

ECONOMETRICS
(FINAL)

ECONOMICS

1. Which of the following statements about the labour markets is false?
 - (A) The imperfect knowledge model contends the nominal wages adapt to changes in price level
 - (B) In a rational expectations model, aggregate supply may be positively sloped in the short run because of forecasting errors
 - (C) In the 'new classical' macroeconomics, aggregate supply is positively sloped in the long run
 - (D) Contemporary Keynesian macroeconomics attributes the positively slope aggregate supply schedule to nominal wage contracts that lasts for extended periods

2. Aggregate supply is positively related to the price level when
 - (A) frictional and structural unemployment exists
 - (B) the supply of labour schedule adjusts immediately to changes in the demand for labour
 - (C) the demand for labour schedule adjusts immediately to the price level, and the labour supply schedule does not
 - (D) the supply of labour schedule adjusts immediately to the price level, and the demand for the labour does not

3. Ke is the expenditure multiplier, b is the interest sensitivity of private sector spending, h is the interest sensitivity of the demand for money and k is the transaction demand for money. From the following sets of values of Ke , b , h , and k , in which one the change in the money supply will have the larger multiplying effect on equilibrium income
 - (A) $Ke = 5, b = 5, h = 5, k = 0.20$
 - (B) $Ke = 4, b = 1, h = 5, k = 0.20$
 - (C) $Ke = 5, b = 10, h = 1, k = 0.20$
 - (D) $Ke = 4, b = 5, h = 10, k = 0.10$

4. In which of the following situations will an increase in the money supply have no effect upon equilibrium income?
 - (A) LM steeply sloped and IS is relatively flat
 - (B) LM is vertical and IS is steeply sloped
 - (C) LM is steeply sloped and IS is vertical
 - (D) LM is relatively flat as is IS

5. Dynamic multipliers occur when
- (A) the assumption of ceteris paribus is dropped
 - (B) the economy is not in equilibrium
 - (C) consumption is unrelated to disposable income
 - (D) there is a lagged response between consumption and disposable income
6. Tobin q-theory of investment indicates that firms add to their stock of capital when
- (A) the replacement value of their assets exceeds the market value of their financial assets
 - (B) the market value of their financial assets exceeds the replacement value of their assets
 - (C) the market value of their real assets exceeds the book value of their financial assets
 - (D) the market value of their financial assets exceeds the book value of their real assets
7. Which of the following best describes the reasons for involuntary bequests?
- (A) Interest rates had increased in recent years
 - (B) There was considerable uncertainty associated with expenditure during retirement
 - (C) There were substantial gains in the stock market
 - (D) Individuals wanted to leave an inheritance to their children
8. A manufacturing company has found that the cost 'c', of operating and maintaining its equipment is related to the length 'x' of the interval between overhauls by the equation $\frac{dc}{dx} - \frac{b-1}{x}c = -\frac{ba}{x}$ where 'a' and 'b' are constants then what would be 'c' as a function of 'x' if $c = c_0$ when $x = x_0$
- (A) $C = \frac{a}{x} + \frac{C_0 x_0}{x_0^b} x^{b-1}$
 - (B) $C = \frac{a}{x} + \frac{C_0 x_0}{x_0^b} x^{b+1}$
 - (C) $C = \frac{a}{x} - \frac{C_0 x_0}{x_0^b} x^{b-1}$
 - (D) $C = \frac{a}{x} + \frac{a x_0}{x_0^b} x^{b-1}$

9. If the consumer utility function is given by $U = q_1 q_2^2 - 10q_1$, $p_1 = 2$, $p_2 = 8$ where q_1 and q_2 are quantities of X and Y and p_1 and p_2 price of X and Y . Given the consumer's income for the period is 116 the budget constraint is $116 - 2q_1 - 8q_2 = 0$ then the consumer would maximise his utility at what quantities of q_1 and q_2 ?
- (A) 10, 18
(B) 12, 30
(C) 18, 15
(D) 10, 17
10. A factory manufactures two types of heavy-duty machines in quantities x and y . The joint cost function is given by $f(x, y) = x^2 + 2y^2 - xy$. To minimise cost, how many machines of each type should be produced if there must be a total of 8 machines?
- (A) 4, 4
(B) 2, 6
(C) 6, 2
(D) 3, 5
11. The demand function for a particular commodity is $y = 14 - 3x$ and the total cost to the monopolist is $y_c = x^2 + 5x$. If tax t per unit quantity is imposed on the monopolist then the maximum tax revenue obtainable by the government is
- (A) 90/40
(B) 55/37
(C) 81/32
(D) 100/48
12. Slope of Average Cost Curve (AC) and elasticity of total cost have which of the following relationship
- (A) when slope of AC is negative, elasticity of total cost is less than 1
(B) when slope of AC is zero, elasticity of total cost is more than 1
(C) when slope of AC is positive, elasticity is less than 1
(D) when slope of AC is zero, the elasticity of total cost is less than 1
13. The problem of choice arises because
- (A) resources are limited
(B) wants are unlimited and resources are limited
(C) wants are limited and resources are minimum
(D) wants are unlimited and resources are minimum

14. When marginal utility is zero, total utility is
- (A) increasing
 - (B) decreasing
 - (C) maximum
 - (D) also zero
15. If the quantity demanded remains unchanged, with changes in price, coefficient of elasticity of demand is
- (A) greater than one
 - (B) less than one
 - (C) zero
 - (D) one
16. Among the following, which is a demand forecasting method?
- (A) Chi square
 - (B) Delphi
 - (C) ANOVA
 - (D) Z test
17. Marginal product of labour where L represents labour use, can be stated as
- (A) $\Delta TP / \Delta P$
 - (B) $\Delta TP / \Delta L$
 - (C) $\Delta TP / L$
 - (D) $TP / \Delta L$
- where TP represents total product, P represents product
18. The economic region of production is given by the segment of isoquants.
- (A) slope of isoquant
 - (B) positively sloped segment of isoquant
 - (C) negatively sloped segment of isoquant
 - (D) negatively sloped segment of iso cost line
19. Among the following, which is the most suitable equation to explain perfectly competitive firm behavior?
- (A) $MR = MC = AR$
 - (B) $MR = MC$
 - (C) $MR = MC = P$
 - (D) $MR = MC = P = AR$

20. If the monopolist demand function is given by $P = a - bQ$, where a is the price intercept and b is the slope of the demand curve. P is price and Q is quantity demanded. Then Marginal Revenue is
- (A) $a - 2b$
 - (B) $a - 2Q$
 - (C) $a - 2bQ$
 - (D) $-a$
21. Usually the sum total of marginal propensity to consume and marginal propensity to save will be
- (A) a value less than one
 - (B) equal to one
 - (C) a value greater than one
 - (D) between 1 and 10
22. Among the following, which is the formulae for calculating multiplier?
- (A) $1/1-MPC$
 - (B) $1/MPC$
 - (C) $1/C$
 - (D) $1/\text{disposable income}$
23. A two sector economy is provided with information on consumption and investment as follows $C = 100 + 0.5Y$ and $I = \text{Rs. } 500$. C represents consumption, Y income and I investment. What is the equilibrium level of income?
- (A) Rs. 600/-
 - (B) Rs. 1000/-
 - (C) Rs. 1200/-
 - (D) Rs. 300/-
24. In an economy of two individuals (A and B) and two commodities (X and Y), general equilibrium of production and exchange occurs when
- (A) $MRT_{xy} = P_x/P_y$, where MRT is Marginal Rate of Transformation and P_x is price of X and P_y is the price of Y
 - (B) MRS_{xy} for A and $B = P_x/P_y$ where MRS_{xy} is the Marginal rate of substitution of x and y , P_x is price of X and P_y is price of Y
 - (C) $(MRS_{xy})_A = (MRS_{xy})_B$
 - (D) $MRT_{xy} = (MRS_{xy})_A = (MRS_{xy})_B$

25. Quasi- Rent is
- (A) equal to firm's total profit
 - (B) greater than the firm's total profit
 - (C) smaller than firm's total profit
 - (D) None of the above
26. All the following curves are 'U' shaped curves except
- (A) Average Cost Curve
 - (B) Average Fixed Cost Curve
 - (C) Average Cost
 - (D) Marginal Cost
27. In oligopolistic market, we have
- (A) price and output are indeterminate
 - (B) marginal revenue curve is continuous
 - (C) many firms selling differentiated product
 - (D) None of the above
28. At the shut down point
- (A) Price = Average Variable Cost
 - (B) Total Revenue = Total Variable Cost
 - (C) Loss = Total Fixed Cost
 - (D) All of the above
29. Which of the following statements of about Free Trade Agreements (FTA) is correct?
- (A) It is an arrangement between two countries to abolish or reduce tariff quotas and preferences on trading of goods and services
 - (B) FTAs are violation of WTO rules and countries are not allowed to enter into FTA with a single country.
 - (C) Both (A) and (B)
 - (D) None of the above
30. The World Bank has estimated India's GDP growth to be in the range of during FY 2021-22.
- (A) 7.5% to 12.5%
 - (B) 7% to 12%
 - (C) 6.5% to 10%
 - (D) None of the above

31. HDI rank of India according to Human Development Report 2020
- (A) 129
 - (B) 130
 - (C) 131
 - (D) 132
32. Balance of payments can be defined as
- (A) record of transactions in goods, services and assets between residents of a country and the rest of the world
 - (B) record of transactions in goods and assets between residents of a country and the rest of the world
 - (C) record of transaction in goods and services between residents of a country and the rest of the world
 - (D) record of transactions of goods between residents of a country and the rest of the world
33. Exchange rate is defined as
- (A) the ratio of domestic price to US dollar price
 - (B) the ratio of rupee prices to foreign prices
 - (C) the ratio of foreign to domestic prices
 - (D) the ratio of US dollar price to rupee prices
34. Suppose $C = 40 + 0.8Y$, $T = \text{Rs. } 50$, $I = \text{Rs. } 60$, $G = \text{Rs. } 40$, $X = \text{Rs. } 90$ and $M = 50 + 0.05Y$, where C represents consumption, Y income, T taxes, I investment, G government spending, X exports and M imports, find equilibrium level of income
- (A) Rs. 100/-
 - (B) Rs. 200/-
 - (C) Rs. 300/-
 - (D) Rs. 240/-
35. In India, the official agency to estimate national income is
- (A) NSSO
 - (B) CSO
 - (C) NCAER
 - (D) NIPA

36. NFHS is associated to
- (A) primary education
 - (B) health
 - (C) sanitation
 - (D) child care
37. Narrow money is the sum total of
- (A) M1 and M2
 - (B) M1 and M3
 - (C) M2 and M\$
 - (D) M1 and M4
38. Pick the odd man out
- (A) Bank rate
 - (B) Lender of last resort
 - (C) Foreign exchange
 - (D) Savings deposit
39. Local governance is associated to constitutional amendment.
- (A) 71
 - (B) 73
 - (C) 75
 - (D) 77
40. Head quarters of SIDBI is located at
- (A) Mumbai
 - (B) Chennai
 - (C) Lucknow
 - (D) Hydrabad
41. WTO replaced
- (A) GATE
 - (B) GATT
 - (C) UNCTAD
 - (D) ADB

42. Special Drawing Rights is associated to
- (A) EEC
 - (B) UNICEF
 - (C) IMF
 - (D) FBB
43. Among the following which is the proposal included in the Central Budget 2021-22?
- (A) Starting small finance bank
 - (B) Starting bad bank
 - (C) Starting NABARD
 - (D) Starting RFC
44. The essence of Pareto optimum is
- (A) making every one better off
 - (B) making every one better off making some one worse off
 - (C) making every one worse off
 - (D) None of the above
45. Expand NITI
- (A) National Institution for Transforming India
 - (B) National Initiative for Transforming India
 - (C) National Intelligence for Transforming India
 - (D) National Institution for Translating India

MATHEMATICS & STATISTICS

46. When we divide $16y^4 - 1$ with $2y - 1$ then we get
- (A) $8y^3$
 - (B) $8y^3 + 4y^2 + 2y + 1$
 - (C) $4y^3 + 4y^2$
 - (D) $8y^3 + 2y^2 + 2$

47. In a clock what rotation is needed to turn from north to southeast in a clockwise direction?
- (A) 180°
 - (B) 125°
 - (C) 360°
 - (D) 135°
48. One group of workers can do a job in 8 days. After this group has worked 3 days, another group joins it and together they complete the job in 3 days. In what time could the second group have done the job alone?
- (A) 12 days
 - (B) 24 days
 - (C) 8 days
 - (D) Insufficient information
49. There are 10 tons of coal containing 2.5% sulphur and also supplies of coal containing 0.80% and 1.10% sulphur respectively. How many tons of each of the latter should be mixed with the original 10 tons to give 20 tons containing 1.7% sulphur?
- (A) 4.3 tons of 0.80 % and 5.7 tons of 1.10%
 - (B) 6.7 tons of 0.80% and 3.3 tons of 1.10%
 - (C) 7.1 tons of 0.80% and 2.9 tons of 1.10%
 - (D) None of the above
50. How many months will it take to pay off a debt of Rs. 880 if Rs. 25 is paid in the first month, Rs. 27 in the second month and Rs. 29 in the third month and so on ?
- (A) 10 Months
 - (B) 30 Months
 - (C) 24 Months
 - (D) 20 Months
51. First purse contains 6 copper coins and 1 silver coin; Second purse contains 4 copper coins. Five coins are drawn from the first purse and put into the second and then 2 coins are drawn from the second and put into the first. Determine the probability that the silver coin is in the first purse?
- (A) $\frac{2}{7}$
 - (B) $\frac{5}{9}$
 - (C) $\frac{4}{9}$
 - (D) $\frac{1}{7}$

52. In this system of equations

$$x + y - 2z + 4t = 5$$

$$2x + 2y - 3z + t = 4$$

$$3x + 3y - 4z - 2t = 3$$

- (A) x and z are basic variables and y and t are free variables
- (B) x and y are basic variables and z and t are free variables
- (C) z and y are basic variables and x and t are free variables
- (D) z and t are basic variables and x and y are free variables

53. Choose the most correct statement from the following statements.

- (A) Let k be a positive integer. If n pigeonholes are occupied by $kn + 1$ or more pigeons, then at least one pigeonhole is occupied by $k + 1$ or more pigeons.
- (B) In a class of 12 boys and four girls, if three students are selected at random then the probability that they are all boys is $11/28$.
- (C) A boy sells apples each for Rs. 12 and pear each for Rs. 7 and he makes Rs. 321. Then there are only three possible solutions to achieve this target.
- (D) All statements given in (A) to (C) are true.

54. At the end of a meeting, everyone had shaken hands once with everyone else; it was found that 45 handshakes were exchanged. How many persons were present at the meeting?

- (A) 15
- (B) 22
- (C) 10
- (D) 13

55. The sequence $-1, -4, 2$ is

- (A) Arithmetic Sequence
- (B) Geometric Sequence
- (C) Harmonic Sequence
- (D) None of Above

56. A freely falling body, starting from rest, falls 16 ft during I second, 48 ft during II second, 80 ft during III second, etc. The distance it covers during the fifteenth second is

- (A) 464 ft
- (B) 500 ft
- (C) 3600 ft
- (D) 32 ft

57. An irrational number is a real number
- (A) that cannot be expressed in the form p/q where p and q are rationals
 - (B) that cannot be expressed in the form p/q where p and q are integers
 - (C) that cannot be expressed in the form p/q where p and q are integers and $q \neq 0$
 - (D) that cannot be expressed in the form p/q where p and q are integers and $0 \leq q \leq 1$
58. In a rational fraction, the numerator denotes
- (A) the size of the reduced fraction
 - (B) the size of the denominator
 - (C) the least common multiple of numerator and denominator
 - (D) the greatest common divisor of the numerator and denominator
59. The value of 5^3 is
- (A) 25
 - (B) 125
 - (C) 243
 - (D) 15
60. In the geometric series, 5, 10, 20, 40, the constant ratio is
- (A) 5
 - (B) 2
 - (C) 4
 - (D) 1
61. Among the following, which is the best explanation for a constant?
- (A) A universally accepted value
 - (B) Magnitude that does not change
 - (C) Magnitude that does not change. It retains the same value all through the mathematical operations
 - (D) Magnitude that does not change, but it can be changed through continuous research
62. The solution for the equation, $x^2 + 6x + 5 = 0$ is
- (A) 1 and 5
 - (B) -1 and -5
 - (C) -1 and 3
 - (D) 1 and -3

63. Let " a " be the first term and the common difference be " d ", then the series can be denoted as
- (A) $a + d$
 - (B) $a + 2d$
 - (C) $a + d, a + 2d \dots$
 - (D) $a + d + d + d \dots$
64. If there are n unknowns in a system of simultaneous equations, to solve that we need
- (A) minimum $n - 1$ equations
 - (B) minimum n equations
 - (C) maximum $n - 1$ equations
 - (D) any number of equations
65. What are equal matrices?
- (A) Two matrices A and B are said to be equal if they are of the same order
 - (B) Two matrices A and B are said to be equal if they are of the same order and their corresponding elements are equal
 - (C) Two matrices A and B are said to be equal if they are of the same order and their elements are equal
 - (D) Two matrices A and B are said to be equal if the column of matrix A corresponds to row of matrix B
66. Decision theory deals with
- (A) making decisions under conditions of uncertainty
 - (B) quantity oriented decision, ignoring financial repercussions
 - (C) the worth of additional information to the decision maker
 - (D) (A) and (C) and not (B)
67. When base year values are used as weights, the weighted average of relative price index is the same as
- (A) the Paasche index
 - (B) the Laspeyres index
 - (C) the unweighted average of relative price index
 - (D) None of the above

68. In Kruskal-Wallis test of k samples the approximate number of degrees of freedom is
- (A) k
 - (B) $k - 1$
 - (C) $n_k - 1$
 - (D) $n - k$
69. A two-tailed test of two variances is to be performed for samples 1 and 2 with $n_1 = 15$ and $n_2 = 12$. If $\alpha = 0.10$, which of the following represents the upper value to which sample variances of $\frac{s_1^2}{s_2^2}$ should be compared
- (A) $\frac{1}{F(14,11,0.05)}$
 - (B) $\frac{1}{F(14,11,0.95)}$
 - (C) $F(11,14,0.05)$
 - (D) $F(14,11,0.05)$
70. If we say $\alpha = 0.10$ for a particular hypothesis test, then we are saying that
- (A) 10 % is our minimum standard for accepting probability
 - (B) 10% is the risk we take rejecting a hypothesis that is true
 - (C) 10% is the risk we take for accepting a hypothesis that is false
 - (D) (A) and (B) only
71. If we sum all the probabilities of the conditional events in which the event A occurs while under statistical dependence, the result is
- (A) Marginal Probability of A
 - (B) Joint Probability of A
 - (C) Conditional Probability of A
 - (D) None of the above
72. A binomial distribution may be approximated by a Poisson distribution if
- (A) n is large and p is large
 - (B) n is small and p is large
 - (C) n is small and p is small
 - (D) None of the above

73. Suppose you are performing stratified sampling on a particular population and have divided the population into strata of different sizes. How can you make your sample selection?
- (A) Select at random an equal number of elements from each stratum
 - (B) Draw an equal number of elements from each stratum and give weights to the results
 - (C) Draw a number of elements from each stratum proportional to its weight in the population
 - (D) (B) and (C) only
74. If the percent of trend for a particular year in a time series is greater than 100% then for this year
- (A) the actual time series value lies below the trend line and the relative cyclical residual is negative
 - (B) the actual time series value lies above the trend line, and the relative cyclical residual is positive
 - (C) the actual time series value lies above the trend line, and the relative cyclical residual is negative
 - (D) the actual time series value lies below the trend line, and the relative cyclical residual is positive
75. Choose the most correct:
- (A) The Mann Whitney U test, two samples of size n_1 and n_2 are taken to determine U statistic. The sampling distribution of the U statistic can be approximated by the normal distribution when either n_1 and n_2 is greater than 10
 - (B) A sign test for paired data is based upon the Poisson distribution but can often be approximated by the normal distribution
 - (C) Kolmogorov-Smirnov test is a measure of goodness of fit of a theoretical distribution
 - (D) Non parametric methods are more efficient than parametric methods
76. In set theory, a set is
- (A) collection of definite objects
 - (B) collection of objects
 - (C) collection of definite and well distinguished objects
 - (D) None of the above

77. In order to study the consumption behaviour of a group of consumers, the best sampling method is
- (A) Random sampling
 - (B) Cluster sampling
 - (C) Stratified sampling
 - (D) Quota sampling
78. Median refers to
- (A) middle value in a distribution
 - (B) extreme left value in a distribution
 - (C) extreme right value in a distribution
 - (D) highest value in the distribution
79. Geometric mean shows
- (A) per cent of change
 - (B) average per cent of change
 - (C) exponential rate of change
 - (D) growth rate
80. Techebyeheff's theorem is associated to
- (A) measures of central tendency
 - (B) standard deviation
 - (C) kurtosis
 - (D) skewness
81. Among the following which is the method to study inequality?
- (A) Measuring median
 - (B) Z test
 - (C) Cornwallis index
 - (D) Lorenz ratio
82. "Hen and egg" nature is associated to
- (A) correlation
 - (B) time series
 - (C) Chi square
 - (D) regression

83. Correlation coefficient is given by
- (A) $A \times B$ where A and B are two regression coefficients
 - (B) A/B where A and B are two regression coefficients
 - (C) $A + B$ where A and B are two regression coefficients
 - (D) $\sqrt{A \times B}$ where A and B are two regression coefficients
84. Among different index numbers, which index number is treated as the ideal index number?
- (A) Laspyear
 - (B) Brumberg
 - (C) Fisher
 - (D) Irving Fisher
85. There are 4 kings and 4 queens in a pack of 52 cards. The probability that the card drawn is a king is
- (A) $1/13$
 - (B) $4/51$
 - (C) $1/51$
 - (D) $3/52$
86. The mean of the binomial distribution is, where P is probability and N is number of trials.
- (A) N
 - (B) N/P
 - (C) NP
 - (D) $2P$
87. Linear programming is
- (A) an optimisation technique
 - (B) a constrained optimisation technique
 - (C) a minimisation technique
 - (D) a constraint minimisation technique
88. Input output analysis shows
- (A) best allocations
 - (B) consumption pattern
 - (C) inter sectoral flows
 - (D) possible allocations

89. Among the following which is a time optimisation technique

- (A) MANCOV
- (B) CPM
- (C) CMP
- (D) PERT

90. The mathematical model applicable to oligopoly market is

- (A) linear programming
- (B) dynamic programming
- (C) game theory
- (D) Lenontiff matrix

FINANCE

91. Bank *A* offers a 2 year certificate of deposit (CD) that pays 10% compounded annually. Bank *B* offers a 2 year CD that is compounded semi-annually. The CDs have identical risk. What is the stated or nominal rate that Bank *B* would have to offer indifferent between the two investments?

- (A) 9.67%
- (B) 9.87%
- (C) 9.93%
- (D) 9.76%

92. Which of the following statements is false?

- (A) The NPV will be positive if the IRR is less than the cost
- (B) If the multiple IRR problem does not exist, an independent project acceptable by the NPV method will also be acceptable by the IRR method
- (C) When $IRR = \text{Cost of Capital}$, $NPV = 0$
- (D) The NPV method is not affected by the multiple IRR problem

93. Which of the following statements is most correct?

- (A) If Company *A* has higher debt ratio than Company *B*, then we can be sure that *A* will have a lower times interest earned ratio than *B*
- (B) Suppose two companies have identical operations in terms of sales, cost of goods sale, interest rate on debt and assets. However Company *A* uses more debt than Company *B*, that is, Company *A* has higher debt ratio. Under these conditions, we would expect *B*'s profit margin to be higher than *A*'s
- (C) The ROE of any company which is earning positive profits and which has positive net worth (or common equity) must exceed the company's ROA
- (D) All of the above

94. A stock is currently trading at Rs. 50. It can go either up by 20%, or fall by 20% in 3 months. Risk free interest rate is 8% per month. What will be the value of call option in 3 months' time if exercise price is Rs. 50?
- (A) 5.5
 - (B) 7.5
 - (C) 9.5
 - (D) 11.5
95. Holding other things constant, the additional funds required for financing the firm's operations would be reduced with an increase in the firm's
- (A) Dividend payout ratio
 - (B) Profit Margin
 - (C) Capital intensity ratio
 - (D) Expected growth rates in sales
96. Ignoring cost and other effects on the firm, which of the following measures would tend to reduce the cash conversion cycle?
- (A) Maintain the level of receivable as sales decreases
 - (B) Buy more raw materials to take advantage of price breaks
 - (C) Take discounts when offered
 - (D) Forgo discounts that are currently being taken
97. Lumber Company is considering a project with a cost Rs. 1000 at Time = 0 and inflows Rs. 300 at the end of Years 1-5. The company's cost of capital is 10%. What is project's modified IRR?
- (A) 10%
 - (B) 12.9%
 - (C) 15.2%
 - (D) 18.3%
98. Which of the following is most correct?
- (A) Under normal conditions, the Capital Asset Pricing Model (CAPM) approach to estimating a firm's cost of retained earnings gives a better estimate than the discounted cash flow approach
 - (B) The Capital Asset Pricing Model (CAPM) approach is typically used to estimate a firm's flotation cost adjustment factor, and this factor is added to the DCF cost estimate
 - (C) The risk premium used in the bond yield plus risk premium method is the same as the one used in the Capital Asset Pricing Model (CAPM) model
 - (D) None of the above

99. If you were to argue that the firm's cost of equity increases as the dividend payout decreases, you would be making an argument with MM's Dividend irrelevance theory and with Gordon and Linter's "Bird in the Hand" theory.
- (A) consistent; consistent
 - (B) inconsistent; consistent
 - (C) consistent; inconsistent
 - (D) inconsistent; inconsistent
100. A firm plans to sell Rs. 100 million of 20 year bonds to raise capital for expansion. Which of the following provisions, if it were included in the bond's indenture, would tend to raise the coupon interest rate over what it would be if the provision were not included?
- (A) A call provision under which the firm may call the bonds for redemption after 5 years
 - (B) Provision for a sinking fund, where a set percentage of the bonds must be called for redemption at par each year
 - (C) A restrictive covenant which states that the firm's current ratio must always exceed 2.0
 - (D) A pledge of real property as security for the bonds
101. Which of the following statements is correct?
- (A) The optimal dividend policy is the one that satisfies the shareholders because they supply the firms' capital
 - (B) The use of debt financing has no effect on earning per share or stock price
 - (C) The riskiness of projected EPS depends upon how the firm is financed
 - (D) Stock price is dependent on the projected EPS and the use of debt but not on the timing of the earnings stream

102. Money markets are markets for
- (A) foreign currency exchange
 - (B) consumer automobile exchange
 - (C) corporate stocks
 - (D) short term debt securities
103. If the interest payment made by the government is removed from the fiscal deficit of the government, then which of the following is referred to?
- (A) Primary deficit
 - (B) Effective revenue deficit
 - (C) Revenue Deficit
 - (D) Monetary deficit
104. Tax avoidance differs from tax evasion as
- (A) When tax is not paid by bankrupt companies is known as tax avoidance, while when done by general companies is called Tax evasion
 - (B) Both are the ways to save tax but tax evasion is legal and tax avoidance is illegal
 - (C) Tax avoidance is a legal process, while tax evasion falls in the category of illegal evasion of taxes
 - (D) Tax avoidance creates parallel economy whereas tax evasion does not have any role in it
105. Which of the following is not a difficulty concerning Beta and its estimation?
- (A) Sometimes a security or project does not have a past history which can be used for calculating beta
 - (B) Sometimes, during a period when the company is undergoing a change such as toward more leverage or riskier assets, the calculated beta will be drastically different than the “true ‘ or ‘expected future’ beta
 - (C) The beta of an “average cost” or “the market” can change over time sometimes drastically
 - (D) Sometimes, the past data used to calculate beta do not reflect the likely risk of the firm for the future because conditions have changed

106. Drexel Corporation has been enjoying a phenomenal rate of growth since its inception one year ago. Currently, its assets total Rs. 100,000. If growth continues at the current rate of 12% compounded quarterly, what will total asset be in 2 and half years?
- (A) Rs. 142,571
 - (B) Rs. 126,678
 - (C) Rs. 148,016
 - (D) Rs. 134,392
107. Eastern Company last dividend was Rs. 0.50 and the company expects to experience no growth for the next 2 years. However, Eastern will grow at an annual rate of 5% in the third and fourth years and beginning with the fifth year it should attain 10% growth rate which it should sustain thereafter. Eastern has a cost of capital of 12%. What should be present price per share of Eastern Company?
- (A) Rs. 19.26
 - (B) Rs. 31.87
 - (C) Rs. 30.30
 - (D) Rs. 20.83

108. Hart Stock is currently selling at an equilibrium price of Rs. 30 per share. The firm has been experiencing a 6% annual growth rate. Last years earning per share is Rs. 4, Dividend payout ratio is 40%. Risk free rate is 8% and Market risk premium is 5%. If systematic risk increase by 50% and all other factors remain constant then by how much will stock price change?
- (A) Rs. -7.33
 - (B) Rs. 7.14
 - (C) Rs. -15.00
 - (D) Rs. -15.22
109. Kenmore has a target fixed asset to sales ratio of 32%. Last year the firm operated at 84% with fixed assets of Rs. 900,000. What were Kenmore actual sales last year?
- (A) Rs. 1,451,613
 - (B) Rs. 2,150,250
 - (C) Rs. 2,362,500
 - (D) Rs. 2,812,500
110. If you receive Rs. 15,000 today and can invest it at 5% annual rate compounded continuously, what will your end value after 20 years?
- (A) Rs. 35,821
 - (B) Rs. 40,774
 - (C) Rs. 75,000
 - (D) Rs. 81,342
111. Morgan Company wants to determine the effective annual rate on 91 day Treasury bills it holds. The T-Bills were purchased at a 6.2% discount rate basis. Use a 365 day year to calculate the yield basis rate.
- (A) 6.39%
 - (B) 6.20%
 - (C) 6.34%
 - (D) 6.54%
112. Which of the following methods of estimating the cost of common equity for a firm treats risk explicitly?
- (A) Discounted Cash Flow method
 - (B) Capital Asset Pricing Method
 - (C) Composite Method
 - (D) All of the above

113. The Economic Order Quantity (EOQ) will rise due to an increase in which of the following variables?
- (A) Product demand (sales)
 - (B) Carrying Costs
 - (C) Ordering Costs
 - (D) Both (A) and (C)
114. Which of the following is not included under accounting concepts?
- (A) Money measurement concept
 - (B) Business entity concept
 - (C) Continuity concept
 - (D) None of the above
115. Which one of the following is not part of partnership firm's goodwill?
- (A) Institutional goodwill
 - (B) Personal goodwill
 - (C) Goodwill related to casual event
 - (D) Implied goodwill
116. A company cannot issue
- (A) redeemable equity shares
 - (B) redeemable preference shares
 - (C) redeemable debentures
 - (D) None of the above
117. Accounting Standard 14 is related with
- (A) amalgamation
 - (B) valuation of stock
 - (C) depreciation accounting
 - (D) valuation of assets
118. Long term solvency is indicated by
- (A) Rate of return
 - (B) Liquidity ratio
 - (C) Debt equity ratio
 - (D) Capital gearing ratio

119. Standard cost – actual cost =
- (A) Standard mix
 - (B) Material usage variance
 - (C) Material cost price variance
 - (D) Material cost variance
120. “Spirit De Corps” principle was enunciated by
- (A) R C Dais
 - (B) Peter Ducker
 - (C) Henry Fayol
 - (D) Helen Keller
121. “Authority is the right to give orders and power to extract obedience” who said so?
- (A) Taylor
 - (B) Fayal
 - (C) Franklin
 - (D) George Terry
122. Which element is not necessary in objective under MBO approach?
- (A) Time element
 - (B) Measureable element
 - (C) Cost element
 - (D) Human relation element
123. The process of delegation is
- (A) Horizontal
 - (B) Cycle
 - (C) Up to down
 - (D) Down to top
124. Classical conditioning is a theory of
- (A) Perception
 - (B) Learning
 - (C) Attitude
 - (D) Behaviour

125. Working capital is the difference between current assets and
- (A) current liabilities
 - (B) fixed assets
 - (C) tangible assets
 - (D) goodwill
126. Current assets are Rs. 20000 and current liabilities Rs. 15000. Working capital would be
- (A) Rs. 40000
 - (B) Rs. 10000
 - (C) Rs. 35000
 - (D) Rs. 5000
127. When Banking Regulation Act was passed?
- (A) 1950
 - (B) 1960
 - (C) 1949
 - (D) 1970
128. Which of the following statements is not related with a sound banking system?
- (A) All banks should be licensed under national law
 - (B) All banks should be required to have wide powers to control the volume of credit creation by banks
 - (C) The central bank should have wide powers to control the volume of credit creation by banks
 - (D) The number of financial institutions should be kept as big as possible
129. Schedule IX is related to
- (A) advance
 - (B) borrowings
 - (C) fixed assets
 - (D) None of the above
130. Which is related to Banking sector?
- (A) Basell III
 - (B) Euro II
 - (C) Euro III
 - (D) GAAR

131. FEMA ACT 1999 has come into force on
- (A) July 1, 2009
 - (B) July 1, 2005
 - (C) June 1, 2011
 - (D) July 1, 2007
132. DOHA conference is related with
- (A) GATT
 - (B) WORLD BANK
 - (C) WTO
 - (D) USA
133. Open Market Operations is a part of
- (A) income policy
 - (B) fiscal policy
 - (C) credit policy
 - (D) debt policy
134. Which of the following is not a part of World Bank group?
- (A) IBRD
 - (B) IFC
 - (C) IDA
 - (D) ADB
135. Which of the following is not an accounting concept?
- (A) Matching concept
 - (B) Dual aspect concept
 - (C) True and fair concept
 - (D) Going concern concept

GENERAL AWARENESS

136. The Himalayan Range is very rich in species diversity. Which one among the following is the most appropriate reason for this phenomenon?
- (A) It has a high rainfall that supports luxuriant vegetative growth
 - (B) It is a confluence of different bio-geographical zones
 - (C) Exotic species have not been introduced
 - (D) It is due to effect of monsoon

137. What can be the possible consequences of desertification?
- (A) Crop failure
 - (B) Flooding
 - (C) Amplified air and water pollution
 - (D) All of the above
138. Which of the following best explains the term countervailing duties?
- (A) A temporary measure in defence of the Domestic Industry which is injured or has potential threat of injury due to sudden surge in imports
 - (B) Tariffs levied on imported goods to offset subsidies made to producers of these goods in the exporting country
 - (C) A protectionist tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value
 - (D) None of the above
139. Consider the following statements with regard to 'FasTag'.
- I It is a device that uses Radio Frequency Identification Technology for making toll payments directly from the prepaid and savings account
 - II It is developed by the Ministry of Electronics and Information Technology under the Digital India programme
 - III Bharat QR provides mobile payment option both for person to person and person to merchant
- Which of the statements given above is/ are correct?
- (A) I and III only
 - (B) II and III only
 - (C) I only
 - (D) II only
140. Why rainbows are always formed opposite to the direction of the sun?
- (A) Total Internal Reflection
 - (B) Reflection
 - (C) Refraction
 - (D) All of the above
141. In which sport is the participant called Pugilist?
- (A) Sprinter
 - (B) Boxing
 - (C) Wrestling
 - (D) Javelin throw

142. Closest star to earth is

- (A) Sun
- (B) Jupiter
- (C) Mercury
- (D) Venus

143. The primary objective of “Make in India programme” is

- (A) to place India on the world map in terms of growth in national income
- (B) to make India top in Information Technology
- (C) to make India top in population growth
- (D) to make India a manufacturing giant

144. Among the following, who is more associated to the formation of UN?

- (A) Franklin Roosevelt
- (B) Hitler
- (C) Abraham Lincon
- (D) Stalin

145. The significance of 1942 in Indian Freedom Movement

- (A) Third round table conference
- (B) Quit India movement
- (C) Death of Nethaji Subas Chandra Bose
- (D) Swadeshi movement

146. 50th birth anniversary of Bangladesh comes in the year

- (A) 2020
- (B) 2021
- (C) 2022
- (D) 2019

147. Article of Indian Constitution related to GST

- (A) 246A, 279A
- (B) 280
- (C) 246, 279A
- (D) 280A

148. Venue of 2024 Olympics

- (A) Paris
- (B) Doha
- (C) Moscow
- (D) Athens

149. In the New Educational Policy 2020, 10 + 2 school structure will be replaced by

- (A) $5 + 3 + 3 + 4$
- (B) $8 + 3 + 4$
- (C) $5 + 3 + 2 + 5$
- (D) None of the above

150. Corona virus (COVID-19) is a virus.

- (A) DNA
- (B) DMA
- (C) RMA
- (D) RNA

ANSWER KEY**Subject Name: 624 MSc IN ECONOMETRICS AND FINANCIAL TECHNOLOGY**

SI No.	Key	SI No.	Key	SI No.	Key	SI No.	Key	SI No.	Key
1	C	31	C	61	C	91	D	121	D
2	C	32	A	62	B	92	A	122	C
3	C	33	C	63	C	93	B	123	C
4	C	34	B	64	B	94	A	124	B
5	D	35	B	65	B	95	B	125	A
6	B	36	B	66	D	96	D	126	D
7	B	37	A	67	B	97	B	127	C
8	A	38	D	68	B	98	D	128	D
9	A	39	B	69	D	99	B	129	A
10	D	40	C	70	D	100	A	130	A
11	C	41	B	71	D	101	C	131	A
12	A	42	C	72	D	102	D	132	C
13	B	43	B	73	D	103	A	133	C
14	C	44	D	74	B	104	C	134	D
15	C	45	A	75	C	105	C	135	C
16	B	46	B	76	C	106	D	136	B
17	B	47	D	77	C	107	D	137	D
18	C	48	A	78	A	108	A	138	B
19	D	49	B	79	B	109	C	139	C
20	C	50	D	80	B	110	B	140	D
21	B	51	C	81	D	111	A	141	B
22	A	52	A	82	D	112	B	142	A
23	C	53	D	83	D	113	D	143	D
24	D	54	C	84	C	114	D	144	A
25	B	55	C	85	A	115	D	145	B
26	B	56	A	86	C	116	A	146	B
27	A	57	C	87	B	117	A	147	A
28	D	58	A	88	C	118	C	148	A
29	A	59	B	89	D	119	D	149	A
30	A	60	B	90	C	120	C	150	D