Entrance Examinations – 2016
M.Phil./Ph.D. Economics

Time: 2 Hours   **Max. Marks: 75**

HALL TICKET NUMBER

INSTRUCTIONS

1. **Read the instructions carefully before answering.**

2. Enter your Hall Ticket Number on this page <u>and</u> 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 <u>two parts</u> – **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 <u>one</u> mark.

8. **There is negative marking. Each wrong answer carries – 0.33 marks.**

9. This question paper contains 15 pages including the cover page and pages for rough work.

PART-A

1. The value of a commodity according to Marx is:
   A. Directly related to productivity.
   B. Unrelated to productivity.
   C. Indirectly related to productivity.
   D. Inversely related to productivity.

2. Paul Sweezy, Maurice Dobb, Robert Brenner are names associated with
   A. The Transitive Debate
   B. The Transition Debate
   C. The Transaction Debate
   D. The Transcending Debate

3. Which of the following is associated with the concept of 'Deskilling'?
   A. Theodore Schultz
   B. Amartya Sen
   C. Harry Braverman
   D. Michael J. Sabel

4. Formalism in economics refers to use of _____ in building economics theories.
   A. Statistics
   B. Mathematics
   C. Definitions
   D. Formal Statements

5. After the Independence of India, JC Kumarappa Committee was constituted to suggest a comprehensive policy of
   A. Social Reforms
   B. Cooperative Movement
   C. Land Reforms
   D. Agrarian Reforms

6. In Ricardian model of growth, economy is likely to reach a stationary state due to the distributive conflict between:
   A. Workers and Capitalists
   B. Capitalists and Landlords
   C. Landlords and Workers
   D. Consumers and Producers

7. The book titled: "Capital in 21st Century" is authored by:
   A. Joseph Stiglitz
   B. Raghurama Rajan
   C. Thomas Picketty
   D. Herald Mynsky

8. Which of the following agencies estimate and publish "Whole Sale Price Index" in India?
   A. Central Statistical Organization
   B. N.S.S.O.
   C. Ministry of Finance
   D. Reserve Bank of India

9. Orthodox view in economics holds that either bond-financed (through deficit financing) or tax-financed public expenditure leads to internalised expectations about future taxes, resulting in no change in aggregate demand for public spending. This is known as:
   A. Ricardian Equivalence
   B. Crowding out Effect
   C. Money Neutrality
   D. None of the above.

10. A statistic is defined as:
    A. A discipline
    B. Data
    C. Any measure obtained from the sample
    D. All the above.

11. 'Simple' production means:
    A. Producing with traditional techniques of production
    B. Producing simple consumer goods
    C. A capitalist system where there is no accumulation
    D. None of the above.

12. The 'inverse relation' debate in Indian agriculture refers to a situation where:
    A. Profitability increases with size of holding
    B. Productivity per acre decreases with increases in size of holding
    C. Input use decreases with increase in size of holding
    D. All the above.

13. A stochastic process is said to be weakly stationary when
    A. Its mean is zero
    B. Its variance is constant
    C. Its covariance is independent of time
    D. It is free from time trend

14. Which of the following is a unit root test?
    A. Johansen-Juselius test
    B. ARDL Bounds test
    C. KPSS test
    D. Ljung-Box test

15. A random walk process is:
    A. Mean reverting
    B. Non-stationary
    C. Used to predict future prices
    D. Associated with non-linear processes only

16. Structure Adjustment undertaken as a conditionality of IMF bail out loan in 1991 by India did not include among the following:
    A. Devaluation of rupee
    B. Reduction of fiscal deficit
    C. Rationalisation of indirect taxes
    D. Increase in public investment

17. Cointegration is associated with:
    A. Non-Stationary processes
    B. Long-run equilibrium relationships
    C. Error correction
    D. All the above.

18. GARCH models deal with
    A. Historical volatility
    B. Implied volatility
    C. Stochastic volatility
    D. Deterministic time varying volatility

19. Which of the following methods/ models are not atheoretical?
    A. Econometric models
    B. Time Series models
    C. Cross-spectral methods
    D. Wavelets methods

20. High frequency data refers to data of
    A. Monthly frequency
    B. Weekly frequency
    C. Tick-by-Tick frequency
    D. Daily frequency

21. Philips curve in the long-run becomes vertical because of:
    A. Acceleration theorem
    B. Natural rate of unemployment
    C. Inflationary expectations on the part of the job seekers
    D. All the above.

22. New classicals believe in
    A. Rational expectations
    B. Instantaneous clearance of markets
    C. Real business cycle theory
    D. All the above.

23. Exchange rate overshooting is associated with:
    A. R. Dornbusch
    B. Paul Krugman
    C. Mundell-Fleming
    D. Anne Krueger

24. The 'quantity theory of money' assumes that:
    A. The equation of exchange is an identity
    B. The real interest rate is constant
    C. The direction of causation runs from money supply to general level of prices
    D. All the above.

25. Which one of these statistics is unaffected by outliers?
    A. Mean
    B. Interquartile range
    C. Standard deviation
    D. Range

PART-B

26. One hundred people were asked, "Do you favour stronger laws on gender-based violence?" Of the 33 that answered "yes" to the question, 14 were male. Of the 67 that answered "no" to the question, six were male. The probability that a randomly chosen respondent is a male given that the respondent does not favour the gender-based violence law is
    A. 14/33
    B. 19/33
    C. 1/5
    D. 6/67

27. Suppose you deposit Rs. 1,000 in an account that pays 12% interest, compounded quarterly. How much will be in the account after eight years if there are no withdrawals?
    A. Rs. 2575.10
    B. Rs. 2475.15
    C. Rs. 2500.20
    D. Rs. 2525.18

28. In a well diversified portfolio:
    A. Market risk is negligible
    B. Unsystematic risk is negligible
    C. Systemic risk is negligible
    D. Nondiversifiable risk is negligible

29. An investor buys a Treasury bill maturing 1 month for Rs. 987. On the maturity date the investor collects Rs. 1000. Calculate Effective Annual Rate (EAR).
    A. 17.0%
    B. 15/8%
    C. 13.0%
    D. 11.6%.

30. Find out the value of the definite integral $\int_0^2 (2-3x)\,dx$
    A. +2
    B. −2
    C. −4
    D. 0 and 2

31. If five conformable matrices are such that P=M'NYK' + M'S, then the transpose of P is
    A. MN'Y'K + MS'
    B. M'S + M'NYK'
    C. KY'N'M + S'M
    D. (MNYK + MS)' = P'

32. The multi-objective programming problem at the first stage formulation, in general, does not give the unique optimal solution but it gives only
    A. The strong maximum value to the objective function
    B. The strong minimum value to the objective function
    C. The satisficing solution among non-dominated alternatives
    D. The solutions to all constraints

33. In a simultaneous equation model, the number of equations to be estimated is
    A. One more than the number of endogenous variables
    B. Equal to the number of exogenous plus endogenous variables
    C. Equal to the number of exogenous constants minus one
    D. Equal to the number of endogenous variables

34. The type of regression models that use censored data is
    A. The Linear Probability Model (LPM)
    B. The Logit Model
    C. The Tobit Model
    D. The Probit Model

35. The slope coefficient in the logit model measures:
    A. The elasticity of change of explanatory variable
    B. The change in the average value of the regressand for a unit change of a regressor
    C. The change in the probability of an event occurring as a result of a unit change in value of a regressor
    D. The change in the log of ·· odds associated with a unit change in value of a regressor

36. If a quantitative variable has N categories, the analysis requires use of:
    A. Only N dummy variables
    B. Only N+1 dummy variables
    C. Only N − 1 dummy variables
    D. Only N*N dummy variables

37. If multicollinearity is perfect in a regression model, then the regression slope coefficients of explanatory variables are
    A. Determinate
    B. Indeterminate
    C. Infinite values
    D. Small negative values

38. The regression coefficients estimated in the presence of autocorrelation are NOT
    A. Unbiased estimators
    B. Consistent estimators
    C. Efficient estimators
    D. Linear estimators

39. The problem of heteroscedasticity may result due to the presence of
    A. Outliers in the sample data
    B. Omission of important explanatory variable in the model
    C. Skewness in the distribution of regressors in the model
    D. All of the above.

40. For the Binomial distribution with parameters n and p, the variance cannot exceed
    A. n/p, where n is the number of trials and p is the probability of success.
    B. np, where n is the number of trials and p is the probability of success.
    C. n/2, where n is the number of trials.
    D. n/4, where n is the number of trials.

41. For a Poisson distribution, it is found that the mean is 6 and variance is 5. The statement or result is:
    A. True ·
    B. False
    C. Difficult to determine
    D. None of the above.

42. Which one of the following statements is NOT correct?
   A. t-test and F-test are parametric tests and Chi square test is generally a non-parametric test.
   B. t-test and F-test and Chi square test are generally non-parametric tests.
   C. Small sample tests like t-test can be used even for large samples but, reverse is not always true.
   D. Normal test (Z-test) is basically designed to test the hypothesis in large samples.

43. The determinant value of the following matrix is
$$\begin{bmatrix} 9 & 8 & 7 \\ 6 & 5 & 4 \\ 3 & 2 & 1 \end{bmatrix}$$
   A. 55
   B. −65
   C. 4
   D. Zero

44. When is the equivalent variation equal to compensatory variation which is equal to consumer surplus?
   A. When income effect is equal to zero
   B. When income effect is less than one
   C. When income effect is equal to substitution
   D. When income effect is greater than one

45. A good is subject to periodic increase in supply. Each time when the supply increases, the supplier finds the total revenue decreasing. In this case, which of the following must be true for the good?
   A. It is an inferior good
   B. The supply is price inelastic
   C. The demand is price inelastic
   D. None of the above.

46. The term increasing cost industry is used to describe
   A. A firm with a rising average cost curve
   B. An industry subject to decreasing returns to scale
   C. An industry with rising marginal cost curve
   D. An industry in which the prices of one or more inputs are bid up as output expands

47. Suppose that duopolists face the following market demand function: $P = 30 - Q$, where $Q = Q_1 + Q_2$. Also, suppose that both firms have zero marginal cost. Find the total output produced in a Cournot equilibrium.
   A. 10
   B. 15
   C. 20
   D. 25

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48. Does a profit-maximizing bundle exist for a technology that exhibits constant returns to scale as long as there is some point that yields positive profits?
    A. Yes
    B. No
    C. Need more information
    D. Cannot say

49. 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.

50. The following production function has the property of constant factor income shares in the face of changing factor prices:
    A. CES production function
    B. Transcendental production function
    C. Cobb-Douglas production function
    D. None of the above.

51. The equilibrium based on demand and supply must
    A. Exist
    B. Be unique
    C. Be stable
    D. Any of the above.

52. Keynes' theory is considered 'general' because
    A. The level of activity can settle at any level
    B. It is a preliminary theory of output and employment
    C. It is not amenable to any specific policy interventions
    D. None of the above.

53. Ricardo's 'marginal land' is
    A. No rent land
    B. The land of second grade
    C. The additional dose of land applied to a given quantity of labour
    D. None of the above.

54. The main factor behind India's high inflation in recent years is
    A. Fuel prices
    B. Food inflation
    C. High fiscal deficits
    D. High interest rates

55. Beginning with an autarky (no-trade) situation with Heckscher-Ohlin model, if Country H is relatively labour abundant, then after trade
    A. Wages and rents should rise in H
    B. Wages and rents should fall in H
    C. Wages should rise and rents should fall in H
    D. Wages should fall and rents should rise in H

56. External economies of scale arise when cost per unit
    A. Rises as the industry grows bigger
    B. Falls as the industry grows bigger
    C. Falls as the average firm grows bigger
    D. Remains constant

57. Monopolistic competition is associated with
    A. Cut-throat price competition
    B. Product differentiation
    C. Explicit consideration at firm level of the feedback effects of pricing decisions of other firms
    D. High profit margins

58. In case of scale economies, an increase in the size of the market will
    A. Increase the number of firms and raise the price per unit
    B. Decrease the number of firms and raise the price per unit
    C. Increase the number of firms and lower the price per unit
    D. Decrease the number of firms

59. The most common form of price discrimination in international trade is
    A. Non-tariff barriers
    B. Voluntary export restraints
    C. Dumping
    D. None of the above.

60. The *prohibitive tariff* is a tariff that
    A. Is so high that it eliminates imports
    B. Is so high that it causes undue harm to trade-partner economies
    C. Is so high that it causes undue harm to import competing sectors
    D. Is so low that the government prohibits its use since it would lose an important revenue source.

61. The Harris-Todaro model
    A. Leads to a rejection of the import substitution strategy for economic development
    B. Supports the protectionist strategy for economic growth
    C. Implies that the free trade approach is not likely to promote economic growth
    D. Both B and C.

62. The yield curve generally slopes upward because
    A. Longer maturity bonds typically pay higher interest rates than shorter maturity bonds
    B. Longer maturity bonds typically pay lower interest rates than shorter maturity bonds
    C. Shorter maturity bonds have more default risk
    D. Longer maturity bonds are not taxable

63. Which of the following is *not* part of M1?
    A. Demand deposits
    B. Bank accounts
    C. Time deposits
    D. Other deposits

64. An increase in expected inflation is likely to cause
    A. A decline in the demand for real money balances
    B. An increase in the demand for real money balances
    C. No change in the demand for real money balances
    D. No change in the demand for real money balances only if the income elasticity of real money demand is zero

65. According to Keynesian macroeconomists, prices adjust _____ to shocks, so that the government should _____
    A. Slowly; do little
    B. Rapidly; do little
    C. Rapidly; fight recessions
    D. Slowly; fight recessions

66. The effort curve is
    A. Horizontal, because work effort is independent of the real wage
    B. Negatively sloped, because of diminishing marginal returns to labour
    C. Positively sloped, because of the law of increasing cost
    D. S-shaped, because a small increase in the real wage will increase work effort more at an intermediate wage than at a low wage or at a high wage

67. The distinguishing feature that determines whether an analysis is classical or Keynesian is:
    A. The speed of price adjustment
    B. The slope of the aggregate demand curve
    C. The degree of monopoly power in the economy
    D. The assumption about the transmission mechanism of monetary policy.

68. Purchasing power parity does not hold in the short to medium run because:
    A. Exports do not equal imports
    B. Exchange rates fluctuate too much
    C. Some goods are not internationally traded
    D. Most business cycles are caused by shocks to aggregate demand

69. Which of the following elasticities measure a movement along a curve rather than a shift in the curve?
    A. Price elasticity of demand
    B. Income elasticity of demand
    C. Cross elasticity of demand
    D. None of the above.

70. The Inflation expectation survey of the Households is conducted by
    A. CSO
    B. NSSO
    C. Ministry of Finance
    D. RBI

71. Convenient sampling is an example of
    A. Probabilistic sampling
    B. Stratified sampling
    C. Non-probabilistic sampling
    D. Cluster sampling

72. The recent monetary policy directed banks to price their lending rates based on
    A. Marginal cost of funds based lending rates
    B. Average cost of funds based lending rates
    C. Prime lending rate
    D. None of the above.

73. India's rank in HDI in the year 2015 is
    A. 135
    B. 130
    C. 132
    D. 134

74. The current foreign exchange reserves in India is about
    A. 350 billion US Dollars
    B. 450 billion US Dollars
    C. 600 billion US Dollars
    D. 200 billion US Dollars

75. The Monetary policy committee announced in the budget 2016 primarily aims at
    A. Targeting inflation
    B. Targeting interest rates
    C. Targeting growth
    D. B and C