

Total No. of Printed Pages—4

**3 SEM TDC ECOH (CBCS) C 5**

**2 0 2 4**

( Nov/Dec )

**ECONOMICS**

( Core )

Paper : C-5

**( Essentials of Microeconomics )**

*Full Marks : 80*

*Pass Marks : 32*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following as directed : 1×8=8

(a) The cardinal utility is propounded by  
\_\_\_\_\_.

( Fill in the blank )

(b) In case of Giffen's good, the income effect is stronger than substitution effect.

( Write True or False )

(c) Write one property of expenditure function.

( 2 )

(d) Revealed preference theory is propounded by

(i) Paul Samuelson

(ii) A. Marshall

(iii) J. R. Hicks

( Choose the correct option )

(e) In the two-input case, if the product isoquants are L-shaped, the inputs are

(i) perfect substitute for each other

(ii) perfect complementary to each other

(iii) independent of each other

( Choose the correct option )

(f) Write one limitation of Cobb-Douglas production function.

(g) Write one example of implicit cost.

(h) Write one difference between pure competition and perfect competition.

2. Write short notes on any *four* of the following (within 150 words each) :  $4 \times 4 = 16$

(a) Assumptions of indifference curve

(b) Revealed preference theory

( 3 )

(c) Expansion path

(d) Determinants of cost functions

(e) Profit maximization rule

Answer the following questions (within 500 words each) :

3. (a) Explain the indirect utility functions. What are the differences between direct and indirect utility functions?  $6+6=12$

Or

(b) Compare and contrast utility maximization and expenditure minimization. Explain the properties of expenditure function.  $(3+3)+6=12$

4. (a) Write the meaning and differences between compensated and ordinary demand curves. Explain Slutsky's equation.  $5+6=11$

Or

(b) Explain the theory of inter-temporal choice. 11

5. (a) Briefly explain :  $6+5=11$

(i) Marginal rate of technical substitution

(ii) Elasticity of substitution

Or

- (b) What do you mean by linear production function? Explain the properties of Cobb-Douglas production function.

2+9=11

6. (a) Illustrate how long-run average cost curve is derived from a set of short-run average cost curves. Discuss how economies and diseconomies of scale determine the shape of the LAC curve.

6+5=11

Or

- (b) (i) Describe the properties of cost function.

6

- (ii) Explain why a firm's unit cost to produce a product declines as the variety of its product increases.

5

7. (a) Discuss how equilibrium is attained by a firm under perfect competition in the short run and in the long run with diagrams.

11

Or

- (b) (i) Define profit function. What are its properties?

2+4=6

- (ii) Write on the short-run supply curve of a firm under perfect competition.

5

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**3 SEM TDC ECOH (CBCS) C 6**

**2 0 2 4**

( Nov/Dec )

**ECONOMICS**

( Core )

Paper : C-6

**( Essentials of Macroeconomics )**

*Full Marks : 80*

*Pass Marks : 32*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following as directed : 1×8=8

(a) Who propounded the relative income hypothesis?

(b) If  $MPC = 0.8$ , autonomous consumption is ₹ 200, total consumption when income  $y = ₹ 700$ , will be

(i) ₹ 580

(ii) ₹ 670

(iii) ₹ 760

(iv) None of the above

( Choose the correct option )

( 2 )

- (c) What is meant by autonomous investment?
- (d) Define stagflation.
- (e) Mention one limitation of the purchasing power parity theory.
- (f) What is meant by an open economy?
- (g) Mention two items in Capital Account of balance of payments.
- (h) State one of the basic rules of the balance of payments accounting.

2. Write short notes on any *four* of the following  
(within 150 words each) :  $4 \times 4 = 16$

- (a) Keynes' fundamental psychological law of consumption
- (b) Marginal efficiency of capital
- (c) Phillips curve
- (d) Asset market approach
- (e) International financial markets

3. (a) What is consumption function? Explain the technical attributes of the consumption function and their inter-relationships with suitable examples.  
 $1 + 11 = 12$

( 3 )

Or

(b) Explain the absolute income hypothesis of consumption. How does it differ from the relative income hypothesis?  $9 + 3 = 12$

4. (a) Explain the concept of marginal efficiency of investment. Discuss the working of the static investment multiplier with suitable examples.  $5 + 6 = 11$

Or

(b) Explain the profit theory of investment. 11

5. (a) Discuss the causes of stagflation. Suggest some policies to solve the problem of stagflation.  $5 + 6 = 11$

Or

(b) Discuss critically the rational expectations theory. How does it differ from the adaptive expectations theory?  $8 + 3 = 11$

6. (a) Discuss the Mundell-Fleming model under the framework of an open economy. 11

Or

(b) Explain critically the Dornbusch's overshooting model of exchange rate determination.

7. (a) What are the various components of balance of trade and balance of payments? Discuss the factors that cause disequilibrium in the balance of payments. 4+7=11

Or

- (b) Distinguish between Current Account and Capital Account in balance of payments. Discuss the monetary approach to adjustment of balance of payments disequilibrium. 3+8=11

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**3 SEM TDC ECOH (CBCS) C 7**

**2 0 2 4**

( Nov/Dec )

**ECONOMICS**

( Core )

Paper : C-7

**( Statistical Methods in Economics )**

*Full Marks : 80*

*Pass Marks : 32*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following as directed :  $1 \times 8 = 8$

(a) Mean deviation can be computed from

- (i) arithmetic mean
- (ii) median
- (iii) mode
- (iv) All of the above

(Choose the correct answer)

( 2 )

(b) Which of the following is not a characteristic of a good measure of dispersion?

- (i) Clearly defined
- (ii) Easy to calculate
- (iii) Based on all observations
- (iv) Should be affected by extreme values.

(Choose the correct answer)

(c) Mention one limitation of harmonic mean.

(d) If  $A$  and  $B$  are mutually exclusive events, then the probability of occurrence of either  $A$  or  $B$  denoted by  $P$  shall be given by \_\_\_\_\_.

(Fill in the blank)

(e) Let  $b_{xy}$  and  $b_{yx}$  be two regression coefficients. If  $b_{xy}$  is greater than unity, then  $b_{yx}$  must be

- (i) zero
- (ii) greater than unity
- (iii) equal to unity
- (iv) less than unity

(Choose the correct answer)

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( Continued )

( 3 )

(f) Sampling errors are non-existent in complete enumeration survey.

(Write True or False)

(g) The regression analysis which studies more than two variables at a time is called \_\_\_\_\_ regression.

(Fill in the blank)

(h) In case of a normal distribution, the coefficient of skewness is

- (i) 1
- (ii) greater than 1
- (iii) 0
- (iv) less than 1

(Choose the correct answer)

2. Write short notes on any four of the following (**within 150 words** each) :  $4 \times 4 = 16$

- (a) The concept of moments
- (b) Systematic sampling
- (c) Properties of Poisson distribution
- (d) Coefficient of determination ( $R^2$ )
- (e) Mathematical expectation

P25/310

( Turn Over )

( 4 )

3. (a) What do you mean by dispersion?  
Explain various methods of computing  
dispersion. 2+9=11

Or

- (b) Calculate the arithmetic mean and  
median of the frequency distribution  
given below. Also calculate the mode  
using the empirical relation among the  
three : 4+4+3=11

Class limit	Frequency
130-134	5
135-139	15
140-144	28
145-149	24
150-154	17
155-159	10
160-164	1

4. (a) (i) Explain the advantages of sampling  
over census. 5
- (ii) Describe the principal steps  
followed in a sample survey. 6

( 5 )

Or

- (b) The following table gives the  
classification of 100 workers according  
to the sex and the nature of work.  
Test whether there is any association  
between nature of work and the sex  
of the worker : 11

	Skilled	Unskilled
Males	40	20
Females	10	30

(For  $v = 1$ , the table value of  $\chi^2$  at 5%  
level of significance is 3.84)

5. (a) Explain with examples the concepts of  
the following : 2×6=12
- (i) Sample space
  - (ii) Equally likely events
  - (iii) Mutually exclusive events
  - (iv) Exhaustive events
  - (v) Favourable events
  - (vi) Random experiment

( 6 )

Or

(b) If one card is drawn from a well-shuffled pack of cards, what is the possibility of getting—

(i) either a king or a queen;

(ii) either a spade or a diamond;

(iii) neither an ace nor a jack;

(iv) either a black king or a red queen?

$$3+3+3+3=12$$

6. (a) (i) Mention the properties of binomial distribution. 4

(ii) Prove that Poisson distribution is a limiting case of binomial distribution. 7

Or

(b) Describe the following : 5+3+3=11

(i) Random variable

(ii) Probability mass function

(iii) Probability density function

( 7 )

7. (a) Mention the properties of Karl Pearson's coefficient of correlation. Find Pearsonian correlation coefficient between the following values of X and Y : 3+8=11

X	78	89	96	69	59	79
Y	125	137	156	112	107	136

Or

(b) From the data given below

Marks in Economics	25	28	35	32	31	36	29
Marks in Statistics	43	46	49	41	36	32	31

find—

(i) the two regression equations;

(ii) the most likely marks in Statistics, when the marks in Economics is 30. 10+1=11

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