

I-53

**Entrance Examinations, February 2015
M.Phil. (Economics)**

Time: 2 Hours

Max. Marks: 75

HALL TICKET NUMBER

INSTRUCTIONS

1. **Read these instructions carefully before answering.**
2. Enter your Hall Ticket Number on this page and also on the OMR answer sheet.
3. Answers are to be marked on the OMR answer sheet following the instructions provided thereon.
4. Handover the OMR answer sheet at the end of the examination.
5. Use of non-programmable calculators is allowed.
6. There are 75 questions in this paper. The Question Paper has **two parts** – **PART-A** and **PART-B**: the **PART-A** contains 25 questions and the **PART-B** contains 50 questions. Marks obtained in **PART-A** will determine the merit rank in case of a tie in the total number of marks obtained.
7. Each correct answer carries one mark.
8. **There is negative marking. Each wrong answer carries -0.33 marks.**
9. This question paper contains **13** pages excluding this cover page but including pages for rough work.

PART-A

1. The Utility function given by: $U = U(X_1, X_2) = X_1^2 + 2X_1 X_2 + X_2^2$ represents:
 - A. Perfect complements
 - B. Neutral goods
 - C. Perfect substitutes
 - D. An irrational ordering

2. If the prices of ice-cream and chocolate are Rs 40 and Rs 30 respectively, and the marginal utility of chocolate is 150, what is the marginal utility of ice cream assuming that the consumer is at equilibrium?
 - A. 112.5
 - B. 200
 - C. 225
 - D. 125

3. A natural monopoly is a market situation in which:
 - A. all firms sell natural resources
 - B. a single firm supplies natural resources to an entire industry
 - C. a single firm can supply the market output more efficiently than many firms
 - D. none of the above

4. The kinked demand curve faced by an oligopolist is based on the assumption that:
 - A. rivals will follow a price increase but not a price cut
 - B. rivals will follow a price decrease but not a price increase
 - C. rivals will follow both price increase and decrease
 - D. rivals will ignore both price increase and decrease

5. Rosy likes Banana but is neutral about Papaya, so the indifference curves are _____.
 - A. L-shaped
 - B. Straight lines with a negative slope
 - C. Straight lines with a positive slope
 - D. Vertical lines

6. A monopolist faces a demand curve given by $D(p) = 100 - 2p$. His cost function is $c(y) = 2y$. What is the optimal level of price?
 - A. 12
 - B. 24
 - C. 26
 - D. 13

7. Senior citizens' discounts at the drugstore is an example of:
 - A. First – degree price discrimination
 - B. Second – degree price discrimination
 - C. Third – degree price discrimination
 - D. No price discrimination

8. A Production plan is defined as :
- A. A list of net outputs of various goods
 - B. A list of net inputs of various goods
 - C. A list of all input bundles
 - D. A list of inputs chosen according to fixed proportions of technology
9. Which of the followings is a positive monotonic transformation?
- A. $U = -1/v^2$
 - B. $U = 1/v^2$
 - C. $U = -e^{-v}$
 - D. $U = v^2$
10. A market demand curve can be derived by adding all the individual demand curves:
- A. Vertically
 - B. Horizontally
 - C. Both vertically and horizontally
 - D. None of the above
11. Arthur Lewis in his model of development held that marginal productivity of labour in densely populated countries is:
- A. Unity
 - B. Zero
 - C. Infinite
 - D. Constant
12. Nobel laureate Amartya Sen showed in his work that famines in Bengal in 1940s occurred primarily because of:
- A. Droughts in India
 - B. Wars among nations
 - C. Loss of entitlements among people
 - D. None of them
13. According to Jevon's Paradox, increased efficiency of fuel use would:
- A. Increase the demand for fuel.
 - B. Decrease the demand for fuel.
 - C. Render demand for fuel remain constant.
 - D. Conserve fossil fuels for the future generation.
14. In Nerlovian supply response function, area under a crop is determined by relative price among other factors, because:
- A. Farmers can decide how much to produce depending on the relative price.
 - B. Farmers can decide yield of the crop depending upon the relative price
 - C. Farmers can only decide area depending upon relative price, but not output.
 - D. Farmers can only decide how much to keep fallow.

15. Backward-bending supply curve for labour is predicated on the assumption of:
 - A. Wage-labour trade-off.
 - B. Income-labour trade-of.
 - C. Income-leisure spin-off.
 - D. Income-leisure trade-off.

16. The idea that labour rich countries may export capital intensive goods and capital rich countries may export labour intensive goods is known as:
 - A. Comparative cost theory.
 - B. Hechscher-Ohlin theory.
 - C. Mezzler's Paradox.
 - D. Leontief's Paradox.

17. Mode of production in Marx's characterization of base-superstructure refers to:
 - A. Production forces and production relations
 - B. Sectoral differences in production
 - C. Strictly technological conditions
 - D. Organic composition of capital and surplus value

18. In Dual-Gap analysis pioneered by Hollis Chenery, developing countries typically face:
 - A. Trade-deficit and fiscal deficit.
 - B. Investment-savings gap and foreign exchange constraint.
 - C. Natural resource constraint and technology constraint.
 - D. None of the above.

19. The most basic difference between socialism and capitalism concerns the issue of:
 - A. introduction of modern technology
 - B. private versus public ownership of industry
 - C. dealing with inflation
 - D. support for public education

20. The theory of laissez-faire capitalism advocates:
 - A. government control of the economy
 - B. noninvolvement of the government in the economy
 - C. government regulation of big business
 - D. government role is confined to stabilizing the economy

21. The process of elimination of petty producers from agriculture and absorption of them into industrial sector in political economy of capitalist development is referred as:
 - A. Poverty Question
 - B. Development Question
 - C. Agrarian Question
 - D. Labour Question

22. Which of the following price index has the largest coverage of goods?
- A. Wholesale Price Index
 - B. National Income Deflator
 - C. Consumer Price Index
 - D. Relative Price Index
23. A tragedy of common property is that its users:
- A. have incentives to overuse
 - B. no incentives to maintain
 - C. cannot prevent others from using
 - D. All of the above.
24. After the Independence, J C Kumarappa Committee was constituted to suggest a comprehensive policy of:
- A. Land Reforms
 - B. Banking Reforms
 - C. Industrial Reforms
 - D. Social Reforms
25. Terms of trade of agriculture tend to worsen in the course of industrialisation process because:
- A. International prices
 - B. Investment in agriculture tends to rise slowly
 - C. Industrial goods have higher income elasticity than agricultural goods
 - D. Industries have higher productivity

PART-B

26. Complete Milton Friedman's famous statement, "Inflation is always and everywhere a _____ phenomenon."
- A. global
 - B. real
 - C. repressonary
 - D. monetary
27. Countries that experience very high rates of inflation may also have:
- A. balanced budgets.
 - B. rapidly growing money supplies.
 - C. falling money supplies.
 - D. constant money supplies

28. Adverse selection is a problem associated with equity and debt contracts arising from:
- the lender's relative lack of information about the borrower's potential returns and risks of his investment activities.
 - the lender's inability to legally require sufficient collateral to cover a 100% loss if the borrower defaults.
 - the borrower's lack of incentive to seek a loan for highly risky investments.
 - the borrower's lack of good options for obtaining funds.
29. Hyperinflation is:
- a situation of extreme inflation generally greater than 50% per month.
 - a period of anxiety caused by rising prices.
 - a process of increase in output caused by rapid rise in prices.
 - All the above
30. Which of the following is not a form of e-money?
- A debit card
 - A credit card
 - A stored-value card
 - A smart card
31. What distinguishes Marx from Smith, Malthus and Ricardo in labour theory of value is:
- intrinsic value
 - use value
 - exchange value
 - surplus value
32. According to Arthus Lewis, theory of comparative advantage does not apply to LDCs because the labour force engaged in agricultural sector derives the wage that is equal to:
- marginal productivity of labour
 - average productivity of labour
 - total productivity of labour
 - All of the above
33. "Gross Cropped Area" in agricultural economics means:
- net sown area plus net irrigated area
 - net sown area plus cultivable waste
 - net sown area plus current fallows
 - total area sown more than once
34. The process of converting an index number measured at two or more base periods is known as:
- Splicing
 - Swapping
 - Deflating
 - Calibrating
35. In the last one decade, agricultural growth in India is basically driven by:
- public investment in agriculture
 - private investment in agriculture
 - exclusively by a rise in productivity
 - All the above

36. "I would rather spend all my time in the country or all in the town, rather than divide myself between the two". Does the above remark represent convex preference ordering?
- A. Yes
 - B. No
 - C. need more information
 - D. may be true
37. Which is a socially preferable, a pooling or a separating equilibrium under asymmetric information?
- A. Pooling
 - B. Separating equilibrium
 - C. In some situation pooling and in some situation separating equilibrium
 - D. Cannot say
38. A market for first hand cars does not have an adverse selection problem as:
- A. information is symmetrical
 - B. information is asymmetrical
 - C. information is complete
 - D. None of the above
39. Under asymmetric information, the market outcome are:
- A. efficient
 - B. inefficient
 - C. some time efficient
 - D. None of the above
40. In comparing an excise subsidy and a cash grant of the same amount, the recipient will:
- A. always prefer the excise subsidy
 - B. always will prefer a cash subsidy
 - C. be indifferent to both
 - D. sometimes prefer excise subsidy and sometimes cash grant
41. Does economic efficiency imply technical efficiency?
- A. Yes
 - B. No
 - C. Need more information
 - D. Depends on the situation
42. Which of the following market structure mimics the price as in a perfectly competitive market:
- A. Bertrand model
 - B. Cournot model
 - C. Monopolistic competition
 - D. Stackelberg leader-follower model
43. In the Stackelberg leader – follower model, equilibrium is defined at the:
- A. intersection of the two reaction functions of the two agents
 - B. tangency of the iso-profit curve of leader and reaction function of the follower
 - C. tangency of iso-profit curve of follower and reaction function of the leader
 - D. tangency of the isoprofit curves of leader and follower

44. From the data obtained from the Economic Survey (in India) one can only carry out:
- A. Explanatory research
 - B. Problem solving research
 - C. Descriptive research
 - D. All the above
45. Expected utility hypothesis is relevant for:
- A. Health Insurance
 - B. Agricultural credit
 - C. Industrial production
 - D. None of the above
46. Infant mortality is defined as:
- A. Number of still births /1000 live births
 - B. Number of live births/1000 deaths
 - C. Number of deaths from birth to one year/1000 live births
 - D. None of the above
47. Which one of the following is an appropriate sampling technique if the study population is scattered over a large area?
- A. Stratified random sampling
 - B. Simple random sampling
 - C. Cluster sampling
 - D. None of the above
48. The F- distribution was discovered by:
- A. Karl Pearson
 - B. R.A Fisher
 - C. W.S Gosset
 - D. C R Rao
49. Which among the following is used to test the significance of correlation coefficient:
- A. t-test
 - B. F-test
 - C. Chi-square test
 - D. None of the above
50. Example of secondary data source is:
- A. National sample survey
 - B. RBI Bulletin
 - C. Population census
 - D. All the above
51. If two coefficient of regression are 0.8 and 0.2, then the value of correlation coefficient is:
- A. 0.40
 - B. 0.50
 - C. 0.25
 - D. 0.45

52. Standard error is defined as:
- Sampling mean
 - Standard deviation of a sampling distribution
 - Standard deviation of a statistic
 - None of the above
53. If a researcher asks questions and he himself records the replies given by the respondents, then this particular method of data collection is known as:
- Interview schedule method
 - Questionnaire method
 - Participant Observation method
 - Focus Group Discussions method
54. In which model the dependent variable is binary in nature?
- ANOVA
 - ANCOVA
 - Simple Linear Regression model
 - Logit model
55. In the linear trend model $Y_t = \alpha + \beta t + U_t$, we can say that:
- there is a downward trend in Y if the sign of estimated α is negative
 - there is an upward trend in Y if the sign of estimated β is positive
 - there is an upward trend in Y if the sign of estimated α is positive
 - All the above
56. Given the function $Y = 35 + \text{Log}X$, derivative dY/dX is equal to:
- $35 + X$
 - $\text{Log}X$
 - $2X$
 - $1/X$
57. On the basis of the coefficient of determination R^2 , two regression models can be compared if:
- the sample size is same in both models
 - the dependent variables are similar
 - the explanatory variables may take any form
 - All of the above
58. Which one is the correct solution for y in the quadratic equation $y^2 + 4y - 5 = 0$?
- 1 and 5
 - 5 and 3
 - 2 and 7
 - 1 and -5
59. Although specially designed to handle over identified equations, the 2SLS method can also be applied to exactly identified equations. In that case,
- the 2SLS will give multiple estimates of parameters in the model.
 - the ILS and 2SLS methods will not give identical estimates.
 - the ILS and 2SLS methods will give identical estimates
 - none of the above

60. If $MC = 2 - 0.4q + 3q^2$ is the marginal cost (MC) function of a firm where q is the level of output, the total variable cost (TVC) at $q = 10$ units will be (Hint: Apply integration method)
- A. 1000 units
 - B. zero
 - C. 100
 - D. Difficult to calculate from the given data
61. New classicals believe in:
- A. rational expectations
 - B. instantaneous clearance of markets
 - C. real business cycle theory
 - D. All the above
62. Linder's demand hypothesis refers to a situation where international demand determines:
- A. range of exports
 - B. range of imports
 - C. range of exports and imports
 - D. none of the above
63. Devaluation leads to improvement in balance of payments when the sum of demand elasticities is:
- A. greater than one
 - B. less than one
 - C. equal to one
 - D. none of the above
64. Marginal cost of a pure public good is:
- A. one
 - B. zero
 - C. very high
 - D. difficult to determine
65. Indian tax system is not considered to be the best because:
- A. it is not based on the canons of taxation
 - B. it is dominated by indirect taxes
 - C. it ignores agricultural income
 - D. All the above
66. Gift tax was introduced for checking evasion of:
- A. expenditure tax
 - B. corporation tax
 - C. capital gains tax
 - D. estate duty
67. The government accounts (both the Centre and the States) are kept in:
- A. Consolidated Fund
 - B. Contingency Fund
 - C. Reserve Fund
 - D. None of the above

68. Price of a derivative asset may be determined by:
- A. Capital Asset Pricing model
 - B. Black-Scholes model
 - C. Markowitz model
 - D. Martingale model
69. Unit root tests are designed to confirm:
- A. Non-linearity in a model
 - B. Non-stationarity of a process
 - C. Possible presence of chaos
 - D. None of the above
70. Which of the following is used to check for presence of volatility?
- A. GARCH model
 - B. Johansen-Juselius model
 - C. Markov Chain model of transition
 - D. ARDL Bounds test model
71. When a health insurance company offers a whole menu of policies, it can be said to be:
- A. solving a mechanism design problem
 - B. sending a signal of quality
 - C. acting as a discriminating monopolist
 - D. exhibiting risk aversion
72. Which of the following represents a monetary aggregate?
- A. Divisia aggregate
 - B. Currency equivalent aggregate
 - C. Simple-sum aggregate
 - D. All the above
73. Expectations are said to be rational when:
- A. formed according to a model of the economy
 - B. economic agents fully make use of the available information
 - C. economic agents form expectations according to implied economic theory
 - D. All the above
74. Which of the following statements is true in the context of identifying a simultaneous equation model?
- A. Exclusion restrictions should be taken into account
 - B. Identities should be ignored
 - C. Order condition is sufficient to confirm identification
 - D. Lagged endogenous variables should not be treated as pre-determined variables
75. Which of the following is a test of heteroscedasticity?
- A. Hildreth-Lu test
 - B. Breusch-Pagan test
 - C. Durbin-Watson test
 - D. Chow test