8	4	5	1000 hours
Labour hrs/unit	5	3	3	650 hours
Floor space sq.ft/unit	9	6	9	1260 sq.ft
Contribution Rs./unit	270	144	225	

P.T.O.

- (i) Formulate the above problem as an LPP. (2)
- (ii) Solve the LPP using the Simplex method. (8)
- (iii) Find the optimal product-mix and the total maximum profit contribution. (2)
- (iv) Determine whether the current optimal solution would remain optimum or not, if the machine hours are reduced from current level of 1000 hrs to 900 hrs. (2)
- (v) The Personnel Manager of Krishna furnishing claims that by recruiting extra labour force, the profits can be increased. Is the claim valid? Give reasons. (1)
2. (a) A Company has received a contract to supply gravel for three new construction projects located in towns A, B and C. Construction engineers have estimated the required amounts of gravel which will be needed at these construction projects.

Project location	Weekly requirement (Truck loads)
A	144
B	204
C	82

The company has three gravel pits located in towns, W, X and Y respectively. The gravel required by the construction projects can be supplied by these three plants. The amount of gravel which can be supplied by each plant is as follows :

Plant	W	X	Y
Amount available (Truck loads)	152	164	54

The company has computed the delivery cost from each Plant to each Project Site. These costs are shown in the following table :

Cost per Truck load (in Rs. '000)

		A	B	C
Plant	W	8	16	16
	X	32	48	32
	Y	16	32	48

Schedule the transfer from each Plant to each Project site, in such a manner so as to minimize the total transportation cost within the constraints imposed by Plant capacities and Project requirements. What is the opportunity cost of transporting one unit from plant Y to project site C? (8)

(b) Write the dual to the following primal LPP :

$$\text{Minimise : } Z = 2x_1 + 3x_2 + 4x_3$$

$$\text{Subject to : } x_1 + 4x_2 + 6x_3 \leq 5$$

$$2x_1 + 3x_2 + 5x_3 \geq 2$$

$$3x_1 + x_2 + 7x_3 = 3$$

$$x_1, x_2 \geq 0, \text{ and } x_3 \text{ unrestricted in sign} \quad (7)$$

3. (a) The following table gives the activities in Construction Project and other relevant information :

Activity	Preceding Activity	Time (in months)		Direct Cost (in Rs. '000)	
		Normal	Crash	Normal	Crash
A	—	4	3	60	90
B	—	6	4	150	250
C	—	2	1	38	60
D	A	5	3	150	250
E	C	2	2	100	100
F	A	7	5	115	175
G	D,B,E	4	2	100	240

The indirect costs vary as follows :

Number of Months :	15	14	13	12	11	10	9	8	7	6
Cost (in Rs '000) :	600	500	400	250	175	100	75	50	35	25

- (i) Draw the network and identify the critical path. (2)
- (ii) What is the normal project duration and associated costs ? (2)
- (iii) ~~Crash the relevant activities systematically and determine the project duration which will result in minimum total cost. (6)~~
- (b) What is an activity float ? What are the different types of float in a network ? (5)
4. (a) The owner of a small machine shop has four machinists available to assign to jobs for the day. Five jobs are offered with expected profit for each machinist on each job as follows :

		Profits (in Rs.)				
		A	B	C	D	E
1	62	78	50	101	82	
2	71	84	61	73	59	
3	87	92	111	71	81	
4	48	64	87	77	80	

Find the assignment of machinists to jobs that will result in a maximum profit. Which job should be declined ? (8)

- (b) A grocer stocks his store with three types of detergents A, B and C. When brand A is sold out, the probability that he stocks up brand A again is 0.7. When he sells out Brand B, the probability that he will stock up Brand B again is 0.8. Finally, when he sells out Brand C the probability that he

will stock up Brand C again is 0.6. In case the grocer switches to another brand of detergent, he does so with equal probability for the remaining two brands. Find the transition matrix. In the long run how does he stock up the detergent? (7)

5. (a) Technico Ltd has installed a Machine costing for Rs. 4 lakhs and is in the process of deciding an appropriate number of a certain spare part required for repairs. The spare part costs Rs. 4,000 each but is available only if they are ordered now. In case the Machine fails and no spares are available, the cost to the company of mending the Machine would be Rs. 18,000. The Machine has an estimated life of 8 years and the probability distribution of failures during this time based on experience with similar machine is as follows :

Number of failures (during 8 year period) :	0	1	2	3	4	5
Probability	: 0.1	0.2	0.3	0.2	0.1	0.1

Ignoring any discounting for time value of money, determine the optimal number of units of the spare part on the basis of :

- (i) Minimax Principle
 - (ii) Laplace Principle
 - (iii) Hurwicz Principle, if $\alpha = 0.7$ (8)
- (b) Solve the Two-person Zero-Sum game :

$$\begin{bmatrix} 1 & 2 & 3 & -1 \\ 2 & 2 & 1 & 5 \\ 3 & 1 & 0 & -2 \\ 4 & 3 & 2 & 6 \end{bmatrix} \quad (7)$$

6. (a) Differentiate between any two of the following :

- (i) PERT and CPM

(ii) Integer programming problem and Zero - One programming

(iii) Decision making under Uncertainty and decision making under Risk. (4×2)

(b) Given below is a table obtained after a few iterations using Simplex method to solve a Linear Programming Problem to maximize total profit :

		C _j	4	5	-3	0	0	-M	-M
C _B	Basic Var.	Solution	X ₁	X ₂	X ₃	S ₁	S ₂	A ₁	A ₂
-M	A ₁	9	0	2	1	0	0	1	-1
4	X ₁	1	1	-1	0	-1	0	0	1
0	S ₂	28	0	5	1	2	1	0	-2

Answer the following questions giving appropriate reasons :

- (i) Is the above solution optimal ? If not, obtain the optimal solution. (5)
- (ii) Obtain the Optimal Value of the objective function. (2)

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Sr. No. of Question Paper : 4109

Roll No.....

Unique Paper Code : 101333

Name of the Paper : **Business Economics – II**

Name of the Course : **Bachelor of Business Studies (BBS), 2015**

Semester : **III**

Duration : **3 Hours**

Maximum Marks : **75**

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **all** questions.
3. **All** questions carry equal marks.

1. Answer all **FIVE** questions :

- (i) Suppose Govt spending increases by 50 units and the increase is financed by 50 unit increase in taxes, what is the effect of these two policy actions on equilibrium income.
- (ii) What is the effect of the following on BP Curve of Country A (i) an increase in MPC of the country which imports goods from Country A and (ii) Government of Country A allows FDI.
- (iii) Marginal propensity to consume affects the LM curve. True /False. Explain.
- (iv) If income increases by Rs. 2000 when government spending increases by 80, what is the MPS ?
- (v) If government spending falls by Rs. 20 and the marginal propensity to consume is 0.60, what are : (a) the change in the equilibrium level of income and (b) the induced change in consumption spending.

(3×5=15)

P.T.O.

2. (i) When the economy is operating at Full employment, interest rate guarantees that exogenous changes in government spending do not affect aggregate output and only changes the composition of output. Explain. (9)

OR

Explain the dichotomy between the monetary and real sector in an economy where money is used only as medium of exchange. (9)

- (ii) Explain the trade off between inflation and unemployment. Why does it not exist in the long run ? (6)
3. (i) The Government of India has tried to raise investment through an investment subsidy. What will be the impact of this decision on output, interest and prices ? Explain using IS – LM diagrams. (9)

OR

Consider the following data for a closed three sector economy

$$C = 60 + 0.8Y_d$$

$$I = 20 - 5r$$

$$G = T = 40$$

$$M_s = 90$$

$$M_d = Y - 10r$$

- (a) Derive the equation of the IS and LM curve
- (b) Find out the equilibrium level of Y and r.
- (c) What should be the increase in Government expenditure to bring about and increase of Rs. 200 in the Income. (3×3=9)
- (ii) In the Keynesian model an increase of one rupee in autonomous expenditure will cause equilibrium income to increase by a multiple of this one rupee increase. Explain the process by which this happens. (6)
4. (i) Within the Mundell Fleming model, assuming perfect capital mobility, analyse the effect of a lump sum tax increase for the case of a flexible exchange rate. Explain. (9)
- (ii) Why does a closed economy respond more to an increase in government spending than an open economy ? (6)
5. Write short notes on any **three** : (5×3=15)
- (i) Globalisation and its impact on Indian economy
- (ii) Liquidity Trap
- (iii) Advantages of Flexible exchange rate
- (iv) Effect of rate of interest on Consumption
- (v) Marginal Efficiency of Capital

[This question paper contains 4 printed pages.]

Sr. No. of Question Paper : 4110

Roll No.....

Unique Paper Code : 101334

Name of the Paper : Cost and Management Accounting

Name of the Course : Bachelor of Business Studies (BBS), 2015

Semester : III

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **Five** questions.
3. **All** questions carry equal marks.

1. (a) M/s ABC Ltd. manufactures Computer Monitors of one specification. Their plant can manufacture 1,00,000 Monitors in a year. In the year 2014-15 they manufactured and sold 80,000 Monitors at Rs. 10,000 per Monitor. The excess capacity remained unused. Following information is available from their cost records :

<u>Particulars</u>	<u>Rupees per Monitor</u>
Selling Price	<u>10,000</u>
Direct Material	3,000
Direct Labour	1,000
Variable Overheads	<u>1,000</u>
Marginal Cost of Production	5,000
Fixed Cost	<u>2,000</u>
Total Cost of Production	<u>7,000</u>
Profit	<u>3,000</u>

P.T.O.

A new customer, who needs 10,000 Monitors, has approached the company. He has offered to buy the Monitors @ Rs. 6,000 per monitor which is much lower than the normal price charged by M/s ABC Ltd. for their product. Should the company accept the offer ? What other conditions should the company keep in mind, other than financials, while making the decision ? What should the company do if the new customer had offered to buy the product at Rs. 4,000 per unit ? Show your profit calculations under different conditions clearly. (10)

- (b) What are the assumptions of Break Even Analysis ? (5)
2. (a) What is Margin of Safety ? What does the size of Margin of Safety indicate ? (3)
- (b) What will be the Break-even Point given that Margin of Safety is 30%. (3)
- (c) Compute the actual sales to earn a Profit of Rs. 5,000 if Fixed Cost is Rs. 10,000 and Break-even Sales is Rs. 40,000. (3)
- (d) Distinguish between Absorption Costing and Marginal Costing. (6)
3. In the current quarter a company has undertaken two jobs. The data relating to these jobs are as under :

	JOB-A	JOB-B
Selling Price	Rs. 107325	Rs. 157920
Profit as percentage on cost	8%	12%
Direct Material	Rs. 37500	Rs. 54000
Direct Wages	Rs. 30000	Rs. 42000

It is the policy of the company to charge factory overheads as a percentage on direct wages and selling and administration overheads as a percentage on factory costs.

The company has received a new order for manufacturing of a similar job. The estimate of direct material and direct wages relating to the new order are Rs. 64000 and Rs. 50000 respectively. A profit of 20% on sales is required.

You are required to compute :

- (i) The rate of factory overheads and Selling and Administration Overheads to be charged.
 - (ii) The selling price of the new order. (15)
4. The product of a factory passes through three process A, B & C The wastage in each process is 2.5%, 5% and 10% respectively. The wastage is sold at the rate of Rs. 10, Rs. 20 and Rs. 50 per 10 Units of Processes A, B, & C respectively. The expenditure incurred on process are as follows :

	Process A	Process B	Process C
Material Consumed (Rs.)	8000	4000	1500
Direct Labour (Rs.)	17000	11000	9000
Manufacturing Exp. (Rs.)	2000	2000	1500
Unit Introduced	4000 Units	—	—
Cost per Unit (Rs.)	1000		
Unit Produced	3900	3600	3250

Prepare Process Account, Abnormal Wastage Account, Abnormal Effectiveness Account. (15)

5. The standard material cost for 100 Kg. Of chemical D is made up of

Chemical A	30 Kg. @ Rs. 4 per kg.
Chemical B	40 Kg. @ Rs. 5 per kg.
Chemical C	80 Kg. @ Rs. 6 per kg.

In a batch of 500 kgs. of chemical D were produced from a mix of

Chemical A	140 Kg. at a cost of Rs. 588
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4

Chemical B 220 Kg. at a cost of Rs. 1056

Chemical C 440 Kg. at a cost of Rs. 2860

Compute material variances contributing in the actual cost per 100 kg. of chemical D over the standard cost. (15)

6. (a) What do you understand by elements of cost ? Explain in detail. (10)

(b) Explain Responsibility Accounting. (5)

7. Explain any **Three** of the following : (15)

(i) Quality Costing

(ii) Semi variable and Step Cost

(iii) Target Costing

(iv) Avoidable Cost and Unavoidable Cost