D 12971 **(Pages : 5)** **Name.....**

Reg. No.....

FIRST SEMESTER M.A./M.Sc. DEGREE (REGULAR) EXAMINATION NOVEMBER 2020/2021

(CBCSS)

Development Economics

DEC 1C 04—QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS – I

(2020 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

General Instructions

1. *In cases where choices are provided, students can attend* **all** *questions in each section.*
2. *The minimum number of questions to be attended from the Section / Part shall remain the same.*
3. *The instruction if any, to attend a minimum number of questions from each sub section / sub part / sub division may be ignored.*
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Part A (Multiple Choice Questions)

Answer **all** *questions.*

Each question carries a weightage of $1/5$.

1. The function $f(x) = 2x^2 + 3x + 2$ is :
   (a) Quadratic. (b) Linear.
   (c) Cubic. (d) Reciprocal.
2. Any matrix for which A = A' is a :
   (a) Null matrix. (b) Singular.
   (c) Symmetric. (d) All the above.
3. Trace of a matrix is :
   (a) Largest column sum.
   (b) Sum of principal diagonal elements.
   (c) Sum of Principal diagonal elements.
   (d) None of these.

4. The derivative of $y = X$ is :

   (a) 1. (b) x.

   (c) 0. (d) x^2.

5. The total cost function is x^2, and then the marginal cost function is :

   (a) x^{-2}. (b) x^2.

   (c) $2x$. (d) x.

6. $\int 1.dx =$

   (a) $x + k$. (b) $1 + k$.

   (c) $\frac{x^2}{2} + k$. (d) $\log x + k$.

7. A matrix with equal number of rows and columns is called :

   (a) row matrix. (b) square matrix.

   (c) column matrix. (d) none.

8. A positive definite Hessian fulfils the second-order conditions for :

   (a) Maximum. (b) Minimum.

   (c) Both maximum and minimum. (d) None.

9. The general quadratic equation $ax^2 + bx + c = 0$ can be solved by using :

   (a) By factorization. (b) By quadratic formula.

   (c) By completing the square method. (d) All the above.

10. Which of the following area where difference equation can be applied ?

    (a) Cob-web Model. (b) Harrod-Domar model.

    (c) Both (a) and (b). (d) None of these.

11. The amount of money today is equal to series of payment in future :

    (a) Nominal value of annuity. (b) Sinking value of annuity.

    (c) Present value of annuity. (d) Future value of annuity.

12. The interest rate per year is 16 and the compounding occurs every quarter then interest rate per compounding period is :

    (a) 0.04. (b) 0.4.

    (c) 40. (d) 0.004.

13. $A = \begin{bmatrix} 2 & 4 \\ 3 & 5 \end{bmatrix} + B = \begin{bmatrix} 3 & 1 \\ 2 & 0 \end{bmatrix}$.

(a) $\begin{bmatrix} 5 & 4 \\ 6 & 0 \end{bmatrix}$. (b) $\begin{bmatrix} 6 & 4 \\ 6 & 0 \end{bmatrix}$.

(c) $\begin{bmatrix} 5 & 5 \\ 5 & 5 \end{bmatrix}$. (d) $\begin{bmatrix} -1 & 3 \\ 1 & 5 \end{bmatrix}$.

14. ———— is a point on the graph where the function crosses its tangent line and changes from concave to convex or vice versa.

(a) Equilibrium point. (b) Optimum point.

(c) Break even. (d) Inflection point.

15. X^{-a} equal to ————.

(a) $\frac{1}{x^a}$. (b) $-X^a$.

(c) $\frac{1}{x^{-a}}$. (d) $-x^{-a}$.

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any **five** *questions.*
Each question carries 1 *weightage.*

16. Define Explicit and implicit function.
17. Define Orthogonal matrix.
18. State Product rule on differentiation.
19. What do you mean by points of inflexion ?
20. State Discontinuous functions.
21. What you mean by Net Present Value ?
22. Define Rank of a Matrix.
23. Find the differential co-efficient of $4x^3 + 3x^2 - 2x + 7$.

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any **seven** *questions.*

Each question carries 2 *weightage.*

24. Find the first and the second order partial derivatives for $Z = 3x^3 - 2x^2y + 2xy^2 + y^3 + 8$.

25. Find the Rank of the Matrix $\begin{vmatrix} 1 & 2 & 3 \\ 3 & 6 & 9 \\ 2 & 4 & 6 \end{vmatrix}$.

26. Describe different types of economic functions and its graphs.

27. The total cost function is given by $TC = \frac{1}{10}x^2 + 5x + 200$. Find the MC and AC.

28. If £ 600 is invested for 3 years at 8% interest compounded annually at the end of each year, what will the final value of the investment be ?

29. What is meant by consumer's surplus ? The demand function of a commodity is $y = 36 - x^2$. Find the consumer's surplus for $y_0 = 11$.

30. Solve the simultaneous equations and find the value of x, y and z

    $14.5x + 3y + 45z = 340$

    $25x - 6y - 32z = 82$

    $9x + 2y - 3z = 16$.

31. A firm faces the demand schedule $P = 184 - 4q$ and the Tc function $TC = q^3 - 21\,q^2 + 160q + 40$. What output will maximize profit ?

32. Discuss the merits and demerits of NPV method.

33. Explain different rules of differentiation.

(7 × 2 = 14 weightage)

Part D (Essay Type Questions)

Answer any **two** *questions.*
Each question carries 4 *weightage.*

34. Solve the system of equations by Crammer's rule :

    $5x - 6y + 4z = 15$

    $7x + 4y - 3z = 19$

    $2x + y + 6z = 46$

35. For the data given below, determine (a) the market price Pt in any time period and (b) the equilibrium price Pe.

$Q_{dt} = 180 - 0.75P_t$, $Q_{st} = -30 + 0.3P_{t-1}$ $P_0 = 220$

36. Use Lagrange multipliers to find the maximum and minimum values of $f(x, y, z) = 4x + 2y + z$ subject to the constraint $x^2 + y^2 + z^2 = 4$.

37. What is the present value of the following cash flow stream if the discount rate is 14 percent ?

Year	0	1	2	3	4
Cash flow	5,000	6,000	8,000	9,000	8,000

(2 × 4 = 8 weightage)

D 12970 (Pages : 4) Name.....

Reg. No.....

FIRST SEMESTER M.A./M.Sc. DEGREE (REGULAR) EXAMINATION NOVEMBER 2020/2021

(CBCSS)

Development Economics

DEC 1C 03—ECONOMICS OF DEVELOPMENT AND GROWTH I

(2020 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

General Instructions

1. *In cases where choices are provided, students can attend* **all** *questions in each section.*
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Part A

Answer **all** *questions.*
Each questions carries 1 / 5 weightage.

Multiple Choice Questions :

1. The new HDI is measured in terms of :

   (a) Geometric Mean. (b) Arithmetic Mean.

   (c) Median. (d) Harmonic Mean.

2. India's second five-year plan is based on :

   (a) Big push. (b) Unbalanced growth.

   (c) Balanced growth. (d) Circular causation.

3. Theil index is used to measure: :

   (a) Poverty. (b) Unemployment.

   (c) Inequality. (d) Inflation.

Turn over

4. Which of the following is not part of the HDI ?

   (a) Life expectancy. (b) GNP per capita.

   (c) Education attainment. (d) Infant mortality.

5. Which stage is known as water shed on the life of a society in Rostow's theory ?

   (a) Traditional society. (b) Take off.

   (c) Drive to maturity. (d) High mass consumption.

6. Which of the following model used the Harrodian dynamic approach and the Keynesian techniques of analysis ?

   (a) Domar model. (b) Solow model.

   (c) Kaldor model. (d) Romer model.

7. Who advocated wage good model ?

   (a) Robinson. (b) Walrus.

   (c) Meade. (d) Brahmannanda.

8. Optimum theory of population developed by :

   (a) Malthus. (b) Leibenstein.

   (c) Edwin Cannan. (d) Ricardow.

9. The big push strategy of development was firstly advocated by :

   (a) Hirschman. (b) Lewis.

   (c) Nurkse. (d) Rodan.

10. Perspective planning refer to :

    (a) Annual planning. (b) Five yearly planning.

    (c) Long term planning. (d) None of the above.

11. The concept of Unbalanced growth has not been advocated by :

    (a) H.W. Singer. (b) A. Lewis.

    (c) A.O. Hirsehman. (d) C.P. Kindleberger.

12. The organic composition of capital refers to :

    (a) Ratio of constant capital to variable capital.

    (b) Ratio of constant capital to total capital.

    (c) Rate of surplus.

    (d) Rate of profit.

13. Who among the following economist, Developed theory of Circular causation ?

    (a) G. Myrdal. (b) R. Nurkse.

    (c) J. Robbinson. (d) K. J. Arrow.

14. According to Kuznet, during the process of development the income inequalities tend to :

    (a) Increase. (b) Decrease.

    (c) Increase first and then decrease. (d) Decrease first and then increase.

15. Who put forward the theory of 'Financial dualism' ?

    (a) J. H. Boeke. (b) Higgins.

    (c) A. Lewis. (d) H. Myint.

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any **five** *questions.*
Each question carries a weightage of 1.

16. Define economic planning.

17. What is knife edge equilibrium ?

18. Write a note on Big push theory.

19. What is Low level equilibrium trap ?

20. What you mean by Technological dualism ?

21. What are the components of PQLI ?

22. Explain Warranted growth rate.

23. Write a note on Palma ratio.

(5 × 1 = 5 weightage)

Turn over

Part C (Short Answer Questions)

Answer any **seven** *questions.*
Each question carries weightage of 2.

24. Evaluate Kaldor's model of growth with reference to less developed countries.
25. Explain the concept of Take-off. Discuss whether Indian economy has achieved the stages of Take-off.
26. Bring out the main defects of Mahalanobis model of growth.
27. Discuss the Uzava model of economic growth.
28. Give an account of Kuznet's inverted U hypothesis.
29. Explain Myrdal's theory of regional development.
30. Examine the Keynesians criticism on classical theory.
31. How does Romar's endogenous growth theory differ from traditional Neo-classical model ?
32. What are the implications of the Prebisch Singer hypothesis ?
33. Critically examine Technological Dualism.

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any **two** *questions.*
Each questions carries weightage of 4.

34. Distinguish between Economic growth and Economic development. Do you think Growth with Development is desirable?
35. Describe Harrod-Domar model of growth. Bring out its implication.
36. Make critical appraisal of Solow model of long run growth.
37. Discuss the applicability of Marxian theory of economic development to under developed countries.

(2 × 4 = 8 weightage)

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Reg. No.....

FIRST SEMESTER M.A./M.Sc. DEGREE (REGULAR) EXAMINATION NOVEMBER 2020/2021

(CBCSS)

Development Economics

DEC 1C 02—MACROECONOMICS : THEORIES AND POLICIES I

(2020 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

General Instructions

1. *In cases where choices are provided, students can attend* **all** *questions in each section.*
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Part A (Multiple Choice Questions)

Answer **all** *questions.*
Each question carries 1/5 *weightage.*

1. According to short-run Philip's curve, there is a trade-off between :
   a) Interest rate and inflation.
   b) The growth of the money supply and interest.
   c) Unemployment and economic growth.
   d) Inflation and Unemployment.
2. If the money supply were increased, then :
   a) The IS curve would shift down to the left.
   b) The IS curve would shift up to the right.
   c) The LM curve would shift down to the right.
   d) The LM curve would shift up to the left.

Turn over

3. People are said to have identical rational expectations, if they :

   a) Assume that this year's inflation will be same as last year's inflation rate.

   b) Assume that this year's inflation rate will be equal to the average inflation rate over the past ten years.

   c) Merely guess that the inflation rate.

   d) Use all available information in forming their expectation about inflation.

4. According to ———————— trade cycles occur due to onset of innovations.

   a) Hawtrey. b) Adam Smith.

   c) JM Keynes. d) Schumpeter.

5. A curve shows different combinations of the output level and the rate of interest which bring about equilibrium in the money market :

   a) LM curve. b) IS curve.

   c) AD curve. d) AS curve.

6. Which of the following theories relates business cycle as a monetary phenomenon :

   a) Keynes theory of business cycle.

   b) Friedman's theory of business cycle.

   c) Hawtrey's theory of business cycle.

   d) Both (b) and (c).

7. Absolute income hypothesis explains :

   a) Consumer behaviour. b) Producer behaviour.

   c) Inflation. d) Government expenditure.

8. According to rational expectation hypothesis :

   a) People make only small mistakes in forecasting inflation.

   b) People do not make avoidable mistake in forecasting inflation.

   c) People do not make random mistakes in forecasting inflation.

   d) People do not make mistakes in forecasting inflation.

9. According to Keynesian consumption function, as income increases APC :

   a) Falls. b) Rises.

   c) Remains constant. d) None of the above.

10. In the IS-LM model, investment depends on the :

    a) Rate of interest. b) Level of income.

    c) Both (a) and (b). d) Either (a) or (b).

11. Who stated that the interaction between multiplier and accelerator give rise to cyclical fluctuation in economic activity :

    a) Friedman. b) Samuelson.

    c) Keynes. d) Schumpeter.

12. If an increase in investment leads to bigger increase in national income, then this can be called as :

    a) Accelerator. b) Aggregate demand.

    c) Monetarism. d) Multiplier.

13. The transaction motive of money demand is a function of ———————.

    a) Interest rate. b) Income.

    c) Profit. d) None of the above.

14. In the Keynesian concept of demand for money, consumers hold their assets in ——————— forms.

    a) Only money. b) Only bond.

    c) Portfolio. d) Either (a) or (b).

15. Dussenberry explains consumption function on the basis of :

    a) Demonstration effect. b) Ratchet effect.

    c) Veblen effect. d) Bothe (a) and (c).

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any **five** *questions.*
Each questions carries 1 *weightage.*

16. Explain crowding out effect.

17. What is an IS curve ?

18. Explain Taylor rule.

19. What do you mean by NAIRU ?

Turn over

20. Explain fisher effect.

21. What is marginal efficiency of investment ?

22. What are the three main motives of holding money according to Keynes ?

23. What is money multiplier ?

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any **seven** *questions.*
Each questions carries 2 *weightage.*

24. Explain the H theory of money supply.

25. Write a note on Life cycle hypothesis.

26. Explain the major measures of money supply.

27. Briefly explain the objectives of macroeconomic policies.

28. Analyse the structuralist theory of inflation.

29. Explain the Kuznets consumption puzzle.

30. Briefly explain the short run and long run Philips

31. How do you interpret Tobin's Q-ratio ?

32. What is Schumpeter's theory of innovation ?

33. Explain Accelerator theory of investment.

(7 × 2 = 14 weightage)

Part D (Essay Type Questions)

Answer any **two** *questions.*
Each questions carries 4 *weightage.*

34. Explain general equilibrium using IS-LM analysis.

35. Analyse Friedman's restatement of quantity theory of money.

36. Critically examine the absolute income hypothesis and relative income hypothesis.

37. Explain the major instruments of fiscal and monetary policy.

(2 × 4 = 8 weightage)

D 12968 (Pages : 4) Name.....

Reg. No.....

FIRST SEMESTER M.A./M.Sc. DEGREE (REGULAR) EXAMINATION NOVEMBER 2020/2021

(CBCSS)

Development Economics

DEC 1C 01—MICROECONOMICS : THEORY AND APPLICATIONS-I

(2020 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

General Instructions

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Part A

(Multiple Choice Questions)

Answer **all** *questions.*

Each question carries 1/5 *weightage.*

1. Diversification is the measure of ————.

   a) Reducing risk. b) Variability.

   c) Utility. d) None.

2. If the LAC curve falls as output expands, this is due to :

   a) Economies of scale. b) The law of diminishing returns.

   c) Diseconomies of scale. d) Any of the above.

3. Oligopoly is characterized by :

   a) Two sellers. b) One seller.

   c) Few sellers. d) Few buyers.

Turn over

4. Bernoulli hypothesis holds that individual takes decision under risky and uncertain decisions on the basis of :

   a) Expected monetary value.

   b) Expected utility.

   c) Marginal utility of money.

   d) Both expected monetary value and expected utility.

5. If an oligopolist incurs losses in the short run, then in the long run :

   a) The oligopolist will go out of business.

   b) The oligopolist will stay in business.

   c) The oligopolist will break even.

   d) Any of the above is possible.

6) All the following curves are U-shaped except :

   a) AVC curve. b) AFC curve.

   c) AC curve. d) MC curve.

7) Which of the following defines marginal utility ?

   a) The change in total utility divided by the price of a product.

   b) The maximum amount of satisfaction from consuming a product.

   c) The total satisfaction received from consuming as much of the product that is available for consumption.

   d) The additional satisfaction received from consuming one more unit of a product.

8. Which of the following would decrease the supply of wheat ?

   a) Decrease in the price of pesticides.

   b) An increase in the demand for wheat.

   c) A rise in the price of wheat.

   d) An increase in the price of corn.

9. Cross elasticity of demand between tea and sugar is Willingness to pay minus actual payment is equal to ————.

   a) Consumer surplus. b) Producers surplus.

   c) Demand. d) None.

10. Market situation in which only two seller is called ————.

a) Duopoly. b) Monopoly.

c) Oligopoly. d) None.

11. In Cobb Douglas production function elasticity of substitution is equal to ————.

a) One. b) Infinity.

c) Zero. d) None.

12. Cross elasticity of demand between tea and sugar is Willingness to pay minus actual payment is equal to ————.

a) Consumer surplus. b) Producers surplus.

c) Demand. d) None.

13. Transformation curve is called ————.

a) PPC. b) Isoquant.

c) Iso revenue. d) None.

14. Indifference curve is ————.

a) Convex. b) Concave.

c) u shape. d) None.

15. In determinant demand curve is feature of ————.

a) Oligopoly. b) Monopoly.

c) Monopolistic competition. d) None.

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any **five** *questions.*
Each question carries a weightage of 1.

16. Explain comparative static analysis.
17. Explain risk averter.
18. What is Veblen effect ?
19. What is a learning curve ?
20. What is meant by elasticity of substitution ?
21. What is a linearly homogeneous product ion function ?
22. Explain Chamberlin model of oligopoly.
23. Explain Nerlove's model.

(5 × 1 = 5 weightage)

Turn over

Part C (Short Answer Questions)

Answer any **seven** *questions.*
Each question carries a weightage of 2.

24. Explain how the N-M utility index is constructed.
25. Explain prisoners dilemma.
26. Explain Sweezy's kinked demand model.
27. Examine the equilibrium of the multi product firm in terms of production possibility curve and isorevenue line.
28. Explain Friedman-Savage hypothesis.
29. Discuss the Stackelberg's model of oligopoly.
30. Explain Harrodian approach to technical progress.
31. Explain the types of cost.
32. Explain the properties of CES production function.
33. Explain habit creation principle.

(7 × 2 = 14 weightage)

Part D (Essay Type Questions)

Answer any **two** *questions.*
Each question carries a weightage of 4.

34. Explain the collusive models of oligopoly.
35. Examine the basic concepts of the theory of games.
36. Discuss Linear Expenditure System.
37. Critically examine Cournot duopoly model.

(2 × 4 = 8 weightage)