P - III (1+1+1) H/17

2017
ECONOMICS (Honours)
Fifth Paper
[Statistics]

Full Marks : 100   Time : Four Hours

The figures in the margin indicate full marks.

Section - I

[Objective Type Questions (Compulsory)]

$2 \times 10 = 20$

1. (a) Distinguish between variable and attributes.

(b) AM of two observations is 25, their GM = 15. Find their Hermonil mean (HM).

(c) Distinguish between Classification and Tabulation.

(d) In a moderately asymmetrical distribution, the values of Mode and Median are 20 and 24 respectively. Locate the value of Mean.

(e) Define 'base period' and 'current period' in Index Number.

(f) State the relationship between correlation coefficient and regression coefficient.

(g) What is the difference between SRSWR and SRSWOR ?

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(2)

(h) Distinguish between standard error and standard deviation.

(i) Under what circumstances two events A and B are said to be statistically independent ?

(j) Define 'seasonal variation' of time series data.

Section - II

[Short Essay Type Questions]

Answer any *four* questions.   10×4=40

2. (i) Let A, G and H represent AM, GM and HM of two observations. Prove that $G^2 = AH$.

(ii) For the two observations, prove that AM ≥ GM ≥ HM.   5+5=10

3. Prove that the standard deviation calculated from two values is equal to half their difference.

4. The scores of two batsmen A and B, in ten innings during a certain season, are as under :

A   32   28   47   63   71   39   10   60   96   14

B   19   31   48   53   67   90   10   62   40   80

Find which batsman is more consistent in scoring.

5. Show that the correlation coefficient lies between −1 and +1.

6. Show that neither Laspeyres formula nor Paasche's Formula obeys time reversal and factor reversal tests of index numbers.

(3)

7. Two examiners ranked 10 students, doing project work under them in order of quality of work. Calculate Spearman's rank correlation coefficient from the rankings of examiners.

Students	1	2	3	4	5	6	7	8	9	10
Examiner - I	2	1	4	5	3	7	6	10	9	8
Examiner - II	3	4	2	5	1	6	7	9	8	10

8. (a) If event A and B are independent prove that $\bar{A}$ and $\bar{B}$ are also independent.

(b) Given that $P(A) = \dfrac{3}{8}$, $P(B) = \dfrac{5}{8}$ and $P(A+B) = \dfrac{3}{4}$. Find $P\left(\dfrac{A}{B}\right)$ and $P\left(\dfrac{B}{A}\right)$.   5+5=10

9. (a) Define Binomial Probability distribution.

(b) If a sample of 5 items is drawn randomly from a lot containing 10% defective items, what is the probability of getting not more than one defective item ?   3+7=10

Section - III

Answer any *two* questions.   20×2=40

10. (a) What is coefficient of variation ? What purpose does it serve ?

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(b) Prove that if $\sigma_x = 0$, then all the variate values are equal.

(c) Calculate the standard deviation of the first 'n' natural numbers. 6+6+8=20

11. (a) Following table gives the change in the price and consumptions of three commodities in the workers consumption busket. Compute Fisher's ideal index number from the data given in the table.

Commodities	2005		2015	
	Price	Consumption	Price	Consumption
Wheat	100	10	110	6
Rice	150	15	170	18
Cloth	5	50	4	30

(b) What is cost of Living Index number ? State the uses of it.

(c) Why Fisher's index number is called ideal index number ? 10+6+4=20

12. (a) State the advantages and disadvantages of moving average method for determining trend line.

(b) Fit a trend line from the following data using any method.

Year : 2001 2002 2003 2004 2005

Value : 380 400 650 720 840

5+5+10=20

(5)

13. (a) Derive the formulae of central moments expressed in terms of moments about an arbitrary origin. What is Sheppard's correction of moments ?

(b) Calculate the coefficient of Skewness from the following :

Class limit :	10-19	20-29	30-39	40-49	50-59	60-69
Frequency :	5	8	14	20	10	3

6+6+8=20

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2017

ECONOMICS (Honours)

Sixth Paper

Full Marks : 100   Time : Four Hours

The figures in the margin indicate full marks.

Group - A

(International Trade)

Section - I

[Objective Type Questions (Compulsory)]

Answer *all* questions.   2×5=10

1. (a) State two important properties of Trade Indifference Curve.

(b) What is an Optimum Tariff ?

(c) State two important differences between GATT and WTO.

(d) What is meant by international liquidity ?

(e) What is devaluation ? State one demerit of it.

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(2)

Section - II

[Short essay type questions]

Answer any *two* questions.   10×2=20

2. State and explain Rybenzynsky theorem.

3. Critically evaluate the Absolute Cost Advantage Theory.

4. Discuss the measures to be taken to correct the deficit in BOP account.

5. Discuss the main objectives and functions of WTO.

Section - III

[Essay type questions]

Answer any *one* question.   20×1=20

6. (a) Examine the Comparative Cost Advantage when production takes place under decreasing cost condition.

(b) How would you show the gains from trade in a Ricardian frame work if production possibility curve is concave to the origin ?   10+10=20

7. (a) Prove the superiority of optimum tariff over free trade.

(b) How would you measure optimum tariff ?   10+10=20

(3)

Group - B

(Public Finance)

Section - I

[Objective Type Questions (Compulsory)]

Answer *all* questions.   2×5=10

8. (a) What is meant by 'double taxation of savings' ?

(b) What is meant by merit goods ?

(c) Which of the following is a public good and why ?

    (i) Book

    (ii) Car

    (iii) Defence

    (iv) Private nursing home

(d) Ad-valorem tax is a tax on —

    (i) Value

    (ii) Value added

    (iii) Quantity

    (iv) None of the above

Choose the correct one and justify.

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(e) Budgetary deficit does not take into account —

(i) Revenue deficit

(ii) Fiscal deficit

(iii) BOP deficit

(iv) Interest payment on public debt.

Section - II

[Short Essay Type Questions]

Answer any *two* questions.   10×2=20

9. What is a direct tax ? Write merits and demerits of a direct tax.   2+8=10

10. Discuss the effect of public debt on :

(i) money supply

(ii) price level

(iii) rate of interest.   4+3+3=10

11. What are the causes of growing public expenditure in India ?   10

12. Show how the welfare effects of taxes on buyers and sellers depend on the elasticity of the demand and supply curves.   10

(5)

Section - III

[Essay Type Questions]

Answer any *one* question.   20×1=20

13. Discuss the equilibrium price and quantity level of a monopolist firm if

(i) a specific excise tax is imposed.

(ii) an advalorem tax is imposed.   10+10=20

14. On what basis should a government choose between

(i) loans and tax.

(ii) internal and external debt.

    10+10=20

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2017

ECONOMICS (Honours)

Seventh Paper

Full Marks : 100   Time : Four Hours

The figures in the margin indicate full marks.

Group - A

(Development Economics)

Section - I

[Objective Type Questions]

1. Answer any *five* questions :   2×5=10

   (a) What are the indicators used for computing Human Development Index (HDI) ?

   (b) What is 'low level equilibrium trap' ?

   (c) Define capital intensive technology of production.

   (d) What is capital formation ?

   (e) What is incremental capital-output ratio ?

   (f) What is balanced growth ?

   (g) What is mixed economy ?

   (h) What do you mean by 'Critical Minimum Effort'?

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(2)

Section - II

[Short Essay Type Questions]

Answer any *two* questions.   10×2=20

2. (a) Distinguish between economic growth and economic development.

(b) State and explain some obstacles of economic development of under developed countries.   5+5=10

3. (a) Explain the role of capital-output ratio in development planning.

(b) State some problems faced in measuring capital-output ratio in developing countries.   6+4=10

4. (a) What is unbalanced growth ?

(b) Illustrate the process of unbalanced growth.   2+8=10

5. Make a comparison between Marxian theory of growth and Rostow's theory of growth.   10

Section - III

[Essay Type Questions]

Answer any *one* question.   20×1=20

6. (a) What is meant by demographic transition ?

(b) How does it affect economic development ?

(c) How it is affected by economic development ?   6+7+7=20

(3)

7. Explain critically the 'two-gap' model of economic development.

Group - B

(Indian Economic Issues and Planning)

Section - I

[Objective Type Questions]

8. Answer any *five* questions :   2×5=10

(a) Give two examples of indirect tax in India.

(b) What is LPG ? When it was introduced in Indian Economy ?

(c) What is economic planning ?

(d) State two features of Indian money market.

(e) State any two problems of external sector in India.

(f) Write two functions of NABARD.

(g) What is 'SENSEX' ?

(h) What do you mean by 'Bank Rate' ?

Section - II

[Short Essay Type Questions]

Answer any *two* questions.   10×2=20

9. Explain the structure and composition of Indian money market.   10

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10. Write a short note on 'Finance Commission' of India.

10

11. What were the main objectives of economic reform introduced in India in 1990s.

10

12. Explain the disinvestment policy of the Government of India.

10

Section - III

[Essay Type Questions]

Answer any *one* question.   20×1=20

13. (a) Write a note on Centre-State Financial relation in India.

(b) Do you think that the present system need to be revised ? If yes, why ?   14+6=20

14. Discuss the changes of economic policy of Government of India towards public sector.   20

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ECONOMICS (Honours)

Eighth Paper

Full Marks : 100   Time : Four Hours

The figures in the margin indicate full marks.

Group - A

(Environmental Economics)

Section - I

[Objective Type Questions (Compulsory)]

2×5=10

1. (a) Define pollution. Give examples of few pollutants.

   (b) What is sustainable development ?

   (c) Distinguish between public goods and externalities.

   (d) What are common property resources ?

   (e) What do you mean by "Tragedy of Commons" ?

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(2)

Section - II

[Short Essay Type Questions]

Answer any *two* questions.   10×2=20

2. (a) Define externality in respect of public goods.

(b) Distinguish between positive and negative externalities with suitable examples.   4+6=10

3. (a) What are environmental resources ? Explain with examples.

(b) Distinguish between renewable and non-renewable resources with examples.   4+6=10

4. (a) When and how the production and conception residuals cause environmental pollution ?

(b) Mention some sources of pollution in the environment.   6+4=10

5. Make a brief note about the cause of market failure in the light of environmental qualities.   10

Section - III

[Essay Type Questions]

Answer any *one* question.   20×1=20

6. (a) Define externalities of economic activities.

(b) How do externalities result inefficiencies and sub-optimal production ?

(3)

(c) Explain the method of modeling environmental damage as negative externality.   4+6+10=20

7. (a) Distinguish between Pollution and Pollutants.

(b) Discuss the different types of pollutants hampering ambient quality.   10+10=20

Group - B

(Essay)

Write an essay on any *one* of the following.
     50×1=50

8. India's Economic Reform and Development.

9. Balanced vs Unbalanced Growth.

10. Poverty and Unemployment in India.

11. General Equilibrium and Welfare.

12. Theories of Consumption Function.

13. Measures of Central Tendency.

14. Commercial banking in India.

15. Indian Agricultural Sector.

16. Foreign Trade and Economic Development.

17. Demonetisation in India.

18. Unorganized Labour Market in India.

19. Global Warming and its effects.

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