



BSc in Export Agriculture
Bachelor of Animal Science
BSc in Tea Technology and Value Addition
BSc in Palm and Latex Technology and Value Addition

First Year Second Semester Examination – December/January 2016/17

Principles of Agricultural Economics (EAG 131-3)
Economic thinking in Agriculture (EAG 121-3/0)

Section II – Structured Questions

Instructions:

Answer **all** questions in the given space.

No. of questions : Two (02)

No. of pages : Twelve (12)

Time : One (01) hour

Total marks allocated : 20%

Index No.

1.

(I) Define the followings;

(5 marks X 5 = 25 marks)

a) Utility

.....
.....
.....
.....

b) Marginal utility

.....
.....
.....
.....

c) Indifference curve

.....
.....
.....
.....

d) Budget line

.....
.....
.....
.....

e) Marginal Rate of Substitution

.....
.....
.....
.....

(II) List the properties of an indifference curve. (8 marks)

.....
.....
.....
.....

(III) State the conditions for consumer's equilibrium (05 marks)

.....
.....
.....
.....

(IV) Graphically show the consumer's equilibrium.

(12 marks)

(V) A student spends Rs. 18 per day for his tea and biscuits and tries to maximize his utility. Price of a cup of tea and a biscuit is Rs. 4 and Rs. 2 respectively. The following table provides data derived on this utility function.

Units	Total Utility		Marginal Utility	
	Tea	Biscuit	Tea	Biscuit
1	12	10		
2	22	15		
3	30	19		
4	36	21		
5	40	23		
6	41	25		
7	39	26		
8	34	26		
9	26	25		
10	16	23		

a) Calculate marginal utility for each good for each level of consumption in the **given table**. (20 marks)

b) At the maximum utility level, find the number of units he consumes. (10 marks)

.....
.....
.....
.....

c) If he can spend Rs. 20, how does he allocate the budget to receive maximum satisfaction under the same prices of the goods? (10 marks)

.....
.....
.....
.....
.....

(VI) How do you graphically derive the demand curve based on the utility theory? (10 marks)

2.

- (I) Perfect Competition is a theory of market structure based on four (04) major assumptions. State those assumptions (4 marks)

.....

.....

.....

.....

- (II) In Perfect Competition, the producer is a price taker. Why is the producer called a price taker? (6 marks)

.....

.....

.....

.....

- (III) Draw the demand curve for a single perfectly competitive firm. You should show the market situation first. (10 marks)

(IV) What is the profit maximizing rule of the firm? (10 marks)

.....
.....
.....
.....

(V) Let the demand function and the cost function of a firm be

$$P = 30 - Q$$

$$TC = 0.5Q^2 + 6Q + 7$$

Where p is the Price, Q is the quantity produced and TC is the total cost

Find the level of output that maximizes profit (10 marks)

(VI) What is meant by the following? (5 marks X 2 = 10 marks)

a) Resource allocative efficiency

.....

.....

.....

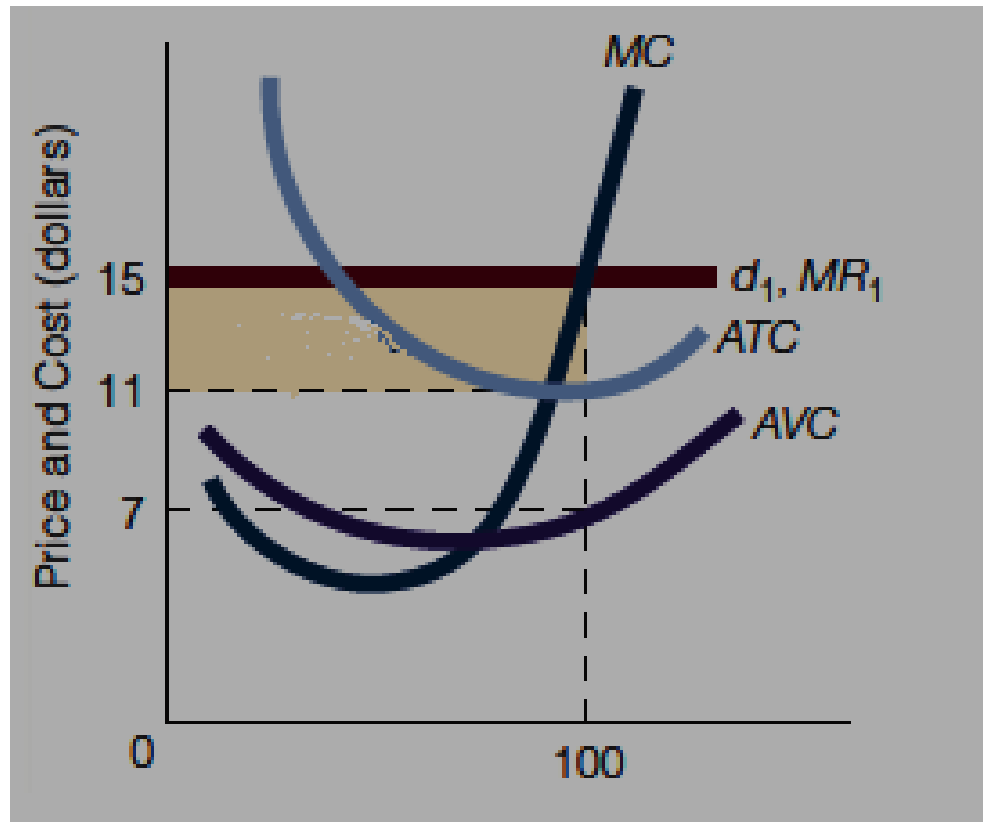
b) Productive efficiency

.....

.....

.....

(VII) The short run equilibrium of a perfectly competitive firm is given below.



Calculate the followings;

(2 marks X 7 = 14 marks)

a) Total Revenue (TR)

.....
.....
.....
.....

b) Total Cost (TC)

.....
.....
.....
.....

c) Total Variable Cost (TVC)

.....
.....
.....
.....

d) Total Fixed Cost (TFC)

.....
.....
.....
.....

e) Profits (π)

.....
.....
.....
.....

f) What type of a profit does this firm have?

.....
.....
.....
.....

g) If the $d_1 = MR$ curve goes through the lowest point of the ATC curve, what is its profit?

.....
.....
.....
.....

h)

I. If the $d_1 = MR$ curve lies in between ATC and AVC curve, does the firm continue its production? Justify your answer. (2 marks)

.....
.....
.....
.....

II. Does it earn a profit/ loss?

(2 marks)

.....
.....
.....
.....

i) If the $d_1 = MR$ curve goes through the lowest point of the AVC curve, does the firm continue its production? Justify your answer. (2 marks)

.....
.....
.....
.....

(VIII) Draw the long run equilibrium of a perfectly competitive firm. (10 marks)

(IX) List four (04) reasons to exist a monopoly (4 marks)

.....
.....
.....
.....

(X) Draw graphs to show monopoly profits and losses

(8 marks X 4= 16 marks)

a) Profits

b) Losses

[End of the Section II)