

Entrance Examinations – 2017
M.A. Financial Economics

Hall Ticket Number

Time: 2 hours
Max. Marks: 100

Part A: 25 Marks
Part B: 75 Marks

INSTRUCTIONS

1. Write your Hall Ticket Number on the OMR Answer Sheet given to you. Also write the Hall Ticket Number in the space provided above.
2. Answers are to be marked on the OMR answer sheet.
3. Please read the instructions carefully before marking your answers on the OMR answer sheet.
4. Handover the OMR answer sheet after the examination to the Invigilator.
5. There are plain sheets in the booklet for rough work, no additional sheets will be provided.
6. Use of non-programmable calculators is allowed.
7. There are a total of 100 questions in this paper: **Part A** (25 questions) and **Part B** (75 questions).
8. **Each question has only one correct option and there is negative marking of 0.33.**
9. The appropriate answer should be coloured with either a blue or a black ball point or a sketch pen. **DO NOT USE A PENCIL.**
10. The question paper contains 21 pages including the cover page and pages for rough work (pages 16 to 20).
11. The question papers can be taken by the candidates at the end of the examination.

PART-A

1. According to Real Business Cycles model, employment in an economy may decline due to:
 - A. technology shock
 - B. high interest rates
 - C. liquidity trap
 - D. lack of demand

2. Vertical Phillips is explained by,
 - A. Absolute income hypothesis
 - B. Rational expectations hypothesis
 - C. Natural rate hypothesis
 - D. Adaptive expectations hypothesis

3. A critique of Keynesian unemployment equilibrium due to investment trap or liquidity trap states the following: As prices go down due to lack of effective demand, real value of money balances goes up and hence total real wealth of households also goes up, thereby inducing increased demand. What is this theoretical phenomenon called?
 - A. Real Balance Effect
 - B. Keynes Effect
 - C. Pigou Effect
 - D. Fisher Effect

4. Given that the individual preferences be complete orderings over a given set of social states, which of the following collective choice rules provides complete and transitive binary relation over the social states?
 - A. Kaldor compensation criteria.
 - B. Ranking by sum of individual utilities (a utilitarian principle).
 - C. Method of majority decision.
 - D. Pareto ranking rule.

5. Presence of arbitrage opportunities entails disequilibrium condition because,
 - A. there is excess demand for some asset or excess supply of some asset.
 - B. there is excess demand for some asset but no excess supply of any asset.
 - C. there is excess supply for some asset or excess demand of any asset.
 - D. None of the above

6. An estimated econometric relation based on OLS is given as:

$$\hat{S}_t = -21.3 + 0.23 Y_t + 2.11 PI_t - 1.3 R_t + 0.69 K_t$$

$$(0.72) \quad (0.19) \quad (4.37) \quad (1.16)$$

Number of observations = 835; Standard errors are in parenthesis.

- Which of the variables has statistically significant influence at 1% level?
- A. K
 - B. PI
 - C. R
 - D. Y

7. A group of economists is working on incorporating environmental costs while assessing economic performance (p). As environmental costs of any economic activity are spread over time, they wish to use appropriate rate of discount (r). Assuming that there are some environmental costs to every economic activity,
- value of p is reduced as r is decreased.
 - value of p is reduced as r is increased.
 - value of p does not depend on r but only on actual physical environmental damage
 - as r is raised, value of p first goes down, then goes up.
8. Let f be a real valued linear function defined over a compact set of points, S (which is a subset of R^n). Then the function f
- attains its minimum at a boundary point of S .
 - attains its minimum only if S is a convex set.
 - attains its minimum in the interior of S .
 - may not attain its minimum anywhere in S .
9. Preferences of an individual are described by the following Cobb-Douglas utility function: $u(x, y) = A \cdot x^2 y$ ($x, y \geq 0$). Then such a utility function is:
- strictly quasi-concave but not strictly monotonous
 - not strictly quasi-concave but strictly monotonous
 - neither strictly quasi-concave nor strictly monotonous
 - both strictly quasi-concave and strictly monotonous.
10. P, Q and R are sets as given below: $P = \{ \emptyset \}$, $Q = \{ 0 \}$, $R = \{ P, Q \}$, where \emptyset is null set. Which of the following statements is correct?
- P is a subset of R
 - Q is a subset of R
 - Both A & B are True
 - None of the above.
11. A person is faced with a choice set containing exactly two elements. Then any binary relation defining her/his preferences necessarily satisfies:
- asymmetry
 - completeness
 - reflexivity
 - transitivity
12. Market supply for a good is perfectly inelastic, ($x^S(q) = 235$, q being the price received by the firms) and its market demand is downward sloping, given as ($x^D(p) = 500/p$, where p is the price paid by the consumers). What happens to the aggregate revenue, R , earned by the firms and the market price, p_m , when an *ad valorem* excise duty of 18 % is freshly levied?
- The market price, p_m , increases by 18 % and the aggregate revenue, R , decreases by 18 %.
 - The market price, p_m , increases by 18 % and aggregate revenue, R , decreases by less than 18 %.
 - The market price, p_m , remains unchanged and aggregate revenue, R , decreases by 18 %.

D. The market price, p_m , remains unchanged and aggregate revenue, R , decreases by less than 18 %.

13. Cartels are inherently unstable because members,

- A. tend to produce below their quotas
- B. tend to produce above their quotas
- C. tend to produce highly differentiated goods
- D. all of the options A, B, C.

14. Consider a general equilibrium framework. Let demands and supplies of all commodities be well-defined for all admissible prices. Then, which of the following is homogenous of degree zero in prices alone?

- A. Aggregate supply
- B. Aggregate cost
- C. Aggregate revenue
- D. Aggregate profit

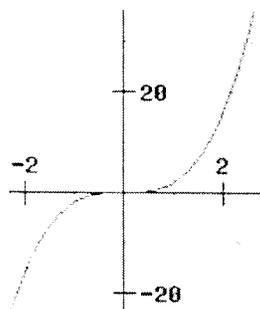
15. Let individual preferences be represented by a utility function, $u(x)$, x being commodity bundle (a vector of order n). For each commodity, i , ($i = 1, 2, \dots, n$), let there exist a quantity x_i^0 , such that, $du/dx_i > 0$ for all $x_i < x_i^0$, and $du/dx_i = 0$ for all $x_i \geq x_i^0$. Then, the underlying preferences must violate condition:

- A. transitivity
- B. convexity
- C. non-satiation
- D. continuity

16. Let a 2-good exchange economy with non-zero initial endowments in each good be such that individual utility functions are strictly quasi-concave and strictly monotonous increasing. Then,

- A. the set of core allocations and the set of competitive allocations are both empty.
- B. the set of core allocations is empty but the set of competitive allocations is non-empty.
- C. the set of core allocations and the set of competitive allocations are both non-empty.
- D. the set of core allocations is non-empty but the set of competitive allocations is empty.

17. Which of the following functions best describes the graph of the function given below (y on vertical axis; x on horizontal axis)?



- A. $y = 3x$
- B. $y = \tan x$
- C. $y = e^x$
- D. $y = 2x^3$

18. A Giffen good has a positively sloped market demand curve as well as a positively sloped market supply curve crossing at the market equilibrium, p^* and q^* such that the slope of the supply curve is greater than the slope of the demand curve. Then, the equilibrium (p^*, q^*) is:

- A. Walras stable and Marshall unstable.
- B. Walras unstable and Marshall stable.
- C. Walras stable and Marshall stable.
- D. Walras unstable and Marshall unstable.

19. At the equilibrium in Q.18. the demand and supply elasticities are such that,

- A. price elasticity of demand and price elasticity of supply are of opposite signs.
- B. price elasticity of demand is smaller than price elasticity of supply.
- C. price elasticity of demand is equal to price elasticity of supply.
- D. price elasticity of demand is greater than price elasticity of supply.

20. Bowley's Measure of Skewness

- A. $(Q_3 - 2M_d + Q_1) / (Q_3 - Q_1)$
- B. $(Q_3 - 2M_d + Q_1) / (Q_3 - Q_2)$
- C. $(Q_2 - 2M_d + Q_1) / (Q_3 - Q_1)$
- D. $(Q_1 - 2M_d + Q_1) / (Q_3 - Q_1)$

21. The second derivative of a function informs us about the _____ of its graph.

- A. slope
- B. value
- C. curvature
- D. height

22. A study found a correlation of $r = -0.61$ between the gender of a worker and his or her income. You conclude that:

- A. women earn more than men on average
- B. women earn less than men on average.
- C. an arithmetic mistake was made; this is not a possible value of r .
- D. this is nonsense because r makes no sense here.

23. A _____ refers to the group in your study whereas a _____ refers to a distinct part of that group of people

- A. sample; population
- B. participant; population
- C. population; sample
- D. sample; participant

24. The second quartile value of a sample is also known as

- A. arithmetic mean
- B. median
- C. mode
- D. geometric mean

25. Data collected on a variable over a period of time is called

- A) time series data
- B) cross section data
- C) panel data
- D) primary data

PART-B

26. 46 out of 56 students in a class scored more than 70% in a test. What is the percentage of the students in that class scored less than 70%?

- A. 18.5 B. 17.9 C. 22.5 D. 12.2

27. Variance is a measure of

- A. dispersion B. skewness C. central tendency D. range

28. The mean of n observations is \bar{A} . If each observation is increased by p , the mean of the new observations is

- A. $(\bar{A} + p)$
B. $(\bar{A} * p)$
C. $(\bar{A} + \text{Square root of } p)$
D. $(\bar{A} + np)$

29. Standard Normal Variate refers to

- A. A normal variate with $\mu=0$ and $\sigma=1$
B. A normal variate with $\mu=1$ and $\sigma=1$
C. A normal variate with $\mu=1$ and $\sigma=0$
D. A normal variate with $\mu=0$ and $\sigma=.5$

30. A matrix whose determinantal value is zero is called

- A. Singular matrix
B. Non-singular matrix
C. Inverse matrix
D. zero or null matrix

31. If inflation is 3 percent at the time when a worker's nominal income increases over unit time from Rs.50,000 to Rs.52,000 then the worker's real income has:

- A. approximately increased by 1%
B. approximately decreased by 3%
C. approximately increased by 5%
D. approximately decreased by 10%

32. If the actual inflation rate is greater than the expected inflation rate, then

- A. Borrowers win.
B. Lenders win.
C. Neither borrowers nor lenders win
D. Both borrowers and lenders win.

33. If the reserve ratio was set at 100%, then banks could:

- A. Increase the number of loans.
B. Increase the money supply.
C. Double the number of loans.
D. Make no loans.

34. IPO stands for
- A. Initial Private Offering
 - B. Internal Public Offering
 - C. Initial Purchase Offer
 - D. Initial Public Offering
35. Suppose the producer is planning to reduce the price of a product from Rs. 10 to Rs. 8 and expecting the quantity demand to increase from 4 to 6 units. What is the Arc Elasticity of Demand?
- A. -1.33
 - B. -2.5
 - C. -1.8
 - D. 2.46
36. The utility function given by $U = U(x, y) = ax + by$, represents
- A. Perfect Substitutes
 - B. Perfect Complements
 - C. Neutral Goods
 - D. One good is Bad
37. When only one combination of labour and capital can be used to produce a given output:
- A. The isoquants are straight lines
 - B. The isoquants are L- Shaped
 - C. The isoquants are Horizontal
 - D. The isoquants are Vertical
38. The production function $F(x,y) = (x+y)^{1/2}$ exhibits:
- A. Constant Returns to Scale
 - B. Increasing Returns to Scale
 - C. Decreasing Returns to Scale
 - D. first increasing and then decreasing returns to scale
39. The cost of production of a monopolist is: $C(Q) = 50 + Q^2$ and demand is $P(Q) = 40 - Q$. What is the profit maximizing level of output?
- A. 13.33
 - B. 10
 - C. 30
 - D. 50
40. The market for fresh fruit juice may be an example of:
- A. Perfect Competition
 - B. Monopoly
 - C. Monopolistic Competition
 - D. Oligopoly

41. In which model each firm treats the output level of its competitor as fixed when deciding how much to produce?

- A. Stackelberg Model
- B. Cournot Model
- C. Bertrand Model
- D. Baumol Model

42. Marginal Social Benefit is the sum of

- A. Marginal Private Benefit and Marginal External Benefit
- B. Marginal Private Benefit and Marginal Public Benefit
- C. Marginal External Benefit and Marginal Internal Benefit
- D. Marginal Internal Benefit and Marginal Public Benefit

43. Individual A has 0.5 probability of receiving an income of Rs.40,000 and 0.5 probability of receiving an income of Rs.0. What is his expected income?

- A. 40,000 B. 30,000 C. 20,000 D. 10,000

44. The Edgeworth box as an analytical device helps in a study of

- A. Efficiency in Income
- B. Efficiency in Expenditure
- C. Efficiency in Cost
- D. Efficiency in Exchange

45. Assume there are 75 transactions a year in an economy with a money supply of Rs.300. If the average value of each transaction is Rs.20, then the velocity of money is

- A. $\frac{1}{2}$ B. 1 C. 5 D. 20

46. The difference between savings and investment is that

- A. investment is purchasing stock, while savings is putting money in a bank.
- B. investment is purchasing capital, savings is postponing consumption.
- C. investment is purchasing assets, while consumption is purchasing goods.
- D. investment increases output, while saving decreases output

47. According to classical economists,

- A. money was a "veil" that determined the nominal values in which such variables as the level of economic activity were measured.
- B. money can have a temporary impact on output.
- C. it is the nominal interest rate that matters in decisions to save and invest.
- D. Both (A) and (B)

48. Steady-state growth refers to

- A. intermediate-run periods.
- B. long-run equilibrium growth.

- C. output determination in the short run.
- D. None of the above

49. Robert Solow is one of the developers of
- A. classical economics.
 - B. the neoclassical growth model.
 - C. real business cycle theory.
 - D. new classical economics

50. A constant returns to scale production function means that if all inputs are halved then output will
- A. double.
 - B. increase, but not double.
 - C. fall by half.
 - D. fall, but not by half.

51. The redirection of macroeconomic policy that took place during the Reagan and both Bush administrations was inspired by
- A. supply-side economics.
 - B. real business cycle theory.
 - C. new classical economics.
 - D. new Keynesian directions

52. An example of negative productivity shock that could cause a recession is
- A. hurricane, which destroys capital.
 - B. a decrease in the price of oil.
 - C. reductions in defense spending.
 - D. all of the above

53. Which of the following statements is correct?
- A. In both the Keynesian and classical systems, aggregate demand is an important determinant of output and employment
 - B. In classical and monetarist models, money is the primary factor determining changes in aggregate demand.
 - C. Aggregate demand in the Keynesian model is determined entirely by the quantity of money, whereas in the classical model, money is one of several factors determining aggregate demand
 - D. None of the above

54. The M3 measure of money supply compiled by RBI equals
- A. CU+DD
 - B. CU+DD+Post office deposits
 - C. CU+DD+TD
 - D. CU+TD

55. Which of the following would be an asset on a consolidated balance sheet for a commercial bank?
- A. Checkable deposits
 - B. Time and savings deposits
 - C. Reserves held on deposit at the Reserve Bank of India

D. Borrowing from the Federal Reserve

56. If the financial innovations such as ATM machines make money demand less elastic than it was before, then

- A. the LM curve will become steeper.
- B. the LM curve will become flatter.
- C. both the IS and LM curves will become flatter.
- D. the LM curve will shift to the left.

57. The policy rate in India is now set by the

- A. Ministry of Finance
- B. Monetary Policy Committee of RBI
- C. NITI Ayog
- D. State Bank of India

58. Policy is conducted via discretion if policymakers

- A. announce and achieve a constant money supply.
- B. announce and achieve a constant interest rate.
- C. are free to respond to changes in economic conditions on a case-by-case basis.
- D. announce in advance how they will respond to changes in economic conditions.

59. The supply-determined nature of output and employment is a crucial feature of

- A. the Keynesian theory
- B. the classical system.
- C. monetarism.
- D. the rational expectations model.

60. A profit-maximizing firm under perfect competition hires labor until

- A. the price of output equals the price of labor
- B. the price of output equals the marginal product of labor
- C. the real wage equals the marginal product of labor.
- D. the real wage equals the marginal product of labor multiplied by the price of output

61. The LM curve slopes upward because

- A. as income rises, savings rise, increasing output.
- B. as interest rates rise, the money supply rises, increasing output.
- C. as interest rates rise, planned investment must fall, increasing output.
- D. as income increases, money demand rises, which increases interest rates.

62. In the liquidity trap case where the LM schedule is nearly horizontal,

- A. both monetary and fiscal policy are highly effective.
- B. monetary and fiscal policy are ineffective.
- C. monetary policy is ineffective and fiscal policy is effective.
- D. fiscal policy is ineffective and monetary policy is effective.

63. A lower interest elasticity of investment demand leads to a

- A. steeper IS curve.

- B. flatter IS curve.
- C. steeper LM curve.
- D. flatter LM curve.

64. If consumption is given by $C = 300 + .6(Y-T)$ and $I = 300 - 40r$, the IS curve is

- A. $Y = 600 - 2.4T - 40r + G$.
- B. $Y = 600 + .6Y - 100r - G$
- C. $Y = 1500 - 1.5T - 100r + 2.5G$
- D. $Y = 1500 + .6T - 100r - G$

65. According to the monetarists,

- A. stable growth in the money supply is needed for economic stability.
- B. aggregate demand is unstable, mostly because of unstable investment demand.
- C. there is a need for fiscal policies to stabilize output.
- D. stable money growth is not needed for the economy to be stable.

66. Raw material in the Marxist political economy is characterized as :

- A. Variable Capital
- B. Non-Capital
- C. Constant Capital
- D. Marginal Capital

67. Recent measure of Demonetisation of Rs.500 and Rs.1000 currency denominations in India by the Govt. of India is said to have been taken

- A. To curb inflation
- B. To curb fiscal deficit
- C. To curb government expenditure
- D. To curb black money

68. Economic profit is equal to

- A. total revenue minus the opportunity cost of producing goods and services.
- B. total revenue minus the accounting cost of producing goods and services.
- C. total revenue minus the explicit cost of producing goods and services.
- D. average revenue minus the average cost of producing the last unit of a good or service

69. A natural monopoly occurs when

- A. the monopolist product is sold in its natural state (such as water or diamonds).
- B. firms are characterized by rising marginal cost curves.
- C. a monopoly firm requires the use of free natural resources (such as water or air) to produce its product.
- D. average total cost of production decreases as more output is produced.

70. The national Highway Development programme started in the

- A. 5th five year plan
- B. 6th five year plan
- C. 4th five year plan
- D. 10th five year plan

71. Which of the following committees worked on issues on microfinance after the Andhra Pradesh Crisis?

- A. Tendulkar committee
- B. Malegam committee
- C. Chakrabarty Committee
- D. Narasimhan Committee

72. The fiscal deficit has been pegged at ____% in the budget 2017.

- A. 3.2
- B. 4.2
- C. 5
- D. 5.5

73. Which one of the following is not a policy rate?
A. bank rate
B. repo rate
C. call money rate
D. marginal standing facility
74. The Inflation expectation survey of the Households is conducted by
A. CSO
B. NSSO
C. Ministry of Finance
D. RBI
75. Which one of the following constitutes the largest component of our foreign exchange reserves?
A. Gold
B. SDR
C. Foreign currency assets
D. Reserve position in the IMF
76. Who was the chairman of the 14th finance commission?
A. C Rangarajan
B. Vijay Kelkar
C. Y V Reddy
D. M Govinda Rao
77. Which one of the following variables is not categorical?
A. Age of a person.
B. Gender of a person.
C. Choice on a test item
D. Marital status of a person
78. In the Harrod-Domar equation $g = s/v$, v is defined as
A. the value of the country's capital stock
B. the ratio of the country's capital stock to its output
C. the change in the country's capital stock
D. None of the Above
79. The theory of unequal exchange was given by
A. A K Sen
B. T Malthus
C. J M Keynes
D. A Emmanuel

80. The Laffer curve

- A. related income tax rates to total income taxes collected.
- B. was so ridiculous that economists took it as a joke, hence the name, Laffer Curve.
- C. related tax rates to deadweight welfare losses.
- D. related government welfare payments to the birth rate.

81. Which of the following choices suggests that the private market can be effective in dealing with externalities?

- A. the "invisible hand"
- B. the law of diminishing social returns
- C. the Coase theorem
- D. technology policy

82. According to the monetarists, when the expected rate of inflation rises, the short-run Phillips curve

- A. shifts upward.
- B. shifts downward.
- C. is unaffected.
- D. None of the above

83. Which of the following organisation publishes quarterly GDP for India?

- A. Central Statistical Office
- B. NSSO
- C. CARE
- D. Ministry of Labour

84. 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.

85. Rostow's economic stages are

- A. the preconditions for takeoff, the takeoff, the drive to maturity, and the age of creative destruction.
- B. the traditional society, the preconditions for takeoff, the takeoff, the drive to maturity, and the age of high mass consumption.
- C. the preconditions for consumption, the replication, the drive to maturity, and the age of high mass consumption.
- D. the learning curve, the age of high mass consumption, post-takeoff, and the drive to Maturity

86. Contagion can best be described as

- A. an economy that experiences a currency crisis impacting other economies with which it competes.
- B. nations affected by a common economic shock.
- C. similar economies experiencing common business cycles.
- D. an economic disease, like a virus, that spreads rapidly to other nations.

87. A short-term financing problem for an economy is commonly referred to as problem of

- A. Solvency.
- B. Contagion.
- C. Policy conditionality.
- D. Liquidity

88. Historically, the primary mission for the IMF has been

- A. poverty reduction.
- B. financing short-term balance of payments problems.
- C. long-term economic development.
- D. lending funds to international agencies.

89. The author of the book Irrational Exuberance is

- A. Robert J Shiller
- B. Eugene Fama
- C. Paul Krugman
- D. Joseph Stiglitz

90. Moral hazard problems can take place in international financial markets if

- A. investors think that the risk of their investments is minimized due to the likelihood of being bailed out in the event of a crisis.
- B. corrupt leaders direct funds to friends who run businesses.
- C. governments spend funds on projects that are not economically feasible.
- D. investors mistakenly invest in places with low rates of returns.

91. As a result of recent currency crises, most economists have concluded that

- A. nations should consider the balancing and sequencing of domestic reform and opening to the outside world.
- B. developing countries should reimpose capital controls.
- C. international financial integration is likely to reduce economic growth.
- D. developing countries should implement a system of fixed exchange rates.

92. Relative to a small open economy, a monetary expansion by a large open economy results in

- A. larger depreciation.
- B. smaller depreciation.
- C. larger appreciation.
- D. smaller appreciation.

93. If the real wage adjusts without friction so that labor is always fully employed, then a 15 percent increase in the money supply

- A. will lead to an increase in the demand for money.
- B. will lead to increased output.
- C. will lead to a change in the full employment level of output.
- D. will lead to a 15 percent increase in nominal wages.

94. In the recent past flows of portfolio capital have resulted largely from

- A. differences in savings rates across countries and the desire to diversify investments.
- B. the same causes they resulted from in the latter part of the last century and the beginning of this

century.

- C. differences in investment opportunities between lenders and borrowers.
- D. the product cycle

95. Infant industry protection ____

- A. in one country is likely to lead to similar protection in other countries.
- B. is a policy protecting an industry while it grows and learns.
- C. is an effective commercial policy for perfectly competitive industries.
- D. (A) and (B)

96. The Budget 2017 has set a target of Rs.-----for agricultural credit for the year 2017-18.

- A. 15 lakh crores
- B. 10 lakh crores
- C. 5 lakh crores
- D. 7 lakh crores

97. BHIM developed by UPI stands for

- A. Bharat Interface for money
- B. Bharat International money
- C. Bharat Interface for mobile money
- D. None of the above

98. Which of the following programs was recently launched for digital literacy?

- A. PMGDISHA
- B. PMJDY
- C. MNREGA
- D. DLP

99. The compound interest on Rs. 30,000 at 7% per annum is Rs. 4347. The period (in years) is:

- A. 2
- B. 3
- C. 2.5
- D. 4

100. We usually observe in stock markets that securities with higher risk

- A. are associated with higher return
- B. are associated with lower return
- C. are associated with approximately similar return
- D. show no pattern with return