F-57

Entrance Examinations, February 2014
M.Phil. (Economics)

Time: 2 Hours   Max. Marks: 75

HALL TICKET NUMBER

PART-A (There are 25 questions in this part)

1. Which of the following is TRUE?
An increase in the price of a Normal good would:

    A. reduce the quantity demanded of it by a larger amount on the Hicksian Compensated Demand curve than on the Marshallian Demand curve.

    B. Increase the quantity demanded of it by a larger amount on the Hicksian Compensated Demand curve than on the Marshallian Demand curve.

    C. Reduce the quantity demanded of it by a smaller amount on the Hicksian Compensated Demand curve than on the Marshallian Demand curve.

    D. Reduce the quantity demanded of it by the same amount on the Hicksian Compensated Demand curve and on the Marshallian Demand curve.

2. Compensating Variation in income measures:
    A. The income necessary to compensate a consumer for a price increase so as to leave him at the original level of indifference
    B. Changes in the welfare of an individual for changes in price of a commodity
    C. Changes in the utility of the individual for changes in prices of the commodity
    D. all three of the above.

3. Which of the following is TRUE?
An individual has the following Utility function: $U = X_1X_2$ and a fixed income. The Demand functions for this Individual for both the commodities would be
    A. Linear and Downward sloping in their own price and income.
    B. Functions of their own price and the price of the substitute good.
    C. Rectangular Hyperbolas with respect to their own prices.
    D. Would have an elasticity of demand greater than unity.

4. If the production function for a good Y is given by $Y= f(X) = X^a$ where $a > 0$. The price of input X is w. If the market for Y is competitive, the condition that this would yield a meaningful solution for a rational producer is:
    A. $a > 1$
    B. $a \geq 2$
    C. $a \leq 1$
    D. Y must be a normal good.

5. Unconditional or Absolute convergence refers to the hypothesis that:
    A. Poor countries growth faster the farther away they are from their steady state equilibrium.
    B. Rich countries growth faster than poor countries because they have higher savings rates
    C. Poor countries grow faster than rich countries
    D. Countries with higher levels of real per capita tend to have higher level of savings

6. According to Ricardian theory, the price of agricultural produce rises over time because
    A. Rent has to be paid on more fertile land as less fertile lands are brought into cultivation
    B. Supply of food does not keep up with the demand for food
    C. Landlords raise the price of agricultural produce since they have a monopoly over land
    D. The labour content in the production of agricultural products rises as less fertile lands are brought into cultivation

7. Primitive accumulation of capital is a process, where
    A. Accumulation happens by dispossession of the peasants and petty producers from their means of production and placing in the hands of capitalists by the State.
    B. Accumulation occurs in primitive communities.
    C. Capitalists increase their surplus value.
    D. All of the above.

8. Neoclassical economists and Marxian economists agree on the following proposition:
    A. Firms extract surplus value from workers.
    B. Firms pay efficiency wages to extract greater effort from workers.
    C. Firms are profit maximizing.
    D. B and C above are true.

9. When independent variables are correlated which statistical technique is used?
    A. Multiple regression
    B. Logistic regression
    C. Factor analysis
    D. Probit model

10. If the observations of 7 units are 7, 108, 7, 10006, 5, 7, 2 which of the central tendency measure is appropriate
    A. Mean
    B. Mode
    C. Median
    D. None of the above

11. Stratified sampling is used when
    A. Population is homogenous
    B. Population is scattered
    C. Population is closed
    D. Population is heterogeneous

12. Chi-square test is used to test
    A. Independence of attributes
    B. Equality of two different means
    C. Significance of mean from single population
    D. Significance of correlation coefficient

13. The Total Derivative of $z = (13x - 18y)^2$ where $y = x + 6$ is
    A. $- 26(13x - 18y)$
    B. $26(13x + 18y)$
    C. $- 10 (13x - 18y)$
    D. $- 10 (13x + 18y)$

14. Let function $f: S | \rightarrow T$ be continuous, S and T be non-empty convex sets of real numbers. Then the function f has a fixed point, if,

    A. $T \subseteq S$, S is bounded.
    B. $S \subseteq T$, T is compact.
    C. $T \subseteq S$, T is compact.
    D. $S \subseteq T$, S is compact.

15. The Rank of the following Matrix

$$P = \begin{bmatrix} -3 & 6 & 2 \\ 1 & 5 & 4 \\ 4 & -8 & 2 \end{bmatrix} \quad is$$

A. 2
B. 3
C. 4
D. 1

16. The set of simultaneous equations:

$$7x - 3y - 3z = 7$$
$$2x + 4y + z = 0$$
$$2y - z = 2$$

has

A. Infinite Solutions
B. Unique Non-Trivial solution
C. Only a trivial Solution
D. No solution

17. India's Current Account Deficit as a proportion of it GDP in 2012-13 has gone up to:
   A. 1.8 percent
   B. 2.8 percent
   C. 3.8 percent
   D. 4.8 percent

18. The objectives of Fiscal Responsibility and Budget Management Act 2004 are:
   A. to introduce transparent fiscal management systems in the country
   B. to introduce a more equitable and manageable distribution of the country's debts over the years
   C. to aim for fiscal stability for India in the long run
   D. All of the above

19. The total subsidies as share of India's GDP in 2012 is about
   A. 2.03 percent
   B. 5.5 percent
   C. 10.2 percent
   D. 20.2 percent

20. Given the supply of money, if the government reduces the tax rate which of the following is true
   A. Equilibrium income and interest rate will decrease
   B. Equilibrium income and interest rate will increase
   C. Equilibrium income will decrease and interest rate will increase
   D. Equilibrium income will increase and interest rate will decrease

21. "Limit Price" or "limit pricing" is a strategy
   A. adopted by the Government to limit the entry of new firms into the Market
   B. adopted by new entrants to undercut the price of incumbents.
   C. Adopted by the incumbents to prevent entry by making entry unprofitable to entrants.
   D. Adopted by trading countries under the WTO agreements

22. The "Elasticity condition to improve the Trade Balance is:
   A. A necessary condition
   B. A sufficient condition
   C. Neither necessary nor sufficient condition
   D. Both a necessary and sufficient condition

23. Liquidity Trap occurs when the demand for money
   A. Is perfectly interest elastic
   B. Is perfectly interest inelastic
   C. Leads to an increase in money supply resulting in a fall in interest rates
   D. Leads to an increase in money supply pushing interest rates upwards

24. Business cycles are
   A. Short term patterns of increases and decreases in economic activity around a general trend
   B. Irregular events, which rarely occur
   C. Predictable economic expansions above the long term trend
   D. Abrupt departures from the current economic trend

25. Consider a system in equilibrium in classical macroeconomic model. Let nominal money supply be increased by 50 per cent. Then new equilibrium is attained,

A. by restoring the nominal balances at the old level through a 50 percent increase in prices
B. as aggregate supply increases by 50 percent to meet increased aggregate demand
C. by restoring the real balances at the old level through a 50 percent increase in prices
D. as investment is stimulated by a fall in rate of interest

PART- B (There are 50 questions in this part)

26. A monopolist faces the demand curve $X = 10/p$ and has a constant marginal cost of 1. His profit maximizing level of output
   A. Is equal to ONE unit of X
   B. Is equal to X where, $0 < X < 1$
   C. Does not exist
   D. Is equal to Zero

4

27. There are two firms A and B in the market having zero marginal costs of production. The inverse demand curve facing this industry is P(Y) = 100 – Y.
Which of the following statements is TRUE?
    A. The competitive output level of the industry is 150
    B. The equilibrium level of Output in this Industry is 33.33 if they decide to share the Market equally
    C. If firm A behaves as the leader and firm B is a follower then the output of firm B would be 10.
    D. The cartel output level for the industry is 70.

28. If a monopoly is characterized by constant positive marginal costs of production and faces a linear demand curve, then it is true that the Dead weight loss due to the monopoly pricing rule will equal to:
    A. One half the value of Monopoly profits
    B. A quarter of the value of the monopoly profits
    C. Equal to the value of the monopoly profits
    D. Two-thirds the value of the monopoly profits

29. A Monopoly market structure is preferable over a competitive market structure only if:
    A. The technology of production is scale neutral.
    B. There are diseconomies of scale in the production of the product.
    C. There are strict economies of scale in the production of the product.
    D. Technology uses fixed proportions of inputs.

30. Which of the following statements is FALSE:
    A. Economies of Scale is a sufficient condition for Sub-additivity of Costs
    B. Economies of scale is not a necessary condition for the Sub-additivity of Costs
    C. Economies of scale not necessary but sufficient for the Subadditivity of costs
    D. Economies of scale are both a necessary and sufficient condition for the Subadditivity of costs.

31. Which of the following statements is TRUE?
    A. A strong Natural monopoly is characterized by Strictly decreasing Average costs of production but can cover its costs by adopting Marginal cost pricing rule.
    B. A firm is a Weak natural monopoly if it cannot cover its costs of production by adopting the marginal cost pricing rule.
    C. A Natural monopoly by definition is immune to entry by other firms.
    D. A firm is a weak natural monopoly if the costs are sub-additive but not necessarily experiencing decreasing average costs of production.

32. In Schumpeter's theory of Economic development, the main source of finance for innovations comes from:
    A. Profits from past economic activity
    B. Past savings
    C. Bank loans
    D. Borrowings from abroad

33. If at the aggregate level, the savings rate is equal to the competitive rate of profits then
   A. This results in a steady state equilibrium with full employment
   B. Maximizes Output
   C. Maximizes consumption
   D. Maximizes Consumption per capita

34. Which of the following statements is TRUE?
   Public Choice theory is
   A. described as "the use of economic tools to deal with traditional problems of political science". Its content includes the study of political behavior.
   B. is the subset of positive political theory that models voters, politicians, and bureaucrats as mainly self-interested individuals.
   C. is a sub-area of microeconomics.
   D. All of the above are true.

35. The author of the book "The Scope and Method of Political Economy" is:
   A. John Stewart Mill
   B. John Neville Keynes
   C. E.A.G. Robinson
   D. Henry Sidgwick

36. What kind of sampling is used in NSS data collection?
   A. Simple random sampling
   B. Stratified random sampling
   C. Multistage sampling
   D. All of the above

37. In a frequency distribution the last cumulative frequency is 500. Q_3 must lie in:
   A. 275th item
   B. 375th item
   C. 475th item
   D. 175th item

38. As a remedy to multicollinearity problem, doing which of the followings may lead to specification bias?
   A. Transforming the existing variables into new variables
   B. Adding new data to the sample
   C. Dropping one of the collinear variables
   D. First differencing the successive values of the variables

39. An estimated econometric relation based on OLS is given as:
   $$\hat{Y}_t = -114 + 0.04\, X_{1t} + 1.2\, X_{2t} - 2.03\, X_{3t} + 0.14\, X_{4t}$$
   $$(0.11) \quad (1.41) \quad (3.15) \quad (0.02)$$
   Number of observations = 541; Standard errors are in parenthesis.
   Which of the variables has statistically significant influence at 1% level?

   A. X_1
   B. X_2
   C. X_3
   D. X_4

6

40. The Hessian Determinant of the function: $z = 2x^2 + xy + 4y^2 + xz + z^2 + 2$ is given by

A. $\begin{bmatrix} 4 & 8 & 2 \\ 1 & 8 & 0 \\ 1 & 0 & 2 \end{bmatrix}$
B. $\begin{bmatrix} 4 & 1 & 1 \\ 1 & 8 & 8 \\ 1 & 0 & 2 \end{bmatrix}$
C. $\begin{bmatrix} 4 & 1 & 1 \\ 1 & 8 & 0 \\ 1 & 0 & 2 \end{bmatrix}$
D. $\begin{bmatrix} 1 & 1 & 4 \\ 1 & 8 & 0 \\ 1 & 2 & 0 \end{bmatrix}$

41. $\int X^{3/2} \, dX = ?$

A. $2/5 \, X^{2/5} + c$

B. $2/5 \, X^{2/5}$

C. $2/5 \, X^{5/2} + c$

D. $5/2 \, X^{2/5} + c$

42. The function $z = x + 2e^y - e^x - e^{2y}$
    A. Has only one extreme value and this is a miminum value of the function.
    B. Has no extreme values
    C. Has a unique extreme value which is a maximum
    D. Has many local maxima

43. Which of the following statements is incorrect?
    A. the transpose of a transposed matrix is equal to the original matrix.
    B. the transpose of the sum of matrices is equal to the sum of transposed matrices.
    C. the transpose of the sum of matrices is not equal to the sum of transposed matrices in reverse order
    D. the transpose of the product of two matrices is equal to the product of the transposes of the matrices in reverse order.

44. The set of points that satisfy the equation $Y = mX$, where $m > 0$ and Y and X belong to the set of Real numbers, constitutes
    A. A compact set
    B. A closed set
    C. An open set
    D. A bounded set

45. The 73rd & 74th Amendments to Constitution of India done in 1993 pertains to:
    A. Centre-State Finances
    B. Creation of three-tier structure of local government bodies
    C. Partial Liberalization
    D. Banking Sector Reforms

46. The Commission for Agricultural Costs and Prices sets Minimum Support Prices taking the following criteria into consideration:
    A. Inter-crop price parity
    B. Inter-sector price parity
    C. Cost of cultivation
    D. All of them

47. Under targeted public distribution system, NSS survey in 2005 found that 40 percent of the rural poor and 27 percent of urban poor were denied BPL ration cards. This is due to:
    A. Inclusion errors
    B. Exclusion errors
    C. Both inclusion and exclusion errors
    D. Enumeration Errors

48. In the monetary policy, the following is considered to be an intermediate target:
    A. Interest rate
    B. Exchange rate
    C. CRR
    D. SLR

49. The disparity tax was propounded by
    A. Raja Challaiah
    B. Gautam Mathur
    C. Richard Musgrave
    D. Y.V.Reddy

50. In the union budget, profits from public sector undertakings are taken under
    A. Capital receipts
    B. Revenue receipts
    C. Planned expenditure
    D. Non-Plan Expenditures

51. Tax elasticity is the growth of tax revenue due to
    A. Growth in the tax rate alone
    B. Growth in the tax base alone
    C. Growth in the tax base as well as tax rate
    D. Growth in indirect taxes

52. Arbitrage entails outcomes where,
    A. there is a possibility of sure gain with no possibility of loss.
    B. expected gain is strictly positive.
    C. probability of gain is very large whereas probability of loss is quite low.
    D. value of possible gain is higher than value of possible loss.

53. In the secondary market for securities, accrued interest
    A. is quoted in the bond price in the financial press.
    B. must be paid by the buyer of the bond and remitted to the seller of the bond.
    C. must be paid to the broker for the inconvenience of selling bonds between maturity dates.
    D. A. and B.

54. The opportunity cost of holding money is the
  A. Real rate of interest
  B. Inflation rate
  C. Expected inflation rate
  D. Nominal rate of interest

55. The assertion that one cannot consistently achieve returns in excess of average market returns on a risk-adjusted basis, given the information available at the time the investment is made is a logical conclusion of
  A. The invisible hand hypothesis of Adam Smith
  B. The assumptions on economic agents by behavioral finance theorists
  C. The assumption that agents have rational expectations
  D. The assumption that agents work under imperfect information.

56. Market Failure refers to the fact that,
  A. Markets do not exist for certain products
  B. The Market does not allocate the resources optimally
  C. The Market discriminates between different consumers
  D. The Market does not function due to regulation by the government

57. Consider two firms which are identical except for their financial structures. The first (Firm U) is unlevered: that is, it is financed by equity only. The other (Firm L) is levered: it is financed partly by equity, and partly by debt. Which of the following statements is true?

  A. The Capital asset pricing Model states that the value of the first firm would be more than the value of the second firm
  B. The Value of the two firms is the same according to the Capital-Structure irrelevance principle.
  C. Value of a firm is unaffected by how it is financed according to the Modigliani-Miller theorem
  D. Both B and C are true statements

58. Which of the following is NOT considered to be a Barrier to entry of firms in an industry?
  A. Absolute Costs advantages of incumbent firms
  B. Economies of Scale
  C. Limit pricing
  D. Advertising

59. The pay off matrix for a game is:

2,2	0,0
0,0	1,1

The game has:
  A. No Nash Equilibrium
  B. Only one Nash Equilibrium
  C. Two Nash Equilibria
  D. Three Nash Equilibria

9

60. An economy with L commodities (including factors of production) has well defined demand and supply functions for all positive prices. Suppose at price $p = (p_1, p_2, ..., p_L)$, all firms earn positive profits. If prices change from p to kp, where k is a real number, $k > 1$. Then,

    A. aggregate demand for each commodity goes down.
    B. aggregate supply for each commodity goes up.
    C. aggregate excess demand for each commodity goes up.
    D. aggregate profit for each firm goes up.

Q.61. Given that the individual preferences be complete orderings over a given set of social states, which of the following collective choice rules provides *complete* binary relation over the social states?

    A. Pareto ranking rule.
    B. Kaldor compensation criteria.
    C. method of majority decision.
    D. all of the above.

62. Which trade theory holds that nations should produce those goods for which it has the greatest relative advantage?
    A. The theory of absolute advantage.
    B. The factor endowment theory
    C. The theory of relative advantage.
    D. None of the above

63. The recent fall in the value of the rupee against US dollars is on account of,
    A. decline in foreign exchange reserves.
    B. increase in current account deficit.
    C. decline in exports.
    D. decline in imports.

64. In country X, it takes 50 labour hours to produce per unit of cloth and 100 labour hours to produce per unit of grain. In country Y, it takes 200 labour hours to produce per unit of cloth and 200 labour hours to produce per unit of grain. At what price would X be willing to trade with Y?
    A. More than half a unit of grain per unit of cloth.
    B. More than a quarter unit of cloth per unit of grain.
    C. More than a quarter unit of grain per unit of cloth.
    D. More than half a unit of cloth per unit of grain

65. The argument that in countries with a large surplus workforce in agriculture, in order to take advantage of network effects, a concentrated planned investment in industrialization must be undertaken was first propounded by:

    A. A.O.Hirschman
    B. Ragner Nurkse
    C. Rosenstein Rodan
    D. W.W. Rostow

66. The World bank's modified human development index has included which of the following in its construction?
   A. Poverty
   B. Inequality
   C. Health
   D. Education

67. One of the problems of Rural Credit is seen as:
   A. Lack of information on formal credit institutions by rural households
   B. Rationing of credit by formal credit institutions
   C. Reluctance of formal institutions to lend money due to problems of Moral Hazard
   D. Fear of retaliation from Money lenders

68. If the Lorenz curve for a country is a straight line of 45^0, the value of the Gini Coefficient
   A. Is equal to 1
   B. Is equal to 0
   C. Is equal to 0.5
   D. Cannot be calculated

69. The supply curve of rupees to the currency market will be upward sloping if
   A. The demand for Indian Exports is price elastic
   B. The demand for Indian Exports is price inelastic
   C. The demand for Imports into India is price elastic
   D. The demand for Imports into India is price inelastic

70. Assuming that money demand is completely interest insensitive, the
   A. LM schedule will be horizontal.
   B. LM schedule will be vertical.
   C. IS schedule is vertical.
   D. IS schedule is horizontal.

71. Traditional Keynesians tend to favor
   A. monetary policy over fiscal policy because of the effectiveness of central banks.
   B. monetary policy over fiscal policy because it reduces interest rates..
   C. fiscal policy over monetary policy because it doesn't impact interest rates.
   D. fiscal policy over monetary policy because of the liquidity trap.

72. In the IS-LM model for a closed economy, the rate of interest in determined in the,
   A. capital market
   B. money market
   C. goods market
   D. stock market

73. The classical model differs from the Keynesian model in that
   A. monetary policy does not impact output in the Keynesian model.
   B. the classical model focuses on the long-run and the Keynesian model focuses on the short-run.
   C. fiscal policy is more powerful in the classical model than in the Keynesian model.
   D. the classical model believes monetary policy is a powerful impact on output and fiscal policy is not.

11

74. The idea of mistaken expectations leading to an upward sloping aggregate supply curve was given by
   A. J M Keynes
   B. R Lucas
   C. G Mankiw
   D. M Friedman

75. Let X and Y be two states of society such that X is Scitovsky superior to Y. Then,

   A. X is Kaldor superior to Y and X is Hicks superior to Y.
   B. X is Kaldor superior to Y but X is not Hicks superior to Y.
   C. X is Kaldor not superior to Y but X is Hicks superior to Y.
   D. X is neither Kaldor superior to Y nor is X Hicks superior to Y.

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SPACE FOR ROUGH WORK