

3rd Semester Examination, 2021

Time : 3 hours

Full Marks : 80

Answer from all the Parts as per direction

The figures in the right-hand margin indicate marks

Candidates are required to answer in their own words as far as practicable

(MODEL CBCS)

(MICRO ECONOMICS - I)

PART - I

1. Fill in the blanks from (a) to (f) and answer in one word from (g) to (i): 1×12
 - (a) Indifference curve analysis is known as _____ utility analysis.
 - (b) Income effect in case of inferior goods is _____.

(Turn Over)

(2)

- (c) When Marginal cost is below the Average Cost, Average Cost _____.
- (d) The Profit function is _____ in output prices.
- (e) Under Perfect competition, if firm's AR curve is tangential to the minimum of its AC curve at equilibrium, the firm earns _____ profit.
- (f) If 'A' is preferred to 'B', 'B' is preferred to 'C', then 'A' is preferred to 'C'. This is known as _____ property.
- (g) Which effect does compensated demand curve include due to change in price?
- (h) What is called the function, showing the technical relationship between quantities of factor input and amount of output?
- (i) What is the nature of profit reaped by a competitive firm in long run?

AH ECO -05

(Continued)

(3)

- (j) Name the form of returns to scale experienced in case of Linear homogeneous production function.
- (k) What happens to consumer surplus with increase in price?
- (l) Which method was used by Slutsky to analyse income effect and substitution effect?

PART - II

2. Answer any eight of the following questions within two to three sentences each : 2×8
- (a) Why are Indifference curves convex to origin?
- (b) What is Lump-sum Principle?
- (c) State the meaning of Elasticity of substitution.
- (d) What is Demand function?

AH ECO -05

(Turn Over)

(4)

- (e) Give the meaning of Expansion path.
- (f) What is Profit ?
- (g) Define Marginal Revenue.
- (h) What is Input demand ?
- (i) Give the meaning of Unitary elastic demand.
- (j) What is linear production function ?

PART — III

3. Answer any *eight* questions of the following within 75 words each : 3×8

- (a) What does a price consumption curve show ?
- (b) Show the relationship between short run AC and MC curves.
- (c) Draw an ISO-quant map.

AH ECO - 05

(Continued)

(5)

- (d) When does a producer minimise cost by optimal choice of inputs ?
- (e) Derive the nature and shape of the short run supply curve of a competitive firm.
- (f) Make a distinction between Fixed proportions production function and Variable proportions production function.
- (g) Derive ISO-Cost line.
- (h) Briefly explain Hicks net substitutes.
- (i) Write down the Indirect utility function.
- (j) Discuss Marginal productivity.

PART — IV

Answer all questions within 500 words each : 7×4

- 4. Explain the consumer's equilibrium for utility maximisation with the help of Indifference curve analysis.

AH ECO - 05

(Turn Over)

(6)

Or

Examine the operation of Revealed Preference theory.

5. Distinguish between Hicksian Income effect and substitution effect of a change in price. Show how they are related to price effect.

Or

Explain Marshallian concept of consumer surplus and examine how it has been rehabilitated by Hicks.

6. Critically examine Law of Variable proportions.

Or

Explain why long run average cost curve is less pronounced than short run average cost curve.

AH ECO -05

(Continued)

(7)

7. Discuss the conditions for profit maximisation of a firm using TC-TR and MR-MC techniques under perfect competition.

Or

Explain the relationship between average and marginal revenue of the firm under both perfect and Imperfect competitions.

AH ECO -05

BA-1800

(6)

5. Explain the significance of RBI' measure of money supply.

Or

Discuss Keynesian approach to demand for money.

6. With the help of IS-LM framework, explain how is equilibrium achieved simultaneously in both the markets ?

Or

Explain the nature and shape of IS and LM curves.

7. Critically examine Hayek's over-investment theory of trade cycle.

Or

Explain Rational Expectations theory. Discuss various implications and challenges of it.

3rd Semester Examination, 2021

Time : 3 hours

Full Marks : 80

Answer from all the Parts as per direction

*The figures in the right-hand margin indicate marks
Candidates are required to answer in their own words
as far as practicable .*

(MODEL CBCS)

(MACRO ECONOMICS - I)

PART - I

1. Fill in the blanks from (a) to (f) and answer in one word from (g) to (l) : 1 × 12

(a) The slope of consumption function is measured by _____.

(Turn Over)

- (b) According to Keynes, the relationship between consumption and income is _____
- (c) Public investment is _____ investment.
- (d) In liquidity trap, at a low rate of interest, demand for money becomes _____
- (e) _____ curve shows the equilibrium in real sector.
- (f) _____ phase of Trade cycle comes after the Depression phase.
- (g) Which curve shows the trade-off between inflation rate and unemployment rate ?
- (h) Who viewed the trade cycle as a monetary phenomena ?
- (i) Between MPS and APS, which is constant in short run to changes in income.
- (j) Who has propounded the Relative income hypothesis ?

- (k) What shape does the Long run Phillips curve take ?
- (l) To which side the LM curve shifts, in case of increase in money supply in the economy ?

PART - II

2. Answer any *eight* of the following within *two* to *three* sentences each : 2 x 8

- (a) Define MEI.
- (b) What is APC ?
- (c) Give the meaning of Autonomous Investment.
- (d) What is speculative demand for money ?
- (e) Give the meaning of money multiplier.
- (f) Write down any two properties of LM curve.

(4)

- (g) Define Inflation.
- (h) What is meant by Adaptive expectations ?
- (i) State the views of Keynes on trade cycle.
- (j) What is Aggregate demand ?

PART - III

3. Answer any *eight* of the following questions within 75 words each : 3×8

- (a) State the implications of Keynesian consumption function.
- (b) Mention the determinants of Business fixed investment.
- (c) What does the shift in LM curve show ?
- (d) State the views of classical economists on demand for money.
- (e) Point out the effects of increase in investment on general equilibrium with the help of IS-LM framework.

AH ECO-06

(Continued)

(5)

- (f) Mention different phases of Trade cycle.
- (g) Write down the measures to raise consumption function.
- (h) Derive Aggregate supply curve with the help of IS-LM framework.
- (i) How is Residential Investment different from Inventory Investment ?
- (j) What does policy-ineffectiveness debate state ?

PART - IV

Answer the following questions within 500 words each : 7×4

4. Explain Keynes' fundamental psychological law of consumption.

Or

Define Marginal Efficiency of Capital. Discuss various factors influencing it.

AH ECO-06

(Turn Over)

3rd Semester Examination, 2021

Time : 3 hours

Full Marks : 80

Answer from all the Parts as per direction

The figures in the right-hand margin indicate marks

Candidates are required to answer in their own words as far as practicable

(MODEL CBCS)

(STATISTICAL METHODS FOR ECONOMICS)

PART – I

1. Fill in the blanks from (a) to (f) and answer in one word from (g) to (l) : 1×12

(a) A parameter is a measure computed from _____ data.

(b) Questionnaire survey method is used to collect _____ data.

(Turn Over)

- (c) Graphic method of measuring correlation between two variables can be explained through _____.
- (d) Karl coefficient of correlation lies between _____.
- (e) Trend line fitted under _____ method is called the line of best fit.
- (f) The collection of one or more outcomes from an experiment is called _____.
- (g) If the mean of a distribution is 14 and the standard deviation is 5. What is the value of coefficient of variation ?
- (h) Name the distribution that is abnormally tall and peaked.
- (i) Which statistical measure studies the nature and extent of relationship between two or more variables and helps in making predictions ?
- (j) Name the method of sampling in which each and every item of the universe has an equal chance of being selected in the sample.

- (k) Which error arises due to human factors in the process of choosing the technique of data collection ?
- (l) What is called the difference between highest and lowest item of a series ?

PART - II

2. Answer any *eight* of the following questions within *two to three* sentences each : 2×8

- (a) What is sample ?
- (b) Define Geometric mean.
- (c) Give the meaning of dispersion.
- (d) What is standard error of estimate ?
- (e) Define Index number.
- (f) When are two events independent ?
- (g) What is the test for Ideal index number ?
- (h) Define secular trend.

- (i) What are Regression lines ?
- (j) Define mutually exclusive event.

PART - III

3. Answer any *eight* of the following questions within 75 words each : 3 x 8

- (a) Make a distinction between primary data and secondary data.
- (b) Mention the advantages of Graphic presentation of data.
- (c) Distinguish between Correlation and Regression.
- (d) Write a brief note on cyclical variation.
- (e) How do you interpret the values of r , when $r = 0$, $r = -1$ and $r = +1$?
- (f) Distinguish between probability sampling and Non-probability sampling.
- (g) State the problems in the construction of an index number.

- (h) Define conditional probability. State multiplication theorem in case of conditional probability.
- (i) What is probable error of correlation coefficient ?
- (j) Briefly explain the Family Budget method for construction of an index number.

PART - IV

Answer the following questions within 500 words each :

- 4. Calculate coefficient of variation from the following data. 7
- | | | | | | |
|-------------|------|-------|-------|-------|-------|
| Class : | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| Frequency : | 10 | 32 | 18 | 25 | 15 |

Or

- Define mode. Find mode for the following series. 7
- | | | | | | |
|-------------|-----|------|-------|-------|-------|
| Items : | 0-5 | 5-10 | 10-20 | 20-30 | 30-40 |
| Frequency : | 2 | 5 | 1 | 3 | 12 |

(6)

5. Define Karl Pearson's coefficient of correlation. Discuss its properties. 7

Or

Obtain two regression equations from the following data : 7

X: 40 34 28 30 44 38 31
Y: 32 39 26 30 38 34 25

6. Discuss various methods of computing Index number. Briefly explain the uses of an Index number. 7

Or

Fit a linear trend to the following data by using Least square method. 7

Year	: 1990	1992	1994	1996	1998
Production (in thousand units)	: 18	21	23	27	16

7. (i) State and prove the Addition theorem of probability. 4

AH ECO -07

(Continued)

(7)

- (ii) From a pack of 52 cards, two cards are drawn at random. Find the probability that one is king and the other is queen. 3

Or

- (i) Write a note on Quota sampling. 4
(ii) A bag contains 6 red balls and 8 green balls. If one ball is drawn at random then what is the probability of the ball being green? 3

AH ECO -07

BA-1800

Or

What are the defects of Agricultural marketing in India ? Suggest measures to correct these defects.

6. Discuss the features of Industrial Policy, 1991.

Or

What is Industrial sickness ? Discuss the steps taken by Govt. to ameliorate industrial sickness in India.

7. Explain the reasons for expansion of service sector in India.

Or

What is meant by service-led-growth ? Is it sustainable in India?

3rd Semester Examination, 2021

Time : 3 hours

Full Marks : 80

Answer from all the Parts as per direction

The figures in the right-hand margin indicate marks

Candidates are required to answer in their own words as far as practicable

(MODEL CBCS)

(INDIAN ECONOMY-1)

PART - I

1. Answer all questions from (a) to (f) Fill in the blanks, from (g) to (i) answer in one word : 1 x 12
(a) The most important infrastructure developed during the British period was _____.
(b) Economic policies followed by the Britishers transformed Indian economy into a _____.

- (c) Average life expectancy of the people of India is _____.
- (d) Disguised unemployment is found in Indian _____.
- (e) MRTP Act was liberalised in the Industrial policy _____.
- (f) In India, economic activities relating to Trade and commerce are included in _____ sector.
- (g) Which five year plan in India emphasised on rapid industrialisation in the country ?
- (h) State the rank of India in the world in terms of population.
- (i) Which industry received major set back during the colonial rule.
- (j) How many days of work are guaranteed to the rural BPL household under MGNREGS ?
- (k) Which type of credit is required by farmers in India for a short period of less than 15 months ?

- (l) Which programme in India is aimed at providing land to the tiller ?

PART - II

2. Answer any *eight* of the following questions within *two to three* sentences each : 2×8

- (a) State two features of Indian economy as a developing economy.
- (b) What is sex composition of Indian population ?
- (c) Name two non-institutional sources of credit.
- (d) Give the meaning of Underemployment.
- (e) What are Regulated markets ?
- (f) Point out the main causes of income inequalities in India.
- (g) What is consolidation of land holdings ?
- (h) State the meaning of Demographic dividend.
- (i) Name the activities that are included in Tertiary sector.

(4)

(j) What are MSMEs?

PART - III

3. Answer any *eight* of the following questions within 75 words each : 3 × 8

- (a) Write down the land settlement system introduced under the British rule.
- (b) Why is Agriculture important in India ?
- (c) State the problems of Agricultural finance in India.
- (d) Mention the reasons for decline in death rate of India.
- (e) Point out the main features of Industrial Policy, 1948.
- (f) Write down the problems of Industrial development in India.
- (g) State the main reasons for stagnation of agriculture in India during British rule.

AG ECO-01

(Continued)

(5)

(h) Why is the contribution of service sector in India's GDP rising ?

(i) State the objectives of land reforms programme in India.

(j) What are the features of National Population Policy, 1976 ?

PART - IV

Answer all the following questions : 7 × 4

4. Discuss the economic consequences of colonial exploitation in India.

Or

Examine the recent employment generation Govt. policies to solve the problem of unemployment in India.

5. Account for low productivity of agriculture in India.

AG ECO-01

(Turn Over)

3rd Semester Examination, 2020

Time : 3 hours

Full Marks : 80

Answer any **one** Group as per your Syllabus

Answer from **all** the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

GROUP — A

(MODEL SYLLABUS)

(MICROECONOMICS - I)

SECTION — A

1. Answer *all* the questions : 1 × 12
- (i) Define utility function.
 - (ii) What is an indifference curve ?

(Turn Over)

(2)

- (iii) What is the shape of the Indifference curve for perfect substitutes ?
- (iv) What do you understand by Income Effect ?
- (v) Define demand function.
- (vi) Substitution and income effects work in opposite directions, in case of _____ goods.
- (vii) Define production function.
- (viii) What do you understand by Isoquant Maps ?
- (ix) What is the general form of Cobb-Douglas production function ?
- (x) What is Marginal Revenue ?
- (xi) A firm's economic profits are the difference between its _____ and _____.
- (xii) Define cost function.

(3)

SECTION – B

2. Answer any *eight* out of the following : 2×8
- (i) Explain Marginal Rate of substitution.
 - (ii) Write down any two properties of indifference curve.
 - (iii) What is budget constraint ?
 - (iv) Define Consumer's Surplus.
 - (v) What do you mean by compensated demand function ?
 - (vi) Define the concept of net substitutes and net complements.
 - (vii) Explain linear production function.
 - (viii) What do you understand by technical progress ?
 - (ix) What are the conditions of profit maximisation of a firm ?
 - (x) Define short-run supply curve.

(4)

SECTION – C

3. Answer any *eight* of the following : 3×8

- (i) Examine indirect utility function.
- (ii) Interpret the convexity of indifference curve.
- (iii) Explain the lump-sum principle.
- (iv) Write a brief note on compensated price elasticities.
- (v) Explain substitution effect of a price change.
- (vi) Explain the concept of returns to scale.
- (vii) Write a brief note on fixed proportions production function.
- (viii) Explain in short the relationship between average and marginal revenue.
- (ix) Explain input demand function.
- (x) Examine the rate of technical substitution.

(5)

SECTION – D

Answer **all** questions : 7×4

4. Discuss the various axioms of rational choice.

Or

Define expenditure function. Discuss the properties of expenditure function.

5. Explain the Indirect Approach to the changes in a goods price.

Or

Distinguish between the individual's demand curve and compensated demand curve.

6. Examine the cost minimising input choice.

Or

Define Cost. Discuss the properties of cost function.

(6)

7. Examine the short run supply by a price taking firm.

Or

Explain the conditions of profit maximisation.

GROUP – B

(OLD SYLLABUS)

(MICROECONOMICS - I)

SECTION – A

1. Answer *all* questions : 2 × 8
- (a) Economic models are based on assumptions, why?
- (b) What is the value of MRS in case of neutral goods?
- (c) Define income elasticity of demand.
- (d) What is the shape of the indifference curve in case of perfect complements?

(7)

- (e) What is isoquants or equal product curves?
- (f) Give two import reasons for the occurrence of increasing return to scale.
- (g) Do you think monopoly power is a source of profit? Why?
- (h) Explain the concept of reasonable profit.

SECTION – B

Answer **all** questions : 16 × 4

2. What are economic models? Distinguish between general economic model and quantitative economic model.

Or

How utility function from indifference curves is constructed? What relation exists between marginal utility and MRS?

3. Discuss various methods of measurement of price elasticity of demand.

(8)

Or

Consumer consumes two goods X and Y. If commodity X is rationed and the constraint is binding. What is the effect on consumption set ? Explain.

4. What is isoquant ? Explain properties of isoquants.

Or

When sum of exponents ($\alpha + \beta$) of Cobb-Douglas production function is equal to one, it shows constant return to scale. Prove.

5. What is profit function ? Explain its properties.

Or

Distinguish between

- (i) Accounting Profit and Economic Profit
- (ii) Normal Profit and Monopoly Profit.

3rd Semester Examination, 2020

Time : 3 hours

Full Marks : 80

Answer any **one** Group as per your Syllabus

Answer from **all** the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

GROUP – A

(MODEL SYLLABUS)

(MACROECONOMICS)

SECTION – A

1. Answer *all* questions : 1 × 12
(i) Define Average Propensity to Consume (APC).

(Turn Over)

(2)

- (ii) Consumption function indicates a functional relationship between _____ and _____.
- (iii) What is Autonomous Investment ?
- (iv) Define Liquidity Trap.
- (v) What do you understand by supply of money ?
- (vi) What is Speculative demand for money ?
- (vii) What is Aggregate Supply ?
- (viii) What is the shape of LM curve ?
- (ix) Product market is in equilibrium when desired _____ and _____ are equal.
- (x) Define Inflation.
- (xi) What is the meaning of Trade cycles ?
- (xii) What do you mean by Adaptive Expectations ?

(3)

SECTION – B

2. Answer any *eight* of the following : 2 × 8
- (i) What does absolute level of income imply ?
 - (ii) Define Marginal Efficiency of Capital (MEC).
 - (iii) What do you understand by Residential Investment ?
 - (iv) What is High-powered money ?
 - (v) Mention any two measures of money supply in India.
 - (vi) Define money multiplier.
 - (vii) What is the slope of IS curve ?
 - (viii) Write down two causes of change in the LM curve.
 - (ix) Explain Rational Expectation.
 - (x) Mention any two characteristics of trade cycles.

(4)

SECTION – C

3. Answer any *eight* of the following : 3×8

- (i) Discuss the measures to raise consumption function.
- (ii) Write a brief note on Marginal Efficiency of Investment (MEI).
- (iii) Explain in brief the principle of accelerator.
- (iv) What is the classical approach to the demand for money ?
- (v) What are the implications of liquidity trap ?
- (vi) Write a note on Aggregate Demand.
- (vii) Examine the factors affecting the slope of IS curve.
- (viii) Discuss the product market equilibrium in the IS-LM framework.
- (ix) Examine the long-run Phillips curve.
- (x) Explain the various characteristics of a trade cycle.

(5)

SECTION – D

Answer **all** questions : 7×4

4. Explain Keynes's psychological law of consumption and discuss its implications.

Or

Explain how does the MEC influence the decision to invest.

5. Discuss Keynesian approach to the demand for money.

Or

Explain the measures of money supply in India.

6. Examine the changes in IS-LM curves and their implications for equilibrium.

Or

Using IS-LM model, derive the aggregate demand curve.

(6)

7. How does Phillips curve explains the trade-off between unemployment and inflation ? Discuss its policy implications.

Or

Explain Hawtrey's theory of trade cycles.

GROUP – B

(OLD SYLLABUS)

(MACROECONOMICS - I)

SECTION – A

1. Answer the following questions : 2 × 8
- (a) Explain the concept of marginal propensity to save.
- (b) What are the important features of Keynes's consumption function ?
- (c) Why does LM curve slopes upward ?
- (d) What do you mean by monetary accommodation of expansion Fiscal policy ?

(7)

- (e) What is liquidity trap ?
- (f) What is narrow money ?
- (g) Name the four phases of trade cycle.
- (h) What is natural rate of unemployment ?

SECTION – B

Answer **all** questions : 16 × 4

2. Explain the relative income hypothesis of consumption. What are its limitations ?

Or

What is consumption function ? Explain its importance in the theory of determination of income and employment.

3. Explain the concept of supply of money. What are the factors responsible for the rapid increase in money supply ?

Or

Explain the Keynesian theory of interest.

(8)

How is Keynesian theory of interest different from the classical theory ?

4. How IS curve is derived from the goods market equilibrium ? Why does IS curve slopes upward ?

Or

Explain the roles of Fiscal and Monetary policy with the help of IS-LM model.

5. What is Phillips curve ? What kind of trade-off between unemployment rate and inflation rate does it imply ?

Or

What is trade cycle ? How it can be controlled ? Explain.

3rd Semester Examination, 2020

Time : 3 hours

Full Marks : 80

Answer any **one** Group as per your syllabus

Answer from **all** the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

GROUP—A

(MODEL SYLLABUS)

(STATISTICAL METHODS FOR ECONOMICS)

SECTION — A

1. Answer *all* questions : 1 × 12

(i) What do you understand by secondary data ?

(Turn Over)

- (ii) Define Harmonic Mean.
- (iii) Name a suitable method of collecting data where the informants are literate and spread over a vast area.
- (iv) Define correlation.
- (v) Correlation coefficient is the Geometric Mean of _____ .
- (vi) What is probable error of correlation coefficient ?
- (vii) What is Secular Trend ?
- (viii) Define Index number.
- (ix) Write down Fisher's formula for the Calculation of Index number.
- (x) Define mutually exclusive events.
- (xi) What is simple-random sampling ?
- (xii) Define conditional probability.

SECTION – B

2. Answer any *eight* of the following : 2 × 8
- (i) Distinguish between Parameter and Statistic.
 - (ii) Define range.
 - (iii) Mention the various types of kurtosis in a distribution.
 - (iv) Interpret the correlation coefficient when its value $r = +1$, $r = 0$, and $r = -1$.
 - (v) Given $r = 0.6$, $n = 64$. Find out probable error.
 - (vi) If $b_{xy} = 0.6$ and $b_{yx} = 0.8$. Calculate coefficient of correlation (r).
 - (vii) What is semi-average method of measuring trend.
 - (viii) Mention any two types of Index numbers.
 - (ix) What is sampling error.
 - (x) What is multi-stage sampling.

SECTION – C

3. Answer any *eight* of the following : 3×8

- (i) Arithmetic Mean of two observations is 25 and their Geometric Mean is 20. Find the values of the two observations and their Harmonic Mean.
- (ii) Distinguish between Primary Data and Secondary data.
- (iii) Write a brief note on skewness of a distribution.
- (iv) Distinguish between correlation and regression.
- (v) Define standard error of estimate. How is it computed ?
- (vi) Distinguish between seasonal and cyclical fluctuations with suitable examples.
- (vii) Explain Time Reversal Test for an ideal Index number.

(viii) Write a brief note on Family Budget Method of calculating Consumer Price Index.

- (ix) A card is drawn at random from a pack of cards. Find the probability that the drawn card is either a club or an ace of diamond.
- (x) Distinguish between sampling and non-sampling error.

SECTION – D

Answer **all** questions :

7×4

4. Explain different method of collecting Primary Data.

Or

Calculate Quartile deviation and coefficient of quartile deviation from the following data :

X	0-20	20-40	40-60	60-80	80-100
Y	4	10	15	20	11

5. Compute correlation coefficient of the following data :

X	2	3	4	5	6	7	8
Y	4	7	8	9	10	14	18

What will be the correlation coefficient of the above data if 1 is subtracted from each value of X and 2 is added to each value of Y ?

Or

The two lines of regression are $15x = 8y + 130$ and $6y = 15x + 90$. Find out \bar{x} , \bar{y} and coefficient of correlation.

6. Fit a straight line trend by the method of least squares to the following data and estimate the production for the year 2001.

Year	1996	1997	1998	1999	2000
Production	49	54	60	72	80

Or

Discuss the problems in constructing index numbers.

7. (a) State and prove the multiplication rule of Probability.
- (b) A problem in statistics is given to five students, A, B, C, D and E the chances of their solving the problem is $1/2$, $1/3$, $1/4$, $1/5$, $1/6$. What is the chance that the problem will be solved?

Or

- (a) State and prove the addition rule of probability. What happens to the addition rule when the events are not mutually exclusive.
- (b) A perfect die is tossed. What is the probability of throwing 3 or 5?

GROUP – B
(ODL SYLLABUS)

(STATISTICAL METHODS FOR ECONOMICS)

SECTION – A

1. Answer the following questions : 2 × 8

- (a) Write a short note on Histogram.
- (b) If the arithmetic mean and standard deviation of Group A and Group B are 1.06, 1.2, 1.309 and 1.307 respectively. Which group is considered more consistent.
- (c) What is linear correlation
- (d) Given the following data :
 $N = 8, \Sigma X = 21, \Sigma X^2 = 99, \Sigma Y = 4, \Sigma XY = 36.$
Find regression equation of Y on X .
- (e) What is Cyclical variation.
- (f) Construct index number of price from the following data, under Laspeyres method :

Commodity	2017		2018	
	Price	Quantity	Price	Quantity
A	2	8	4	6
B	5	10	6	5
C	4	14	5	10
D	2	19	2	12

- (g) A bag contains 10 black and 20 white balls. One ball is drawn at random. What is the probability that it is black.
- (h) A coin is tossed for six times. What is the probability of obtaining four heads.

SECTION – B

Answer all questions : 16 × 4

2. (a) What is skewness? Explain the tests of skewness.
- (b) A test in mathematics was given to 400 students of whom 150 were boys and 250 girls. The results were as following :

$$n_1 = 150$$

$$n_2 = 250$$

$$\bar{x}_1 = 72$$

$$\bar{x}_2 = 7.3$$

$$\sigma_1 = 7.0$$

$$\sigma_2 = 6.4$$

Find the mean and Stand Deviation of the Combined group.

Or

- (a) What is range ? Explain the uses of range.
 (b) Find the mean deviation of the following data :

Class	Frequency
0-10	5
10-20	8
20-30	12
30-40	15
40-50	20

3. (a) Prove that the coefficient of correlation lies between +1 and -1.

- (b) From the data given below find the number of items "n".

$$r = 0.5, \Sigma xy = 120, \sigma_y = 8, \Sigma x^2 = 90.$$

where x and y are deviations from arithmetic mean.

Or

- (a) What is regression ? Why there is the necessity of drawing two regression lines ?
 (b) The equations of two lines of regression obtained in a correlation analysis are the following :

$$2x = 8 - 3y \text{ and } 2y = 5 - x$$

Obtain the value of correlation coefficient.

4. (a) Write a note on secular trend.
 (b) Plot the following data on a graph paper and ascertain trend by method of semi-average.

Year	2010	2011	2012	2013	2014	2015	2016
Production	100	120	95	105	108	102	112

Or

- (a) Write a note on Time reversal test.
- (b) Prepare fixed base index numbers from the chain base index numbers :

Year	2006	2007	2008	2009	2010	2011
Chain base Index	94	104	104	93	103	102

5. (a) Explain the multiple theorem of probability.
- (b) A bag contains 10 white and 6 black balls, 4 balls are successfully drawn out and not replaced. What is the probability that they are alternatively of different colours.

Or

- (a) Explain the properties of normal distribution.
- (b) Eight coins are thrown Simultaneously. Find the chance of obtaining
- (i) at least 6 heads (ii) no heads (iii) all heads.

3rd Semester Examination, 2020

Time : 3 hours

Full Marks : 80

Answer any **one** Group as per your Syllabus

Answer from **all** the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

GROUP — A

(MODEL SYLLABUS)

(INDIAN ECONOMY)

SECTION — A

1. Fill in the blanks : 1 × 12
- (a) British colonial rule has _____ Indian handicrafts.

(Turn Over)

(2)

- (b) Per capita income was _____ in India at the time of independence.
- (c) Wide gap between birth rate and death rate _____ population growth.
- (d) Recent population policy was passed by Govt. of India in year _____.
- (e) Green Revolution _____ regional disparity.
- (f) High yielding varieties programme started in India in year _____.
- (g) NABARD was started in India in year _____.
- (h) First industrial policy of the Nation was passed in year _____.
- (i) Abolition of industrial licensing is a feature of _____ industrial policy of Govt. of India.
- (j) Investment limit of small scale industrial has been raised to _____ crores recently.

(3)

- (k) Share of service sector in GDP of the Nation is _____ in recent years.
- (l) ICT and IT comes under _____ sector.

SECTION – B

2. Answer any *eight* of the following within *two* or *three* sentences each : 2 × 8
- (a) What is colonialism ?
 - (b) What do you mean by British exploitation ?
 - (c) What is age structure ?
 - (d) Define unemployment.
 - (e) Define Birth Rate.
 - (f) What is ceiling on land holdings ?
 - (g) Define Cooperative.
 - (h) Define agricultural productivity.
 - (i) Who is money lender ?

(4)

- (j) State the classification of industries in 1956 industrial policy.

SECTION – C

3. Answer any *eight* of the following within about 75 words each : 3 × 8
- (a) What is Demographic dividend ?
 - (b) What is occupational structure ?
 - (c) What is Green Revolution ?
 - (d) Define cottage industries.
 - (e) What is consolidation of land holdings ?
 - (f) Define Service Sector.
 - (g) What is industrial sickness ?
 - (h) Define sex-composition.
 - (i) What is sustainability of services ?
 - (j) State inequality of income distribution.

(5)

SECTION – D

Answer all questions : 7 × 4

4. (a) Discuss the basic features of Indian economy at the time of independence. 7

Or

- (b) State the causes of inequality in income distribution in India.

5. (a) Discuss the causes of low productivity in India. 7

Or

- (b) Explain the sources of agricultural finance in India.

6. (a) Discuss the problems of small scale and cottage industries in India. 7

Or

- (b) Examine the industrial policy of India adopted in 1991.

(6)

7. (a) State the factors determining growth of service sector in India. 7

Or

- (b) Discuss the spread of ICT and IT and its policy measures.

GROUP – B

(OLD SYLLABUS)

(INDIAN ECONOMY)

SECTION – A

1. Answer *all* the following questions : 2 × 8

- (a) What do you mean by colonialism ?
(b) What is roytwari system of land tenure ?
(c) Explain three important causes drain during British rule.
(d) Define economic planning.

(7)

- (e) What do you mean by decentralised planning ?

- (f) What are the factors influencing density of population ?

- (g) What do you mean by poverty line ?

- (h) Explain the concept of educated unemployment.

SECTION – B

Answer **all** questions : 16 × 4

2. Explain the conditions of villages, urban handi-crafts, transport and trade during the pre-British period in India.

Or

Explain the forms of colonial exploitation in India and also its consequences.

3. Explain in details the emergence of capitalist enterprises in India during British period.

(8)

Or

What are the problems of stagnation, poverty and backwardness during the British period ?

4. Explain the characteristic of planning or a planned economy.

Or

Analyse the performance of decentralised planning in India and the causes of dismal performance.

5. Analyse the nature and extent of unemployment problem in India.

Or

Explain the poverty alleviation programmes of Govt. of India.

Or

2019

"Profit maximising output is smaller than the sales maximising output." Explain.

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from **both** the Sections as per direction

The figures in the right-hand margin indicate marks

Candidates are required to answer in their own words as far as practicable

(MICROECONOMICS - I)

SECTION – A

1. Answer the following : 2 × 8

- (a) What are the prime objectives to build economic models ?
- (b) What is the value of MRS in case of perfect complements ?

- (c) What is cross elasticity demand ?
- (d) What is the shape of the indifference curve in case of perfect substitutes ?
- (e) Explain the concept of marginal rate of technical substitution.
- (f) Explain the concept of CES function.
- (g) What relation exist between MRP and VMP under perfect competition and monopoly ?
- (h) What are the conditions of profit maximisation ?

SECTION - B

Answer all questions : 16 x 4

- 2. What are an economic models ? Explain the role of assumptions in deriving economic models.

Or

Explain the properties of budget set. How the budget line changes ? Discuss.

- 3. Explain and illustrate how price effect is decomposed into income effect and substitution effect.

Or

"Price elasticity of demand varies from zero to infinity." Explain.

- 4. What is expansion path ? Explain the expansion path of a linear homogenous production function.

Or

Explain various economics of scale and diseconomics of scale that accrue to the firm when it expands its scale of production.

- 5. Profit maximisation remains the most important objective of firm inspite of multiplicity of other alternative objectives. Explain.

2019

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from **both** the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

(MACROECONOMICS-I)

SECTION — A

1. Answer the following questions : 2 × 8

- (a) Explain the concept Marginal Propensity to Consume (MPC).
- (b) What relation exist between APC and MPC in long-run ?

(Turn Over)

- (c) Why does is curve slope downward ?
- (d) When expansionary monetary policy is adopted, what happens to interest rate and level of income ?
- (e) What is liquidity trap ?
- (f) Define the concept of money multiplier.
- (g) What is trade cycle ?
- (h) Explain the concept of sacrifice ratio in context of policy of disinflation.

SECTION – B

Answer all questions : 16 x 4

- 2. What is consumption function ? Explain the factors that cause shift in consumption function.

Or

Explain the permanent income hypothesis of consumption. Explain its weakness.

- 3. Explain various measures of money supply in India.

Or

Discuss the Keynesian Theory of demand for money.

- 4. How LM Curve of derived from money market equilibrium ? Why does LM Curve slopes upward ?

Or

Explain the derivation of Aggregate Demand and Aggregate supply curves with the help of IS-LM analysis.

- 5. What is Phillips Curve ? What are its policy implications ? Explain.

Or

Explain Hawtrey's monetary theory of trade cycle. Show that his model of business cycle is self-generation.

2019

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from both the Sections as per direction

*The figures in the right-hand margin indicate marks
Candidates are required to answer in their own words
as far as practicable*

(STATISTICAL METHODS FOR ECONOMICS)

SECTION—A

1. Answer the following questions : 2 x 8

- (a) What is meant by classification of data ?
- (b) What relation exist between mean, median and mode in a moderately asymmetrical distribution.
- (c) What is positive correlation.

(Turn Over)

(2)

- (d) If $r = 0.6$, $\sigma_x = 4$ and $b_{xy} = 0.8$, then find the value of σ_y .
- (e) What is secular trend ?
- (f) From the chain base index numbers given below prepare the fixed base index numbers.
- | | | | |
|------|------|------|------|
| 2007 | 2008 | 2009 | 2010 |
| 80 | 110 | 120 | 90 |
- (g) One card is drawn from a standard pack of 52. What is the probability that it is either a king or queen.
- (h) The mean of the poisson distribution is 2.25. Find the value of β_1 and β_2 .

SECTION - B

Answer all questions : 16 x 4

2. (a) Prove that $AM \geq GM \geq HM$.
- (b) The first four central moments of a distribution are 0.16, -36 and 120 respectively. Comment upon the skewness and kurtosis of the distribution.

AH ECO-07

(Continued)

(3)

Or

- (a) Explain the mathematical properties of Standard deviation.
- (b) The population of a country has increased from 84 million in 2001 to 108 million in 2011. Find the annual rate of growth of population.
3. (a) Write a note on Karl Pearson's coefficient of correlation.
- (b) Compute Spearman's rank correlation for the following observation.

Candidate 1 2 3 4 5 6 7 8

Judge X 20 22 28 23 30 30 23 24

Judge Y 28 24 24 25 26 27 32 30

Or

- (a) Distinguish between correlation and regression.

AH ECO-07

(Turn Over)

(4)

(b) Find the regression coefficients of Y on X and X on Y form the following data :

$$\Sigma X = 50, \bar{X} = 5, \Sigma Y = 60, \bar{Y} = 6, \Sigma XY = 350$$

Variance of $X = 4$ and Variance of $Y = 9$.

4. (a) Write a note on Seasonal Variation.

(b) The annual production figure (in thousand tonnes) of a fertilizer factory given below :

Year	2011	2012	2013	2014	2015	2016	2017
Production	70	75	90	91	95	98	100

Fit a straight line trend by the method of least square.

Or

(a) What are the problems in the construction of index numbers ? Explain.

(b) Calculate Fisher's ideal index from the following data :

(5)

Commodity	2016		2017	
	Price	Expenditure	Price	Expenditure
A	8	80	10	120
B	10	120	12	96
C	5	40	5	50
D	4	56	3	60
E	20	100	25	150

5. (a) Explain the addition theorem of probability.

(b) The probability that a man fishing at a particular place will catch fish 1, 2, 3, 4 fish are 0.4, 0.3, 0.2 and 0.1 respectively. What is the expected number of fish caught.

Or

(a) Explain the properties of binomial distribution.

(b) If the probability of defective bolt is 0.1. Find (i) Mean (ii) The standard deviation of defective bolts in a total of 900. Also calculate skewness and kurtosis.

Total Pages—3

AG ECO—01

2019

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from **both** the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

(INDIAN ECONOMY-I)

SECTION – A

1. Answer *all* the following questions : 2 × 8
- (a) What is the meaning of Drain ?
 - (b) What is the Zamindari system of land tenure ?
 - (c) What are the main implications of planning ?

(Turn Over)

(2)

- (d) Mention four important objectives of planning in India.
- (e) Explain the condition of road communication during British Period.
- (f) Explain the trends of urbanisation of India.
- (g) What do you mean by human capital formation ?
- (h) Define relative poverty.

SECTION – B

Answer all questions : 16 x 4

2. Explain in details the conditions of agriculture and industries during Pre-British Period.

Or

Explain various impacts of British colonial rule on the Indian Economy.

3. Explain the conditions of Indian economy at the time of Independence.

AG ECO-01

(Continued)

(3)

Or

Discuss the problems of stagnation, poverty and backwardness during British Period.

4. Analyse the salient features of India's Five Year Plan.

Or

Give a critical appraisal of the achievements of Five Year Plan in India.

5. Analyse the problems of over population in India.

Or

Explain the nature and extent of Unemployment problem in India.

AG ECO-01

BA-2,500

2018

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from both the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

(MICROECONOMICS - I)

SECTION – A

1. Answer the following : 2 × 8
- (a) What is Economic model ?
 - (b) What is MRS ?
 - (c) What is cross elasticity of demand ?
 - (d) What is demand function ?

(Turn Over)

(2)

- (e) What is Increasing Returns to Scale ?
- (f) What is Economics of Scope ?
- (g) What are conditions of profit maximisation ?
- (h) Distinguish between Accounting profit and Economic profit.

SECTION - B

Answer all questions : 16 x 4

2. (a) What are the main assumptions of indifference curve analysis to consumption ? Explain the main characteristics of indifference curve analysis.

Or

- (b) What are Economic Models ? What are its general features ? Build a hypothetical micromodel of price determination.

3. (a) Explain different methods to measure price elasticity of demand.

AH ECO-05

(Continued)

AH ECO-05

BA-2,200

(3)

Or

- (b) Distinguish between income and substitution effect. Use the compensation variation of income method to show substitution effect for change in price.

4. (a) State the law of diminishing returns. Why does diminishing returns to variable factors occur eventually ? Can they become negative ? If so, why ?

Or

- (b) Show increasing, constant and decreasing returns to scale through isoquants. What factors cause increasing returns to scale ?

5. (a) Explain the hypothesis of profit maximisation.

Or

- (b) What is Profit Function ? Explain its properties.

2018

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from both the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

(MACROECONOMICS-I)

SECTION—A

1. Answer the following questions : 2 × 8
- (a) What is the difference between APC and MPC ?
 - (b) Explain the meaning of 'real balance effect'.
 - (c) What is meant by liquidity preference ?

(Turn Over)

(2)

- (d) What is narrow money (M_1) ?
- (e) Why does IS curve slope downward ?
- (f) What is meant by money market equilibrium ?
- (g) What is meant by trade-off between inflation and unemployment ?
- (h) What is meant by recession ?

SECTION -- B

Answer all questions : 16 × 4

- 2. (a) Explain Keynes' psychological law of consumption. Explain its importance in determination of income and employment in the economy.

Or

- (b) What is Relative Income Hypothesis ? How does it differ from Keynes' Absolute Income Hypothesis ? Explain the shortcomings of the Relative Income Hypothesis.

AHECO -06

(Continued)

(3)

- 3. (a) Explain the concept of money supply. What are the factors responsible for rapid increase in money supply ?

Or

- (b) Explain Fischer's transaction approach and Cambridge cash Balance theory to the demand for money. How does the Cambridge theory differ from Fischer's approach ?

- 4. (a) What is product market equilibrium ? How is the IS curve derived ? What causes shift in the IS curve ?

Or

- (b) How is LM curve derived ? Show the effect of changes in money supply on rate of interest and income ?

- 5. (a) What is Phillip's curve ? What are its policy implications ?

AHECO -06

(Turn Over)

(4)

Or

(b) Explain Hawtrey's Monetary theory of business cycle. Show that his model of business cycle is self-generating.

2018

(3rd Semester)

Time : 3 hours

Full Marks : 80

Answer from both the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

**(STATISTICAL METHODS
FOR ECONOMICS)**

SECTION – A

1. Answer *all* the following questions : 2 × 8
- (a) What is Frequency distribution ?
- (b) Find median from the following :
- $X : 57, 58, 61, 42, 38, 65, 72, 66$

(Turn Over)

(3)

(ii) Prices of a particular commodity in Five Years in two cities are given below :

Prices in City--'A'	Prices in City--'B'
20	10
22	20
19	18
23	12
16	15

From the data find the city which had more stable price.

Or

(b) (i) Calculate mode from the following data :

Wages	No. of Workers
Less than 10	15
Less than 20	35
Less than 30	60
Less than 40	84
Less than 50	94
Less than 60	127
Less than 70	198
Less than 80	250

(Turn Over)

(2)

(c) What is negative correlation ?

(d) When there are two variables X and Y , what will be regression line of Y on X and X on Y .

(e) What is base shifting in Index Numbers ?

(f) Given the Trend Equation $Y_c = 40 + 2X$ where origin = 2001, X unit = 6 months, Y unit = annual production. Convert this into monthly trend equation.

(g) There are 52 cards in a pack of which 13 are diamond cards. What is the probability that a card is not diamond ?

(h) The mean of a binomial distribution is 20 and standard deviation is 4. Find p , q and n .

SECTION - B

16 x 4

Answer all questions :

2. (a) (i) Explain the important properties of Arithmetic Mean. Why is it superior to other methods of average ?

AHECO-07

(Continued)

AHECO-07

(ii) Two samples of 100 and 150 respectively have mean 50 and 60 and standard deviation of 5 and 6. Find the mean and standard deviation of the combined sample of 250.

3. (a) (i) Explain the properties of Karl Pearson's co-efficient of correlation.

(ii) A random sample of 5 college students is selected and their grades in Mathematics and Statistics are found to be

Mathematics	85	60	73	40	90
Statistics	93	75	65	50	80

Calculate the rank-correlation coefficient.

Or

(b) (i) What are regression lines ? Explain the mathematical properties of regression.

(ii) Given the following data, estimate the marks in Mathematics obtained by a student who has scored 60 marks in English :

Mean of marks in Mathematics = 80

Mean of marks in English = 50

S. D. of marks in Mathematics = 15

S. D. of marks in English = 10

Co-efficient of correlation = 0.4

4. (a) (i) Explain the uses of moving average method in time series. Point out its limitations.

(ii) Calculate trend values of profit for all these years and estimate figures for 2017 :

Year	2011	2012	2013	2014	2015	2016
Profit (in lakhs)	83	92	71	90	169	191

Or

(b) (i) What are the tests of good Index Numbers ? Define Fisher's Ideal Index Numbers and show that it satisfies these tests.

Or

- (b) (i) How Poisson distribution is different from Binomial distribution ? Under what conditions Poisson distribution is applicable.
- (ii) In a normal distribution 31% of the items are under 45 and 8% are over 64. Find the mean and standard deviation of the distribution.

(ii) The following table gives group price Index Number and percentage of expenditure on various groups obtained from inquiries in to budget of the middle class Families in a town :

Group	Percentage of Expenditure	Group price in 2014	Index Number in 2016
Food	35	350	446
Fuel and Lighting	10	220	330
Clothing	20	230	400
Rent	15	160	105
Miscellaneous	20	190	340

What changes are seen in the level of cost of living in 2016 compared to 2014.

- 5. (a) (i) Point out the important properties of normal distribution.
- (ii) The average percentage of failure in a certain examination is 40. What is the probability that out of a group of 6 candidates atleast 4 passed in the examination ?

(Continued)

2017

(Semester-III)

Time : 3 hours

Full Marks : 80

The figures in the right-hand margin indicate marks

Answer from both the Sections as per direction

(Indian Economy- I)

SECTION -A

Answer **all** questions. 2 × 8

1. Answer the following :

- (a) What was Zamindari system ?
- (b) What is the meaning of self sustaining villages of India in the pre- British rule ?
- (c) What is the meaning of economic drains during British rule ?
- (d) What is the meaning of self- reliance as a strategy of planning ?

(Turn Over)

(e) What is import substitution ?

(f) What is public sector ?

(g) What is meant by 'Poverty Line' ?

(h) What is the meaning of 'Unproductive Consumers' ?

SECTION-B

Answer all questions

16 × 4

2. (a) Discuss the economic condition of India before the British rule.

Or

(b) Describe the main causes of poverty in India during British rule.

3. (a) 'Indian economy was in a state of stagnation at the time of independence'- explain.

Or

(b) Examine the composition of national income and occupational structure at the time of independence.

4. (a) Discuss the main objectives of Indian planning.

Or

(b) What was the approach to planning in the earlier five year plans ? What changes are observed in this approach in the recent past ?

5. (a) Discuss the adverse effects of population growth in the Indian economy.

Or

(b) Discuss the main causes of poverty in India.