

**SECOND SEMESTER M.A. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2022**

(CBCSS)

Development Economics

DEC 2C 08—QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS—II

(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.*
4. *There will be an overall ceiling for each Section / Part that is equivalent to the maximum weightage of the Section / Part.*

Part A (Multiple Choice Questions)*Answer all fifteen questions.**Each question carries 1/5 weightage.*

1. If A and B are independent events with $P(A) = 0.5$ and $P(B) = 0.4$, then $P(A \cup B)$ is :
(a) 0.9. (b) 0.7.
(c) 0.5 (d) 0.4.
2. If the two events A and B are not independent, then
(a) $P(A \cap B) = P(A) \cdot P(B)$. (b) $P(A \cap B) = P(A) \cdot P(B|A)$.
(c) $P(A \cap B) = P(A) + P(B)$. (d) None of these.
3. The expected value of a constant is :
(a) Zero. (b) The constant itself.
(c) One. (d) Cannot be determined.
4. The parameters of a binomial random variable with mean 4 and variance 3 are :
(a) $\left(8, \frac{1}{2}\right)$. (b) $\left(12, \frac{1}{3}\right)$.
(c) $\left(16, \frac{1}{4}\right)$. (d) $\left(20, \frac{1}{5}\right)$.

Turn over

5. For a binomial distribution :
- (a) mean < variance. (b) mean > variance.
(c) mean = variance. (d) None of these.
6. For a normal distribution, measure of kurtosis is always :
- (a) Equal to 0 (b) Not equal to 0.
(c) Equal to 3. (d) Not equal to 3.
7. If $X \sim N(4, 1)$, then $P(X > 4)$ is :
- (a) 0. (b) 0.25.
(c) 0.5. (d) 1.
8. _____ distribution is used to describe the behaviour of rare events.
- (a) Binomial. (b) Poisson.
(c) Normal. (d) Lognormal
9. The square root of the variance of an estimator is called :
- (a) Significance level. (b) Parameter.
(c) Statistic. (d) Standard error.
10. Square of a standard normal variate will follow :
- (a) χ^2 distribution. (b) t distribution.
(c) F distribution. (d) Normal distribution.
11. The distribution used for testing the equality of two population variances is :
- (a) Normal distribution. (b) t distribution.
(c) F distribution. (d) χ^2 distribution.
12. The distribution used for testing the equality of two population proportions is :
- (a) Normal distribution. (b) t distribution.
(c) F distribution. (d) χ^2 distribution.
13. Which of the following hypothesis shows a right tailed test ?
- (a) $H_0 : \mu = \mu_0$. (b) $H_1 : \mu \neq \mu_0$.
(c) $H_1 : \mu < \mu_0$. (d) $H_1 : \mu > \mu_0$.

14. The variance of mean of a random sample of size n from a normal population with variance σ^2 is :

(a) $\frac{\sigma}{n}$.

(b) $\frac{\sigma^2}{n}$.

(c) $\frac{\sigma}{\sqrt{n}}$.

(d) $\frac{\sigma^2}{\sqrt{n}}$.

15. The expectation of the mean of a random sample of size n from a normal population with mean μ is :

(a) $\frac{\mu}{n}$.

(b) $n\mu$.

(c) μ^2 .

(d) μ .

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any five questions.

Each question carries 1 weightage.

16. Three unbiased coins are tossed. What is the probability of getting atmost two heads ?
17. Obtain the probability of getting a sum of 9 when two dice are thrown simultaneously.
18. If Z is a standard normal variate, find $P(0.87 < Z < 1.28)$.
19. Define lognormal distribution.
20. Define standard error.
21. What do you mean by interval estimation ?
22. Define alternative hypothesis.
23. What do you mean by power of a test ?

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries 2 weightage.

24. Give the physical conditions for which binomial distribution can be applied.
25. The number of traffic accidents on a particular stretch of road during a month follows a Poisson distribution with a mean of 7. Find the probability of observing exactly three accidents on this stretch of road next month.

Turn over

26. A player is to toss three coins. He wins Rs. 10 if three heads appear, Rs. 5 if two heads appear and Re. 1 if one head appears. He will lose Rs. 12 if no head appears. What is the expected amount ?
27. Explain the properties of normal distribution.
28. A random sample of 50 Mathematics grades showed a mean of 75 and a standard deviation of 10. What are the 95 % confidence limits for the population mean ?
29. Discuss the major sampling distributions.
30. Discuss the desirable properties of a good estimator.
31. Explain the procedure for testing a hypothesis.
32. In a die throwing experiment the throw of 4 or 6 is considered as a success. Suppose 9000 times the die was thrown and resulted in 3240 successes. Is the data support the claim that the die is unbiased?
33. A die is thrown 180 times with the following results :

Number turned up	1	2	3	4	5	6
Frequency	25	35	40	22	32	26

Test whether the die is unbiased.

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any two questions.

Each question carries 4 weightage.

34. Fit a Poisson distribution to the following data and calculate the expected frequencies :

X	0	1	2	3	4
Frequency	123	59	14	3	1

35. The heights of six randomly chosen sailors are in inches:63, 65, 68, 69, 71 and 72. Those of 10 randomly chosen soldiers are 61, 62, 65, 66, 69, 69, 70, 71, 72 and 73. Test whether the data support the claim that the sailors are on the average taller than soldiers.
36. Explain the technique of analysis of variance for one-way classification.
37. Following are the weekly sale records (in Rs.) of three salesmen A, B and C of a company during 13 sale-calls :

A	300	400	300	500	
B	600	300	300	400	
C	700	300	400	600	500

Test whether the sales of three salesmen are different.

(2 × 4 = 8 weightage)

**SECOND SEMESTER M.A. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2022**

(CBCSS)

Development Economics

DEC 2C 07—ECONOMICS OF DEVELOPMENT AND GROWTH—II

(2020 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

General Instructions

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Part A

*Answer all questions.
Each answer carries 1 weightage.*

Multiple Choice questions :

1. Which of the following scenarios explain economic development ?
 - a) Improvement in the distribution system.
 - b) Improvement in the technology.
 - c) Improvement in the production.
 - d) All of the above.
2. Infant mortality :
 - a) Is defined as the annual number of deaths of infant under 1 year old per 1,000 live births.
 - b) Reflects the availability of primary education, the rights of employment and social security.
 - c) Is life expectancy up to age 3.
 - d) Reflects the availability of hospitals and childcare facilities, and the parents' wealth.

Turn over

3. As economic development proceeds, income inequality tends to follow a(n) _____ curve.
- a) Convex.
 - b) Inverted U-shaped.
 - c) L-shaped.
 - d) S-Shaped.
4. Dual economies are countries :
- a) With double capital and labor.
 - b) With a modern manufacturing sector as well as traditional agriculture sector.
 - c) That specialize in labor-intensive products more than capital intensive products.
 - d) With foreign-owned and domestically-owned capital.
5. The Lorenz curve shows :
- a) Patterns of poverty between developed and developing countries.
 - b) The change in GDP per capita over time.
 - c) The poorest's income shares fall in the early stages of growth.
 - d) Income concentration relative to a 45-degree line.
6. A stationary population is when population growth is :
- a) Increasing at an increasing rate.
 - b) Decreasing.
 - c) Zero.
 - d) 100%.
7. The Keynesian remedy for unemployment is to :
- a) Decrease aggregate demand.
 - b) Reduce tax rates or lower interest rates.
 - c) Increase government spending.
 - d) Decrease private consumption and investment.
8. Many environmental resources are public goods, which are characterized by :
- a) Rivalry and exclusion in consumption.
 - b) Non rivalry and non-exclusion in consumption.
 - c) Rivalry but non exclusion in production.
 - d) Non rivalry but exclusion in usage.

9. The Montreal Protocol, signed in 1987 and strengthened in 1990 :
- Attains the global optimal level of common property resource.
 - Relies on internationally tradable emission permits.
 - Minimizes free riders of public goods.
 - Reduces ozone depletion through the cutting of chlorofluorocarbon production.
10. Which of the following is not part of the Human Development Index ?
- Infant mortality.
 - Life expectancy.
 - Educational attainment.
 - GDP per capita.
11. Capital formation in underdeveloped countries is a major bottleneck. The reason can be :
- Small size of market with no incentive for investment.
 - Low level of income.
 - Demonstration effect.
 - All the above.
12. The Multidimensional Poverty Index has been developed by :
- The UNDP.
 - Oxford HDI.
 - The UNO.
 - Morris D Morris.
13. Inclusive governance includes :
- Allowing NBFCs to do banking.
 - Increase government spending on health.
 - Strengthening mid-day meals scheme.
 - All the above.
14. Consider the following statements and identify the right ones :
- According to the Malthusian theory, supply of food grains increase in geometric progression
 - The population grows in arithmetic progression.
- i) only
 - ii) only.
 - Both
 - None.
15. Consider the following :
- Life expectancy at birth.
 - Gross enrolment ratio for schools.
 - Adult Literacy rate.
 - Per capita income.

Which of the above is/are the parameters for the measurement of Human Development Index by UNDP?

- (a) 1, 2 and 4. (b) 1 and 3.
 (c) 4 only. (d) 1, 2, 3 and 4.

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any five questions.

Each question carries a weightage of 1.

16. Write a note on Domestic Resource Mobilisation.
17. What is Zilibotti model ?
18. Explain Adam Smith's ideas of economic development.
19. Critically examine the concept of solow-Hartwick rule.
20. Highlight the features of Social welfare program.
21. Define Gender issues in Development.
22. Enumerate the obstacles to economic development.
23. Give a brief presentation of the Measures for empowerment of women.

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries a weightage of 2.

24. Explain Kyoto protocol.
25. Write a note on Economic models of environmental issues.
26. Explain CME and Low level of equilibrium trap.
27. What are the factors inhibiting Industrialization ?
28. Discuss various approaches to population analysis.
29. Define Notions of freedom, rights and duties.
30. Explain GDI, GEM, MDG and SDG.
31. Give a brief presentation of Urban development and environment.

32. Write a note on John Rawls and A.K. Sen's contribution.
33. Write down the Role of Intuitions in Development.

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any two questions.

Each question carries a weightage of 4.

34. Explain the concept of Solow Hartwick rule. And Explain critically about it.
35. Explain various international environmental issues. Mention various efforts to tackle the issues.
36. Compare and contrast the Rural and Urban Migration and point out their relative merits and demerits.
37. Bring out the importance of Gender issues in Development and explain Measures for empowerment of women.

(2 × 4 = 8 weightage)

SECOND SEMESTER M.A. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2022

(CBCSS)

Development Economics

DEC 2C 06—MACROECONOMICS : THEORIES AND POLICIES—II

(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. The IS curve is _____.
 - a) Downward slopping.
 - b) Upward slopping.
 - c) Linear slopping.
 - d) All of the above.
2. According to the Phillips curve, unemployment will return to the natural rate when :
 - a) Nominal wages are equal to expected wages.
 - b) Real wages are back at long-run equilibrium level.
 - c) Nominal wages are growing faster than inflation.
 - d) Inflation is higher than the growth of nominal wages.

Turn over

3. What is the cause of inflation ?
- a) If money supply increases.
 - b) If the production rate falls.
 - c) If money supply increases and production falls.
 - d) Both money supply and production decreases.
4. The trough of a business cycle occurs when _____ hits its lowest point.
- a) Inflation.
 - b) The money supply.
 - c) Aggregate economic activity.
 - d) The unemployment rate.
5. In case of LM curve _____.
- a) Output had negative relationship in the money market.
 - b) Interest rate has negative relationship in the money market.
 - c) Both (a) and (b).
 - d) Opposite of the explanations (a) and (b).
6. What is the role of fiscal policy ?
- a) It stabilize the economy.
 - b) It stabilize the problem of unemployment.
 - c) Both (a) and (b).
 - d) None of the above.
7. How would you determine the marginal efficiency of capital ?
- a) By prospective Yield.
 - b) By supply price of capital assets.
 - c) Both (a) and (b).
 - d) Interest rate.
8. Supply creates its own demand is the Basis of :
- a) Classical economics.
 - b) Keynesian economics.
 - c) Monetarism.
 - d) None of these.
9. An increase in injections into the economy may lead to :
- a) An outward shift of aggregate demand and demand-pull inflation.
 - b) An outward shift of aggregate demand and cost-push inflation.
 - c) An outward shift of aggregate supply and demand-pull inflation.
 - d) An outward shift of aggregate supply and cost-push inflation.

10. A classical aggregate supply curve includes _____.
- a) Short run aggregate supply curve.
 - b) Horizontal long run aggregate supply curve.
 - c) Constant aggregate supply curve.
 - d) All of the above.
11. The IS curve comprises of :
- a) Income.
 - b) Interest rate.
 - c) Both (a) and (b).
 - d) None of the above.
12. The low point in the business cycle is referred to as the :
- a) Expansion.
 - b) Boom.
 - c) Trough.
 - d) Peak.
13. The Philips Curve shows trade off between :
- a) Income and employment.
 - b) Inflation and Income.
 - c) Unemployment and Inflation.
 - d) All of the above.
14. An economic condition characterized by high unemployment and excessive inflation is called :
- a) Stagflation.
 - b) Inflation.
 - c) Depression.
 - d) Deflation.
15. The book How to Pay for War is written by :
- a) J.M.Keynes.
 - b) Paul A Samulson.
 - c) Pigou.
 - d) Friedman.

(15 × 1/5 = 3 weightage)

Part B

Answer any five questions.

Each question carries 1 weightage.

16. Explain Philips curve.
17. Explain classical concept of full employment.
18. Explain the concept of Supply shock.

Turn over

19. What is menu cost ?
20. Explain Monetary policy.
21. Explain monetarism.
22. Explain Liquidity Trap.
23. Explain efficiency wage.

(5 × 1 = 5 weightage)

Part C

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

24. Explain menu cost model.
25. Examine Nordhaus Opportunity cost model.
26. Explain Rational political business cycle.
27. Describe inside outside model.
28. Explain real business cycle.
29. Explain exchange rate determination.
30. Explain monetarist view of Great depression.
31. Examine Keynesian Quantity theory of money.
32. Explain full employment determination of classical economics.
33. Explain major propositions of new classical macro economics.

(7 × 2 = 14 weightage)

Part D

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

34. Examine Real Business Cycle model, Why is real business cycle theory is important ?
35. What are the main ideas of supply side economics ? What are the drawbacks of supply side policies.
36. What are the main ideas of Classical school of Economics ? What is the difference between classical and Keynesian Economics ?
37. Examine post Keynesian development in the field of Economics.

(2 × 4 = 8 weightage)

**SECOND SEMESTER M.A. DEGREE [REGULAR/SUPPLEMENTARY]
EXAMINATION, APRIL 2022**

(CBCSS)

Development Economics

DEC 2C 05—MICROECONOMICS : THEORY AND APPLICATION—II

(2020 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

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Part A

Answer all questions.

Each bunch of five questions carries a weightage of 1.

Multiple choice questions.

1. The accelerator principle states :
 - (a) If an increase in the growth of output is expected, investment will increase.
 - (b) If an increase in investment is expected, output will increase.
 - (c) If an increase in the growth of investment is expected, output will increase.
 - (d) Small swings in investment are associated with large swings of output.
2. A perfectly competitive steel mill that produces large amounts of pollution (a negative externality) will, from a social point of view :
 - (a) Produce too little steel.
 - (b) Produce the socially optimal quantity of steel.
 - (c) Produce too much steel.
 - (d) Produce too much steel only if it installs pollution control equipment.

Turn over

3. Bargaining costs are generally high in cases involving environmental externalities because :
- (a) There are strong incentives to be a free rider.
 - (b) Many individuals may be affected by the externalities.
 - (c) It is difficult to measure the costs of the externalities.
 - (d) All of the above.
4. A demerit good :
- (a) Is a public good.
 - (b) Involves a positive externality.
 - (c) Is overprovided in the free market.
 - (d) Is under provided in the free market.
5. A public good will probably :
- (a) Be expensive in a free market.
 - (b) Be overprovided in the free market.
 - (c) Not be provided in the free market.
 - (d) Has no opportunity cost.
6. Edgeworth box represents a particular allocation of labour and capital between _____.
- (a) Firms.
 - (b) Commodities.
 - (c) Individuals.
 - (d) None.
7. A sum total of the satisfaction of all the individuals in a society refers to _____.
- (a) Point of bliss.
 - (b) Second best.
 - (c) Maximizing welfare.
 - (d) None.
8. In general equilibrium model Walras used _____ equations.
- (a) Simultaneous.
 - (b) Quadratic.
 - (c) Behavioural.
 - (d) None.
9. "Social choice and individual value" was formulated by _____.
- (a) Arrow.
 - (b) Kaldor.
 - (c) Hicks.
 - (d) None.

10. Kaldor criterion and Hicks criterion were _____.
- (a) Different. (b) Same.
(c) Compensative. (d) Both a and c.
11. Market with asymmetric information is related to _____.
- (a) Akerlof. (b) Hicks.
(c) Kaldor. (d) None.
12. Which method can help in obtaining a welfare improvement if externalities exist ?
- (a) Pigouvian taxes.
(b) Regulation.
(c) Assigning property rights and permitting bargaining.
(d) All of the above.
13. In a public goods context, it is difficult to measure impact on real income because
- (a) Public goods are generally free to the public.
(b) They make up a small percentage of total GDP.
(c) It is hard to measure how people value the public good.
(d) Inflation decreases the value of the good.
14. Rawls theory of justice is related to _____.
- (a) Welfare economics. (b) Distribution.
(c) Production. (d) None.
15. The concept Market signaling was introduced by _____.
- (a) Michael Spence. (b) Akerlof.
(c) Marshall. (d) None.

(15 × 1/5 = 3 weightage)

Part B (Very short answer Questions)

Answer any five questions.

Each Question carries 1 weightage.

16. Explain Numeraire.
17. Explain Grouping.

Turn over

18. Social welfare function.
19. "Externalities can be internalized through well-defined property rights". Discuss.
20. Distinguish between hidden action and hidden information.
21. What are public goods ? Examine the features of public goods.
22. State the Principles of behavioural economics.
23. Examine Scitovsky paradox.

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries 2 weightage.

24. Explain search for the lowest price and advertising.
25. Explain Akerlof model of lemon.
26. Explain principal agent theory.
27. Explain efficiency wage hypothesis.
28. Critically examine Arrows impossibility theorem.
29. Explain common property resources.
30. Discuss the types of externalities.
31. Explain the theme of behavioural economics.
32. Explain the assumptions of $2 \times 2 \times 2$ model.
33. Discuss equilibrium price of future goods.

(7 × 2 = 14 weightage)

Part D (Essay Type Questions)

Answer any two questions.

Each question carries 4 weightage.

34. Discuss new welfare economics.
35. Explain theory of second best.
36. Discuss Market signalling as a solution to the problem of asymmetric information.
37. Explain the existence, uniqueness and stability in general equilibrium.

(2 × 4 = 8 weightage)

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(CBCSS)

Development Economics

DEC 2C 08—QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS—II

(2020 Admission onwards)

Time : Three Hours

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Part A (Multiple Choice Questions)

Answer all questions.

Each question carries a weightage of 1/5.

1. Exhaustive events :
 - (a) are equally likely.
 - (b) are non-overlapping.
 - (c) contain all possible events.
 - (d) none of these.
2. If the two events A and B are independent, then :
 - (a) $P(A \cap B) = P(A) \cdot P(B)$.
 - (b) $P(A \cap B) = P(A) \cdot P(B | A)$.
 - (c) $P(A \cap B) = P(A) + P(B)$.
 - (d) None of these.
3. If X is a random variable, then $E(X^r)$ is called :
 - (a) r th raw moment.
 - (b) r th central moment.
 - (c) Variance.
 - (d) Standard deviation.
4. The parameters of a binomial random variable with mean 12 and variance 4 are :
 - (a) $\left(18, \frac{1}{3}\right)$.
 - (b) $\left(16, \frac{1}{3}\right)$.
 - (c) $\left(18, \frac{2}{3}\right)$.
 - (d) $\left(16, \frac{2}{3}\right)$.

Turn over

5. The standard deviation of Poisson distribution with mean 9 is :
- (a) 3. (b) 6.
(c) 8. (d) 9.
6. For a standard normal distribution, median is always :
- (a) equal to 0. (b) not equal to 0.
(c) equal to 3. (d) not equal to 3.
7. If $X \sim N(5, 4)$, then $P(X > 5)$ is :
- (a) 0. (b) 0.25.
(c) 0.5. (d) 1.
8. If $q = p$, the binomial distribution is _____.
- (a) Positively skewed. (b) Symmetric.
(c) Negatively skewed. (d) Mesokurtic.
9. The statistical measure of the population values is called :
- (a) Statistic. (b) Parameter.
(c) Estimator. (d) Estimate.
10. If X follows standard normal distribution, then X^2 follows :
- (a) Normal distribution. (b) t distribution.
(c) F distribution. (d) χ^2 distribution.
11. Square of a t variate will follow :
- (a) Normal distribution. (b) t distribution.
(c) F distribution. (d) χ^2 distribution.
12. If the statistic t is an unbiased estimator of the parameter θ and its variance tends to zero as the sample size $n \rightarrow \infty$, then t is a _____ estimator.
- (a) Sufficient. (b) Consistent.
(c) Efficient. (d) Likelihood.
13. Which of the following hypothesis shows a left tailed test ?
- (a) $H_0 : \mu = \mu_0$. (b) $H_1 : \mu \neq \mu_0$.
(c) $H_1 : \mu < \mu_0$. (d) $H_1 : \mu > \mu_0$.
14. Whether a test is one-tailed or two-tailed depends on _____ hypothesis.
- (a) Null. (b) Alternative.
(c) Simple. (d) Composite.
15. Level of significance is related to :
- (a) Type I error. (b) Type II error.
(c) Power. (d) Standard error.

Part B (Short Answer Type Questions)

Answer any five questions.

Each question carries a weightage of 1.

16. Compute the values of the following :
(a) ${}_5P_2$; (b) $10C_6$; (c) ${}_6C_2$; (d) ${}_7P_5$.
17. Define a random variable. Also define expectation and variance of a random variable.
18. If Z is a standard normal variate, find $P(-0.34 < Z < 0.62)$.
19. Distinguish between Parameter and Statistic.
20. State Central limit theorem.
21. Define confidence coefficient.
22. Define critical region.
23. What are the basic assumptions of ANOVA ?

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries a weightage of 2.

24. Out of 800 families with 4 children each, how many would you expect to have (i) 2 boys and (ii) either 3 or 4 boys. Assume equal probability for boys and girls.
25. A car hire firm has two cars which it hires out day by day. The number of demands for a car on each day is distributed as Poisson variate with mean 1.5. Calculate the probability of days on which (i) neither car is used and (ii) some demand is refused.
26. An urn contains 7 white and 3 red balls. Two balls are drawn together, at random from this urn. Calculate the expected number of white balls drawn.
27. The weekly wages of 1000 workers are normally distributed around a mean of Rs. 700 with a standard deviation of Rs. 50. Estimate the number of workers whose weekly wages will be (i) between Rs. 700 and Rs. 720 ; (ii) between Rs. 690 and Rs. 720 ; (iii) more than Rs. 750 ; (iv) less than Rs. 630.
28. Explain the properties of normal distribution.
29. Explain the important applications of lognormal distribution in Economics.
30. Discuss the desirable properties of a good estimator.
31. A sample of 15 items was taken from a normal population with standard deviation 10 and the sample mean is found to be 65. Can it be regarded as a sample from a population with mean 60 ?

Turn over

32. Test whether the accidents occur uniformly over week days on the basis of the following information :

Day of the week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
No. of accidents	11	13	14	13	15	14	18

33. In a sample of 1000 people in Bihar, 530 are wheat eaters and the rest are rice eaters. Can we assume that both rice and wheat are equally popular in the state at 5 % level of significance ?

(7 × 2 = 14 weightage)

Part D (Essay Type Questions)

Answer any two questions.

Each question carries a weightage of 4.

34. A systematic sample of 100 pages was taken the Oxford Dictionary and the observed frequency distribution of foreign words per page was found to be as follows :

No. of foreign words per page (X)	0	1	2	3	4	5
Frequency	42	34	12	7	4	1

Calculate the expected frequencies using Poisson distribution.

35. Out of 800 persons, 25 % were literate and 300 had travelled beyond the limits of their district. 40 % of the literates were among those who had not travelled. Prepare a 2 × 2 contingency table and test at 5 % level whether there is any relation between travelling and literacy.
36. Explain the technique of analysis of variance for two-way classification.
37. A set of data involving four tropical fees stuffs, A, B, C, D tried on 20 chicks is given below. All the 20 chicks were treated alike in all respects except the feeding treatments and each feeding treatment is given to 5 chicks. Analyse the data :

A	55	49	42	21	52
B	61	112	30	89	63
C	42	97	81	95	92
D	169	137	169	85	154

(2 × 4 = 8 weightage)

**SECOND SEMESTER M.A. DEGREE (REGULAR) EXAMINATION
APRIL 2022**

(CBCSS)

Development Economics

DEC 2C 07—ECONOMICS OF DEVELOPMENT AND GROWTH—II

(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 bunch of five questions carries a weightage of 1.

1. The term economic growth is explained by ———.
 - (a) Structural changes in the economy.
 - (b) Increase in the per capita production.
 - (c) Increase in the per capita income.
 - (d) All of the above.
2. The Physical Quality of Life Index (PQLI) combines three indicators. They are :
 - (a) Infant mortality, life expectancy and adult literacy rate.
 - (b) Crime rate, clean environment and quality of housing.
 - (c) Air pollution rate, water pollution rate and sanitation.
 - (d) Health, education and environment.

Turn over

3. According to the text, basic needs include :
 - (a) Food, clothing and housing.
 - (b) Health, education and quality housing.
 - (c) Adequate nutrition, primary education, health, sanitation, water supply and housing.
 - (d) Longevity and living standards.
4. The vicious circle theory states that :
 - (a) Growing government assistance create addiction to welfare programs.
 - (b) Low income levels create pressure for money creation.
 - (c) Low income levels create pressure for cheap imports.
 - (d) Low per capita income creates low savings that keep incomes low.
5. A value of 1 in Gini index represents :
 - (a) Low inequality.
 - (b) Maximum inequality.
 - (c) 10/10, 000 % inequality.
 - (d) 1 % inequality.
6. The _____ is the ratio of the nonworking population (under 15 years old and over 64 years old) to the working-age population.
 - (a) Labor force participation rate.
 - (b) Per capita population ratio.
 - (c) Population transition.
 - (d) Dependency ratio.
7. Malthus's theory was that population :
 - (a) Increased proportionally to economic growth.
 - (b) Increased geometrically, outstripping food supply, which grew arithmetically
 - (c) Increased stagnantly with food supply and economic development.
 - (d) Increased disproportionately, surpassing agricultural production.
8. Disguised unemployment is :
 - (a) When marginal revenue productivity of labor is zero.
 - (b) The same as seasonal unemployment of LDC agricultural.
 - (c) The rigid factor proportions in LDC agriculture and industry.
 - (d) Due to capital formation and the level of technology remaining constant.

9. The greenhouse effect is the phenomenon by which ?
- Biological diversity is dominant in agricultural production.
 - The globe's water pollution affects plankton.
 - The earth's atmosphere traps infrared radiation.
 - Climatic changes occur naturally in the forest.
10. With economic growth, the proportion of labour-force engaged in agriculture :
- Increases.
 - Decreases.
 - Remains unaffected.
 - Changes in an uncertain manner.
11. The People's Campaign for Decentralized Planning was launched in 1996 in the Indian state of :
- Tamil Nadu.
 - Bihar.
 - Karnataka.
 - Kerala.
12. The concept of HDI was popularized by :
- Morris D Morris.
 - Adam Smith.
 - Keynes.
 - Mahbub Ul Haq.
13. Which of the following is not an indicator to measure MPI ?
- Electricity.
 - Nutrition..
 - Cooking fuel.
 - Profession.
14. The author of the book An Essay on Principles of Population is :
- Malthus.
 - James Princep.
 - Keynes.
 - Frank Notenstein.
15. How does Sen define poverty ?
- The lack of material well-being.
 - The deprivation of basic capabilities for an individual.
 - The lack of supportive social institutions to ensure ones basic livelihood.
 - The lack of a cultural or religious identity.

(15 × 1/5 = 3 weightage)

PART B (Very Short Answer Questions)

Answer any five questions.

Each question carries a weightage of 1.

16. Define the Prior-Savings Approach.
17. What is Acemoglu model ?

Turn over

18. Write a note on Dual Gap Analysis.
19. What are the Core requirements of agricultural development ?
20. Define the natural resource accounting.
21. What is Martin Weitzman's Dismal Theorem ?
22. Write a note on the Keynesian and Quantity Theory Approaches to the Financing of Economic Development.
23. What is Development Gap ?

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries a weightage of 2.

24. Explain the importance of human resources in economic development.
25. Distinguish between growth and development. How do you measure economic development ?
26. Write short note on Theory of demographic transition.
27. Explain Gini coefficient. What are the properties that an appropriate measure of income inequality should possess ?
28. Explain briefly the concept of Manpower planning and its importance to economy.
29. Explain the method of calculation of Physical Quality of Life Index (PQLI) for an economy.
30. Bring out the role of social norms and the community in economic development.
31. Describe A.K. Sen's approach to choice of techniques and examine this model.
32. Explain the Harris — Todaro model and discuss its relevance.
33. Write short note on Global Hunger Index.

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any two questions.

Each question carries a weightage of 4.

34. What are the measures of economic inequality in an economy ? Is inequality bad for the economy ? Justify your answer.
35. What are the properties that a suitable measure of income inequality should possess ? Explain Lorenz curve and the Gini coefficient.
36. Describe the Mankiw-Romer-Weil extension to the neoclassical growth model to include human capital.
37. Does international trade foster economic development ? If so, how ? Do developing nations always gain from international trade ?

(2 × 4 = 8 weightage)

**SECOND SEMESTER M.A. DEGREE (REGULAR) EXAMINATION
APRIL 2021**

(CBCSS)

Development Economics

DEC 2C 06—MACROECONOMICS : THEORIES AND POLICIES—II

(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 a weightage of 1/5.

1. Phillips curve is :
 - (a) Single equation economic model.
 - (b) Double equation economic model.
 - (c) Multi equation economic model.
 - (d) Any of the above.
2. What happens when AS curve is horizontal ? Which means the :
 - (a) Price level goes upside.
 - (b) Price level is constant.
 - (c) Price level goes downside.
 - (d) None of the above.
3. The real money supply has :
 - (a) Negative effect on aggregate demand.
 - (b) No effect on aggregate demand.
 - (c) Positive effect on aggregate demand.
 - (d) All of the above.

Turn over

4. If the curve of aggregate demand is downward, then., means that more output is demanded at lower price levels
- (a) There is more output at lower price levels.
 - (b) There is loe output at lower price levels.
 - (c) There is constant output at lower price levels.
 - (d) None of the above.
5. The IS - LM model shows., which combination of interest rates and output will ensure equilibrium in both the goods and money markets
- (a) Which combination of interest rates ensure equilibrium on goods.
 - (b) Which combination of output will ensure equilibrium on money.
 - (c) None of the above.
 - (d) Both (a) and (b).
6. Who implements monetary policy in India ?
- (a) Gramin bank.
 - (b) State Bank of INDIA.
 - (c) NABARAD.
 - (d) Central Bank of India.
7. 'The General Theory of Employment, Interest, and Money' is the monumental work of _____.
- (a) J. M. Keynes.
 - (b) Robert Sahhlas.
 - (c) Wassily Leontief.
 - (d) Paul Krugman.
8. How RBC explains macroeconomics fluctuations ?
- (a) Predictable events that hit the economy
 - (b) Unpredictable events that hit the economy.
 - (c) Only internal shocks.
 - (d) Only external shocks.
9. Investment Function depends on:
- (a) Size of firm.
 - (b) Price of good.
 - (c) Time.
 - (d) Marginal efficiency of capital.
10. Who is the father of macroeconomics ?
- (a) Milton Friedman
 - (b) Adam Smith.
 - (c) J. M. Keynes.
 - (d) David Ricardo.

11. Which of the following statements is true about a Laissez-Faire economy ?
- It is a branch of socialism that focuses exclusively on welfare economics.
 - It involves economic transactions between private parties without any intervention from the state or government.
 - It is a term which denotes the economic transactions that are carried out by the state or government.
 - None of the above.
12. If inflationary expectations increase, the Phillips curve will :
- Shift to the right.
 - Shift to the left.
 - Become vertical.
 - Become upward sloping.
13. Economists use the term shocks to mean :
- Unexpected government actions that affect the economy.
 - Typically, unpredictable forces that have major impacts on the economy.
 - sudden rises in oil prices.
 - The business cycles.
14. According to the classical economists the economy ?
- Requires fine tuning to reach full employment.
 - Can never deviate from full employment.
 - Will never be at full employment.
 - Is self-correcting.
15. Rapid increase in the price level during periods of recession of high unemployment are known as ?
- Slump.
 - Inflation.
 - Stagflation.
 - Stagnation.

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any five questions.

Each question carries a weightage of 1.

- Explain business cycles.
- What is Stagflation ?
- Explain say's law of market.

Turn over

19. Explain Laffer curve.
20. What is supply side economics ?
21. Explain Balance of Payment.
22. Explain NAIRU.
23. Explain classical economics.

(5 × 1 = 5 weightage)

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries a weightage of 2.

24. Examine Long run Phillips curve.
25. Distinguish Flexible and Fixed exchange rate.
26. Explain New Classical macro economics.
27. Describe quantity theory of Money.
28. State Supply-side economics.
29. What is Keynesian equilibrium.
30. Explain monetary approach to BOP.
31. Explain consequence of Great Depression.
32. Explain Effectiveness of Monetary policy in combating inflation.
33. Explain policy implications of Laffer curve.

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any two questions.

Each question carries a weightage of 4.

34. Describe classical concept of Employment and output determination.
35. Examine the effectiveness of Monetary and fiscal policy by using ISLM model.
36. Examine short run and long run Phillips curve. What are the main Weakness of Phillips curve ?
37. What does ISLM model shows ? Explain causes of shift in IS and LM curve.

(2 × 4 = 8 weightage)

**SECOND SEMESTER M.A. DEGREE (REGULAR) EXAMINATION
APRIL 2021**

(CBCSS)

Development Economics

DEC 2C 05—MICROECONOMICS : THEORY AND APPLICATION—II

(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 bunch of five questions carries a weightage of 1.

1. The concept of social optimum was introduced by _____.
(a) Pigou. (b) Marshall.
(c) Arrow. (d) None.
2. 'Economic Theory and Operations Analysis' is authored by _____.
(a) Baumol. (b) Smith.
(c) Kaldor. (d) None
3. Utility means 'happiness' and is a sense of 'desired fulfillment' is a criticism against Pareto optimality by _____.
(a) Kaldor. (b) Hicks.
(c) Pigou. (d) Samuelson.
4. In market, to convey the information about product is called _____.
(a) Market signaling. (b) Moral hazard.
(c) Adverse selection. (d) None.

Turn over

5. Theory of second best developed by _____.
- (a) Lancaster. (b) Pareto.
(c) Pigou. (d) None.
6. Pareto points in the Edgeworth Box are :
- (a) Found when indifference curves are tangent.
(b) Found when MRS are equal.
(c) Found when one person cannot be made better off without making another person worse off.
(d) All of the above.
7. Points outside the production possibility frontier are :
- (a) Producible. (b) Endowment points.
(c) Consumer equilibrium points. (d) Unattainable.
8. The First Fundamental Theorem of Welfare Economics requires :
- (a) Producers and consumers to be price takers.
(b) That there be an efficient market for every commodity.
(c) That the economy operate at some point on the utility possibility curve.
(d) All of the above.
9. A public good is :
- (a) A good that the public must pay for.
(b) Non rival in consumption.
(c) More costly than a private good.
(d) Paid for by the government.
10. Movement from an inefficient allocation to an efficient allocation in the Edgeworth Box will :
- (a) Increase the utility of all individuals.
(b) Increase the utility of at least one individual, but may decrease the level of utility of another person.
(c) Increase the utility of one individual, but cannot decrease the utility of any individual.
(d) Decrease the utility of all individuals.
11. Kaldor criterion and Hicks criterion were _____.
- (a) Different. (b) Same.
(c) Compensative. (d) Both (a) and (c)

12. Market with asymmetric information is related to _____.
- (a) Akerlof. (b) Hicks.
(c) Kaldor. (d) None.
13. "Social choice and individual value" was formulated by _____.
- (a) Arrow. (b) Kaldor.
(c) Hicks. (d) None.
14. Pareto concept of maximum social welfare is based upon _____.
- (a) Welfare economics. (b) Classical.
(c) Neo classical. (d) None.
15. The consumption overtime is called _____.
- (a) Inter temporal choice of consumption.
(b) Strong ordering.
(c) Weak ordering.
(d) None of these.

(15 × 1/5 = 3 weightage)

Part B (Very Short Answer Questions)

Answer any five questions.

Each question carries a weightage of 1.

16. Explain the term Point of constraint bliss.
17. Explain Arrows Impossibility Theorem.
18. Explain various compensatory criteria.
19. Explain adverse selection.
20. "Externalities can be internalized through well-defined property rights". Discuss.
21. Distinguish between hidden action and hidden information.
22. Explain diversification.
23. Explain tattonment.

(5 × 1 = 5 weightage)

Turn over

Part C (Short Answer Questions)

Answer any seven questions.

Each question carries a weightage of 2.

24. Explain efficiency wage theory.
25. Explain the types of externalities.
26. Explain Bergson Samuelson social welfare function.
27. Explain Bentham criteria.
28. Explain theory of second best.
29. Explain principal agent problem.
30. Examine the principles of Rawls theory of justice.
31. What are the causes of market failure ?
32. Discuss Net Present Value criterion for capital investment decisions.
33. Adam Smith's criterion of measuring welfare.

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any two questions.

Each question carries a weightage of 4.

34. Discuss Pareto optimality criteria.
35. Discuss market for lemons.
36. Discuss the elements of general equilibrium analysis. State the conditions under which a competitive market is efficient.
37. What are reference points ? Discuss the different principles of behavioural economics.

(2 × 4 = 8 weightage)