

ECONOMETRICS
(FINAL)

1. The expansion path of production theory is analogous in consumption theory to the
 - (A) Price Consumption Line
 - (B) Engle Curve
 - (C) Income Consumption Line
 - (D) Budget Constraint Line

2. Moral Hazard is
 - (A) Actions or decisions taken by managers that cannot be observed by owners
 - (B) A situation in which managers taken hidden actions that harm the owners of the firm but further the interests of the managers
 - (C) A manager takes an action or makes a decision that advances the interest of the manager only
 - (D) None of the above

3. In distribution, Pareto Optimality is achieved when
 - (A) one individual cannot be made better off without making the other worse off
 - (B) the individuals are on their consumption contract curve
 - (C) the individuals are on their utility possibility curve
 - (D) All of the above

4. At firm's shut down point
 - (A) Price = Average Variable Cost
 - (B) Total Revenue = Total Variable Cost
 - (C) The total loss of the firm = Total fixed Cost
 - (D) All of the above

5. The term "Green GDP" means
 - (A) amount of investment made in sustainable activities in an economy
 - (B) value of goods and services created by climate friendly activities
 - (C) value of goods and services calculated net of monetary loss due to environmental damage
 - (D) GDP value created by the forest resources of the nation

6. Lifting potential for India's Economic growth includes all initiatives except
- (A) PM Gati Shakti National Master plan for seamless movement of people and goods
 - (B) National monetisation Pipeline with Rs. 9 lakh crore investment potential
 - (C) UPI touched its highest ever mark with 782 crore transactions in Dec 2022
 - (D) Central bank across economies hiking interest rates widening current account deficit
7. According to Economic Survey 2022-2023, the Indian Economy is expected to grow at (in real term) for year ending by March 2023
- (A) 7%
 - (B) 6.5%
 - (C) 6.8%
 - (D) None of the above
8. In market clearing model
- (A) The price level always exists at the intersection of aggregate supply and aggregate demand
 - (B) Output is determined by the intersection of aggregate supply and aggregate demand
 - (C) Shifts of aggregate demand or aggregate supply immediately change price and/or output
 - (D) All of the above
9. Which of the following statements is **TRUE**?
- (A) An adverse supply shock can cause a recession
 - (B) A substantial increase in the minimum wage can cause a recession
 - (C) A decline in aggregate spending can cause a recession
 - (D) All of the above
10. A liquidity effect occurs when
- (A) A reduction in government spending lowers the rate of interest
 - (B) A money supply increase lowers the rate of interest
 - (C) An increase in government spending increase the rate of interest
 - (D) A money supply increase the rate of interest

11. 'Ke' is the expenditure multiplier, 'b' the interest sensitivity of private sector spending, 'h' the interest sensitivity of the demand for money, and 'k' is the transaction demand for money. From the following sets of values for **ke**, **b**, **h** and **k**, find the one in which a change in the money supply will have the largest multiplying effect on output
- (A) $Ke = 5, b = 5, h = 5, k = .20$
 - (B) $Ke = 4, b = 1, h = 5, k = .20$
 - (C) $Ke = 5, b = 10, h = 1, k = .20$
 - (D) $Ke = 4, b = 5, h = 10, k = .10$
12. When income elasticity of demand is greater than unity, then the commodity is
- (A) a luxury commodity
 - (B) a non-related good
 - (C) a necessity
 - (D) an inferior good
13. In Mundell-Fleming Model, an increase in the rate of interest in Country B
- (A) Increase the world rate
 - (B) Decrease the world rate
 - (C) Results in a depreciation of B's Currency in a flexible exchange rate environment
 - (D) Results in an appreciation of B's Currency in a flexible exchange rate environment
14. A neoclassical aggregate supply schedule exists
- (A) At an output level which is associated with zero rate of unemployment
 - (B) At an output level determined by the supply of and demand for labour
 - (C) When the demand for labour and supply of labour schedules adjust immediately to a change in the price level
 - (D) When equilibrium in the labour markets is unaffected by a shift of the supply of labour schedule
15. Fiscal Deficit as a percentage of GDP in Economic Survey is estimated at in 2022-23
- (A) 4.7%
 - (B) 9.2%
 - (C) 6.7%
 - (D) 6.4%

16. When an economy is at steady state and there is an increase in the saving rate
- (A) the saving curve shifts upward and there is no change in output curve
 - (B) saving per worker exceeds depreciation investment per worker and the economy is below the steady state capital-labour ratio
 - (C) the saving curve shifts upward and there is no shift of the depreciation line
 - (D) All of the above
17. The permanent income hypothesis is consistent with cross section and time series data because
- (A) higher-income households are savers, since their current income includes positive transitory components
 - (B) higher-income households are savers, since their current income includes negative transitory components
 - (C) lower-income households are savers, since their current income includes negative transitory components
 - (D) lower-income households are dissavers, since their current income includes positive transitory components
18. Tobin's q-theory of investment indicates that firms add to their stock of capital when
- (A) the replacement value of their real assets exceeds the market value of their financial asset
 - (B) the market value of their financial asset exceeds the replacement value of their real 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 exceed the book of their real assets
19. The central bank should follow a money supply monetary policy when
- (A) the IS schedule is negatively sloped
 - (B) the LM schedule is largely insensitive to the rate of interest
 - (C) the location of IS in space is more certain than that of LM
 - (D) the location of LM in space is more certain than that of IS
20. A perfectly competitive economy is allocatively efficient because
- (A) It produces where price measures the value consumers place on the last unit produced
 - (B) It equals marginal cost, which measures the value to consumers that the resources used to produce marginal unit could produce in other uses
 - (C) It maximises the sum of producers and consumers surpluses
 - (D) All of the above

21. Schumpeter's theory and substantial evidence suggest that
- (A) market power results in inefficient resource allocation
 - (B) firms with market power conducive to technological change that underlies long term economic growth
 - (C) Both (A) and (B)
 - (D) None of the above
22. The neo-classical theory of distribution is an implication of
- (A) Profit maximisation
 - (B) Sales maximisation
 - (C) Each factor is paid the value of its marginal revenue product
 - (D) (A) and (C) only
23. Generally, in important decisions of life, consumers distinguish
- (A) Choices concerning a bit more and a bit less
 - (B) Maximisation of Total values or total utilities
 - (C) Maximisation of consumers' surplus
 - (D) Minimisation of economic cost
24. According to efficiency wage theory
- (A) A wage higher than the competitive wage (the efficiency wage) increases worker productivity by discouraging workers from shirking job
 - (B) Unemployment even though some workers are actively seeking work
 - (C) Provides to offer higher fringe benefits
 - (D) All of the above
25. Public Goods are
- (A) provided by government
 - (B) both nonrival and nonexclusive in nature
 - (C) always provided efficiently
 - (D) None of the above
26. The transformation curve is derived from the
- (A) consumption curve
 - (B) utility possibility curve
 - (C) production contract curve
 - (D) social welfare function

27. Cross elasticity of demand for a pair of substitute goods will be
- (A) positive
 - (B) unitary
 - (C) negative
 - (D) infinite
28. Other things remaining constant, a change in the price of a commodity causes the quantity purchased of its compliments to move
- (A) in the opposite direction
 - (B) in the same direction
 - (C) can't be determined
 - (D) in a negligible manner
29. Derived demand means
- (A) when prize is related with demand
 - (B) when prize is not associated with demand
 - (C) when demand for one good gives birth to demand for another good
 - (D) when are demand joint goods
30. Quasi rent is the reward to a factor of production which is
- (A) economic rent in the short-run but transfer earing in the long-run
 - (B) transfer earnings in the short-run
 - (C) transfer earning both in the short and long-run
 - (D) economic rent both in the short and long-run
31. In a Pareto efficient equilibrium
- (A) Trying to make someone better off will make someone else worse off
 - (B) Governments collect some tax revenue
 - (C) Trying to make someone better of will make someone else better off
 - (D) There is a fair distribution of income
32. The relative income hypothesis suggest that MPC for higher income group is
- (A) higher
 - (B) lower
 - (C) depends on economic situation
 - (D) All of the above

33. When the consumption function becomes a steeper
- (A) the MPC rises
 - (B) the MPC falls
 - (C) the saving function also become steeper
 - (D) less of every rupee is consumed
34. Leverage effect is associated with
- (A) multiplier
 - (B) consumption function
 - (C) super multiplier
 - (D) accelerator
35. Investor should be willing to invest in riskier investment only
- (A) if they are true speculators
 - (B) if there are no safe alternatives except for holding cash
 - (C) if the term is short
 - (D) if the expected return is sufficient to cover for the risk
36. Tobin's basic financial instruments includes
- (1) cash
 - (2) rate of Interest
 - (3) MEC
 - (4) equity
- Which of the statements given above is/are correct?
- (A) (1) and (2)
 - (B) (2) and (3)
 - (C) (1) and (3)
 - (D) None of the above
37. Which of the following models of business cycle generates constrained cycles?
- (A) Samuelson's model
 - (B) Hicks model
 - (C) Kaldor's model
 - (D) All of the above

38. Marxian theory of evolution of economy is referred to as
- (A) induction
 - (B) deduction
 - (C) dialectical materialism
 - (D) None of the above
39. According to K Arrow, it is..... to construct social indifference curve
- (A) easy
 - (B) difficult
 - (C) impossible
 - (D) both (A) and (B)
40. Vicious Circle of Poverty theory was developed by
- (A) Friedman
 - (B) J E Meads
 - (C) Ragnar Nurkse
 - (D) J Robinson
41. Critical minimum effort theory was developed by
- (A) A Lewis
 - (B) Fei Ranis
 - (C) H Leibenstein
 - (D) A K Sen
42. Output/Labour is called
- (A) marginal productivity of labour
 - (B) total productivity of labour
 - (C) average productivity of labour
 - (D) None of the above
43. Solow built his model as an alternative to
- (A) Kaldor's model of growth
 - (B) Ranis-Fei model of growth
 - (C) Harrod-Domar model of growth
 - (D) Meade's model of growth

44. In Joan Robinson's growth model, capital accumulation depends on
- (A) saving-income ratio
 - (B) profit-wage relation and labour productivity
 - (C) profit-income ratio and capital productivity
 - (D) saving-investment ratio
45. In Harrod's model of economic growth, if warranted rate is below the natural rate of growth, then it is possible to maintain steady state growth at the warranted rate with
- (A) continually increasing unemployment
 - (B) a constant rate of unemployment
 - (C) continually decreasing unemployment
 - (D) None of the above
46. In a company "XYZ" the respective ratio between the total number of under graduate employees and the total number of graduate employees is 13 : 23. The company has only two branches, one in Mumbai and one in Delhi. If the total number of undergraduate employees in Mumbai branch is 351, which is 30% of the total undergraduate employees in the company, what is the total number of graduate employee in the company?
- (A) 2185
 - (B) 1955
 - (C) 2070
 - (D) 2360
47. The marked price of a watch was Rs. 720. A man bought the same for Rs. 550.80 after getting two successive discounts, the first being 10%. The second discount rate is
- (A) 12%
 - (B) 15%
 - (C) 18%
 - (D) 14%
48. Find the value of $\tan 4^\circ \tan 43^\circ \tan 47^\circ \tan 86^\circ$
- (A) 1
 - (B) $\frac{2}{3}$
 - (C) 2
 - (D) $\frac{1}{2}$

49. The ratio of the present ages of Sushma and Karishma is 6 : 7 respectively. The ratio of their ages 8 years hence would be 8:9 respectively. What would be the respective ratio of their ages after 12 years?
- (A) 17 : 19
(B) 15 : 17
(C) 9 : 10
(D) 10 : 11
50. If a, b, c are the sides of a triangle ABC , then $a^{\frac{1}{p}} + b^{\frac{1}{p}} - c^{\frac{1}{p}}$ where $p > 1$ is
- (A) always negative
(B) always positive
(C) always zero
(D) positive 1, p , 2 and negative if $p > 2$
51. The expression $\left(\frac{x^b}{x^c}\right)^{\frac{1}{bc}} \left(\frac{x^b}{x^c}\right)^{\frac{1}{ca}} \left(\frac{x^b}{x^c}\right)^{\frac{1}{ab}}$ reduces to
- (A) 2
(B) 0
(C) 1
(D) None of the above
52. You are selecting a cricket team of 11 players out of 16 including 4 bowlers and 2 wicket keepers. In how many ways you can do it so that the team contains exactly 3 bowlers and 1 wicket keeper?
- (A) 960
(B) 840
(C) 420
(D) 252
53. The expression $n(n-1)(2n-1)$ is divisible by
- (A) 15
(B) 4
(C) 6
(D) 64

54. $\int x^{100x}(1+\log x)dx$

(A) $\frac{x^{100x}}{100} + c$

(B) $x^{100x} + c$

(C) $\frac{x^{99x}}{99} + c$

(D) $x^{99x}(1+\log x) + c$

55. The Cricket Control Board of India decides to raise a cricketer's beneficiary fund of Rs. 5 crores. A start is made with Rs. 10 lakhs and every year an addition worth Rs. 3 lakhs is made. In how many years will the fund reach the desired level?

- (A) 10 years
(B) 15 years
(C) 16 years
(D) 20 years

56. If a scooterist drives at the rate of 24 kms per hour, he reaches his destination 5 minutes late. If he drives at the rate of 30 km per hour, he reaches his destination 4 minutes soon. How far is his destination?

- (A) 18 kms
(B) 16 kms
(C) 20 kms
(D) 15 kms

57. $\frac{20}{3} \times \frac{12}{35} \times \frac{4}{5} = ?$

(A) $\frac{960}{875}$

(B) $\frac{12}{35}$

(C) $\frac{64}{35}$

- (D) None of the above

58. Calculate the elasticity of demand, when the price of a product is lowered from Rs. 20 to Rs. 15, quantity demanded increase from 40 to 60

(A) $\frac{7}{5}$
(B) $\frac{19}{62}$
(C) 35
(D) 1.5

59. A firm's profit (in Rs.) is given by the expression $7.5q - 1500$, where 'q' is the quantity sold. What profit will the firm get, if the quantity sold is 500?

(A) 2250
(B) 2520
(C) 2200
(D) 5220

60. Find the value of in the equation

$$16x - 4 = 68 + 7x$$

(A) 7.1
(B) 8
(C) 2.9
(D) 2.7

61. Assume that a firm can sell its product at Rs. 18. It has to pay out Rs. 240 fixed cost plus a marginal cost of Rs. 14 for each unit produced. How much does it need to produce to break even?

(A) 60
(B) 20
(C) 80
(D) 40

62. $Y = \frac{100}{x} + 4x$ has

(A) a maximum profit where $x = 5$
(B) a minimum profit where $x = 5$
(C) a maximum profit where $x = 0$
(D) None of the above

63. $(X + Y)(X - Y) =$
- (A) $X^2 + 2XY - Y^2$
 - (B) $X^2 - 2XY + Y^2$
 - (C) $X^2 - Y^2$
 - (D) $X^2 + YX + Y^2$
64. For the demand and supply functions $Q_d = 10 - P, Q_s = 3P - 2$, the equilibrium (P_o, Q_o) is
- (A) (6,4)
 - (B) (5,5)
 - (C) (7,3)
 - (D) (3,7)
65. What is the slope of the graph of $2y + 3x = 10$?
- (A) -3
 - (B) 3
 - (C) -15.5
 - (D) 1.5
66. Which of the following functions is the steepest?
- (A) $Y = 10 + 2x$
 - (B) $Y = 8 + 3x$
 - (C) $Y = 6 - 4x$
 - (D) $Y = 6 + 4x$
67. Find the derivative of the following function at arbitrary point $F(x) = 32x - x^2$?
- (A) $32 - x$
 - (B) $32x - 2x^2$
 - (C) $32 - 2x$
 - (D) $32 - x^2$
68. Is the following function increasing or decreasing in the immediate vicinity of $x = 2$?
- (A) Increasing
 - (B) Decreasing
 - (C) Stationary
 - (D) Cannot be determined

69. From an ogive constructed for a particular set of data
- (A) The original data can always be reconstructed exactly
 - (B) The original data can always be approximated
 - (C) The original data can never be approximated or reconstructed but valid conclusions regarding data can be drawn
 - (D) None of the above
70. Which of the following is a necessary condition for use of Poisson distribution?
- (A) Probability of one arrival per second is constant
 - (B) The number of arrivals in any 1-second interval is independent of arrivals in other intervals
 - (C) The probability of two or more arrivals in the same second is zero
 - (D) All of the above
71. With a lower significance level, the probability of rejecting a null hypothesis that is actually true
- (A) decreases
 - (B) remains the same
 - (C) increases
 - (D) All of the above
72. The chi-square and the t-distribution are
- (A) always symmetrical distributions
 - (B) used for hypothesis testing
 - (C) dependent on the number of degrees of freedom
 - (D) (B) and (C) but not (A)
73. A method used to deal with cyclical variations when the cyclical component does not explain most of the variation left unexplained by the trend component is
- (A) Spearman analysis
 - (B) Specific Analysis
 - (C) Second degree analysis
 - (D) None of the above

74. Choose the **CORRECT** Statement
- (A) A fractile is a location in a frequency distribution that a given proportion (or fraction) of the data lies at or above
 - (B) A measure of peakedness of a distribution curve is its skewness
 - (C) When using a subjective probability, two people with the same given information can produce different but equally correct answers
 - (D) Using Bayes theorem, we may develop revised probabilities based on new information, these revised probabilities are also known as posterior probabilities
75. The correct distribution to use to compute consumer's risk exactly is the
- (A) Normal
 - (B) Hypergeometric
 - (C) Poisson
 - (D) Binomial
76. When performing a chi square hypothesis test, what happens when expected frequencies in several cells are too small?
- (A) The value of Chi- square will be overestimated
 - (B) The null hypothesis will be more likely to be rejected than it should be
 - (C) The degrees of freedom are greatly reduced
 - (D) Both (A) and (B)
77. A non parametric method used to determine whether two independent samples have been drawn from populations with the same distribution is the
- (A) Mann Whitney U test
 - (B) Run test
 - (C) Spearman Rank Correlation
 - (D) None of the above
78. Which of the following are common reason for studying both secular trends and seasonal variation?
- (A) To allow the elimination of the component from the series
 - (B) To describe past patterns
 - (C) To project past patterns into the future
 - (D) All of the above

79. Observing how optimal decisions and profits change when payoffs or probabilities vary is called
- (A) Maxmin approach
 - (B) Decision tree
 - (C) Sensitivity Analysis
 - (D) Utility Analysis
80. The arithmetic mean of the direct 100 natural numbers is
- (A) 55.2
 - (B) 60.1
 - (C) 25.7
 - (D) 50.5
81. If co-efficient of skewness is 0.64, $\bar{x} = 82$ and σ is 50 the value of mode is
- (A) 60
 - (B) 50
 - (C) 40
 - (D) 70
82. In a moderately skewed distribution
- (A) $Z = \bar{X} = M$
 - (B) $Z = 3M - 2\bar{X}$
 - (C) $M = 2\bar{X} - Z$
 - (D) $\bar{X} = M = 2Z$
83. The sum of the squared deviations of the items from arithmetic mean is always
- (A) minimum
 - (B) 1
 - (C) 0
 - (D) 5
84. Mean deviation equals
- (A) $\frac{1}{5}QD$
 - (B) $\frac{4}{5}\sigma$
 - (C) $\frac{1}{3}\sigma$
 - (D) $\frac{5}{6}QD$

85. The sum of deviations taken from actual arithmetic mean is
- (A) 0
 - (B) infinite
 - (C) positive
 - (D) negative
86. In a given distribution $X = 20$, $\sigma = 16$. The co-efficient of variation is
- (A) 36%
 - (B) 80%
 - (C) 320%
 - (D) 4%
87. Which percentile is equivalent to the first quartile Q_1 ?
- (A) 25th
 - (B) 50th
 - (C) 75th
 - (D) 100th
88. F-test is a
- (A) variance test
 - (B) probability test
 - (C) factor test
 - (D) None of the above
89. The most appropriate statistical test for analyzing qualitative data is
- (A) 't'-test
 - (B) 'z'-test
 - (C) Chi-square
 - (D) ANOVA
90. The total area of normal distribution between the average value ± 1.96 of standard deviation is
- (A) 95.45%
 - (B) 95%
 - (C) 99%
 - (D) 68.34%

91. Which of the following statements is most **CORRECT**?
- (A) The ability of firms to engage in socially beneficial projects that involve voluntary costs is constrained by competition and the need of firms to attract capital at low cost
 - (B) The actions that maximise a firm's stock price are inconsistent with maximising social welfare
 - (C) The concept of social responsibility and ethical responsibility on the part of corporations are completely different and neither is relevant in maximising stock price
 - (D) In a competitive market, if a group of firms do not spend resources making social welfare improvements, but another group does, in general, this will not affect the second group's ability to attract capital
92. Which of the following statements is **CORRECT**?
- (A) If Company A has a 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 sold, interest rate on debt and assets. However Company A uses more debt than Company B, that is, Company A has a higher debt ratio. Under these conditions, we would expect B's profit margin to be higher than A's
 - (C) The ROE's of any company which is earning positive profits and which has a positive networth (or common equity) must exceed the company's ROA
 - (D) Statements (A), (B) and (C) are false
93. A 9% coupon bond issued by the State sells for Rs. 1000 and thus provides a 9% yield to maturity. What coupon rate on the Synthetic Chemical Company bond that also sells at its Rs. 1000 par value would cause the two bonds to provide that same after tax rate of return to an investor in the 28% tax bracket?
- (A) 12.50%
 - (B) 17.50%
 - (C) 7.00%
 - (D) 14.00%
94. If it were evaluated with an interest rate of 0%, a 10 year regular annuity would have a present value of Rs. 3,755.50. If the future compound value of this annuity, evaluated at year 10 is Rs. 5,440.22. What effective annual interest rate must the analyst be using to find the future value?
- (A) 7%
 - (B) 8%
 - (C) 9%
 - (D) 10%

95. You have just taken out an installment loan for Rs. 1,00,000. Assume that the loan will be repaid in 12 equal monthly installments of Rs. 9,456 and that the first payment will be due one month from today. How much of your third monthly payment will go towards the repayment of principal?
- (A) Rs. 7,757.22
 - (B) Rs. 6,359.12
 - (C) Rs. 7,212.50
 - (D) Rs. 7,925.88
96. Other things remaining constant, which of the following is **NOT** true about bonds?
- (A) Price sensitivity that is the change in price due to a given change in the required rate of return, increases as a bond's maturity increases
 - (B) For a given bond of any maturity, a given percentage point increases in the interest rate causes larger rupee capital loss than capital gain stemming from an identical decrease in the interest rate
 - (C) For any given maturity, a given percentage point increase in the interest rate causes smaller rupee capital loss than the capital gain stemming from an identical decrease in the interest rate
 - (D) From a borrower's point of view, interest paid on bonds is tax deductible
97. A company's stock is currently selling at an equilibrium price of Rs. 30 per share. The firm has been experiencing a 6% annual growth rate. Last year's earning per share were Rs. 4 and the dividend payout ratio is 40%. The risk free rate is 8%, and the market risk premium is 5%. If the systematic risk (beta) increases by 50% all the other factors remain constant, by how much will the stock price change?
- (A) -Rs. 7.33
 - (B) +Rs. 7.14
 - (C) -Rs. 15
 - (D) -Rs. 15.22
98. Club Auto Parts' last dividend was Rs. 0.50 and the company expects to experience no growth for the next 2 years. However, Club will grow at an annual rate of 5% in the third and fourth years and beginning with the fifth year, it should attain a 10% growth rate which it will sustain thereafter. Club has a required rate of return of 12%. What should be the price per share of Club stock at the beginning of the third year?
- (A) Rs. 19.98
 - (B) Rs. 25.06
 - (C) Rs. 31.21
 - (D) Rs. 19.48

99. Elephant Books sells paperback books for Rs. 7 each. The variable cost per book is Rs. 5. At current annual sales of 2,00,000 books, the publisher is just breaking even. It is estimated that if the authors' royalties are reduced, the variable cost per book will drop by Rs. 1. Assume authors' royalties are reduced and sales remain constant; how much more money can the publisher put into advertising (a fixed cost) and still break even?
- (A) Rs. 6,00,000
 - (B) Rs. 4,66,667
 - (C) Rs. 3,33,333
 - (D) Rs. 2,00,000
100. Air Company has average inventory of Rs. 10,00,000. It is estimated annual sales are 1,20,00,000 and the firm estimates its receivables conversion period to be twice as long as its inventory conversion period. The firm pays its trade credit on time, its terms are net 30. The firm wants to decrease its cash conversion cycle by 10 days. It believes that it can reduce its average inventory to Rs. 9,00,000. Assume a 360 day year and that sales will not change. By how much the firm also reduce its account receivable to meet its goal of a 10 day reduction?
- (A) Rs. 1,01,900
 - (B) Rs. 10,00,000
 - (C) Rs. 2,33,333
 - (D) Rs. 3,33,520
101. Your assistant has just completed an analysis of two mutually exclusive projects. You must now take her report to a board of directors meeting and present the alternatives for the board's consideration. To help you with your presentation, your assistant also constructed a graph with NPV profiles, so you do not know which line applies to which project. Of the following statements regarding the profiles, which one is most reasonable?
- (A) If the two projects have the same investment costs, and if their NPV profiles cross once in the upper right quadrant, at a discount rate of 40%, this suggests that a NPV versus IRR conflict is not likely not exist
 - (B) If the two projects' NPV profiles cross once, in the upper left quadrant, at a discount rate of minus 10 %, then there will probably not be a NPV versus IRR conflict, irrespective of the relative sizes of the two projects, in any meaningful, practical sense
 - (C) If one of the projects has a NPV profile which crosses the X-axis twice, hence the project appears to have two IRRs, your assistant must have made a mistake
 - (D) Whenever a conflict between NPV and IRR exist, then if the two projects have the same initial cost, the one with the steeper NPV profile probably has less rapid cash flows. However, if they have identical cash flow patterns, then the one with the steeper profile probably has the lower initial cost

102. The “Pure Modigliani and Miller Result” establishes under restrictive assumptions, that the firm’s stock price will be maximised if it uses virtually 100% debt. Which of the following real world conditions does the most to limit real world corporate debt ratios to far less than 100%?
- (A) There are brokerage costs
 - (B) At high levels of debt revenues decline
 - (C) Investors can’t really borrow at the same rate as corporations
 - (D) Interest rates increases as debt ratio rises
103. A firm plans to sell Rs. 10,00,00,000 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
104. An investor who writes call options against stocks held in his or her portfolio is said to be sellingoption
- (A) in the money
 - (B) put
 - (C) naked
 - (D) covered
105. Redstone Company is considering a leasing arrangement to finance some special manufacturing tools that it needs for production during the next three years. A planned change in the firm’s production technology will make the tools obsolete after 3 years. The firm will depreciate the cost of the tools on a straight-line basis. The firm can borrow Rs. 48,00,000, the purchase price at 10% to buy the tools or make three equal end of year lease payments of Rs. 21,00,000. The firm’s tax rate is 40% and the firm’s before tax cost of debt is 10%. Annual Maintenance Costs associated with ownership are estimated at Rs. 2,40,000. What is the net advantage to leasing?
- (A) Rs. 0
 - (B) Rs 1,06,000
 - (C) Rs. 3,62,800
 - (D) Rs. 4,33,100

106. Beverage Company stock sells for Rs. 27.83, pays a dividend of Rs. 2.10 and has an expected long term growth rate of 6%. The firm's pure-debt bond pays 10.8%. Johnson is planning a convertible bond issue. The bonds will have a 20 year maturity, pays Rs. 100 interest annually, have a par value of Rs. 1000 and will be callable after 10 years. Assuming that the bonds will be converted at year 10, when they become callable, what will be expected return on the convertible when it is issued?
- (A) 14%
 - (B) 11.44%
 - (C) 10.8%
 - (D) 12.16%
107. Which of the following statement is **FALSE**?
- (A) Any bond sold outside the country of the borrower is called an international bond
 - (B) Foreign Bond and Eurobonds are two important types of international bonds
 - (C) Foreign bonds are bonds sold by a foreign borrower but denominated in the currency of the country in which the issue is sold
 - (D) The term Eurobond specifically applies to any foreign bonds denominated in U.S. Currency
108. A particular Japanese imported automobile sold for 14,76,000 yen or \$8200. If the car still sells for the same amount of yen today but the current exchange rate is 144 yen per dollar, what is car selling for today in U.S. dollars?
- (A) US\$ 10250
 - (B) US\$ 12628
 - (C) US\$ 8200
 - (D) US\$ 5964
109. The Housing Finance Companies are issued guidelines on prudential norms on income recognition, accounting standards, asset classification, provisioning of Bad and doubtful debts, capital adequacy and concentration of credit/ investment by
- (A) Reserve Bank of India
 - (B) National Housing Bank
 - (C) NABARD
 - (D) Ministry of Finance

110. Which of the following is true about Reverse Mortgage?
- (A) It is loan against residential mortgage for senior citizen
 - (B) It is loan enabled annuity that seeks to monetise the owner's equity in the house
 - (C) It is for the lifetime of the borrower
 - (D) All of the above
111. Mortgage Guarantee Companies should be registered with RBI and have
- (A) Minimum net owned fund of Rs. 100 crore
 - (B) 90% of business from mortgage guarantee contracts
 - (C) Maintain Capital adequacy ratio of 10% of its aggregate risk weighted assets
 - (D) All of the above
112. Insurance Regulatory and Development Authority Act came into existence in
- (A) 1996
 - (B) 1998
 - (C) 1999
 - (D) 2000
113. Which one of the following is **FALSE**?
- (A) A lien empowers a bank to retain all the securities/ assets of the customers in respect of the balance due from him
 - (B) A pledge is a delivery of goods from one person to another to secure a debt
 - (C) Hypothecation refers to a charge on movable goods/ commodities/ receivables and so in which possession and ownership of the securities/ assets charged to the banks remains with the borrower(s)
 - (D) Usufructuary Mortgage is a mortgage in which the mortgagee does not get possession of the property until repayment of debt
114. Which of the following is **NOT** true about Treasury Bills?
- (A) They are negotiable Instrument
 - (B) They are issued on discount and are repaid on par on maturity
 - (C) High liquidity on account of short tenure and interbank repos
 - (D) None of the above
115. Short Sellers provide liquidity to genuine investors and the frameworks provides for
- (A) Naked Short Selling
 - (B) Future and Options segment should be eligible for short selling
 - (C) Institutional investors are allowed day trading
 - (D) None of the above

116. Special Drawing Rights are issued by
- (A) IMF
 - (B) World Bank
 - (C) ADB
 - (D) None of the above
117. Nominal Effective Exchange Rate is
- (A) a measure of the nominal exchange rate of Currency with reference to a basket of currencies
 - (B) a measure that takes into account the changes in exchange rates of currency A against each currency in the basket as well as differences in inflation rates between country of currency A and countries of all the currencies in the chosen basket
 - (C) Both (A) and (B)
 - (D) None of the above
118. Forward Rate Agreement is notionally an agreement that
- (A) is between parties in which one of them makes a commitment to lend to the other a certain amounts of funds, in a particular currency for a specified period at a specified future date at an interest fixed at the time of agreement
 - (B) a call option on interest rate that give the holder the right to borrow funds for a specified duration at specified interest rate without an obligation to do so
 - (C) Both (A) and (B)
 - (D) None of the above
119. Investors agree to invest in high- risk investments if only
- (A) there are any true speculations
 - (B) the predicted return is satisfactory for taking a risk
 - (C) there are no safe options except for holding cash
 - (D) the return is short
120. Risk arising from the unique uncertainties of individual securities is known as
- (A) Systematic risk
 - (B) Unsystematic risk
 - (C) Market risk
 - (D) Total risk

121. describes the relationship between systematic risk and expected return for assets, particularly stocks.
- (A) CAPM
 - (B) PERT
 - (C) Sharpe ratio
 - (D) Treynor ratio
122. Which of the following is not a financial derivative?
- (A) Stock
 - (B) Futures
 - (C) Options
 - (D) Forward contracts
123. In the capital market, the term arbitrage is used with reference to
- (A) purchase of securities to cover the sale
 - (B) sale of securities to reduce the loss on purchase
 - (C) simultaneous purchase and sale of securities to make profits from price
 - (D) variation in different markets
124. A call option gives the owner
- (A) the right to sell the underlying security
 - (B) the obligation to sell the underlying security
 - (C) the right to buy the underlying security
 - (D) the obligation to buy the underlying security
125. What is the value of the firm usually based on?
- (A) The value of debt and equity
 - (B) The value of equity
 - (C) The value of debt
 - (D) The value of assets plus liabilities
126. Which of the following depositories is the first and largest depository in India?
- (A) Central Depository Services Limited
 - (B) National Depository Services Limited
 - (C) National Securities Depository Limited
 - (D) Central Securities Depositories Limited

127. Which of the following is issued by registered foreign portfolio investors to overseas investors who want to be part of the Indian stock market without registering themselves directly?
- (A) Certificate of Deposits
 - (B) Commercial Paper
 - (C) Promissory Note
 - (D) Participatory Note
128. Which of the following is not included in the assumptions on which Myron Gordon proposed a model on stock valuation?
- (A) Retained earnings, the only source of financing
 - (B) Finite life of the firm
 - (C) Taxes do not exist
 - (D) Constant rate of return on firm's investment
129. Stock exchanges provide an opportunity to the investors to disinvest and invest. Identify the related function of the stock exchange
- (A) Providing scope for speculation
 - (B) Providing liquidity and marketability to existing securities
 - (C) Pricing of security
 - (D) Spreading of equity cult
130. The value of one unit of investment in Mutual fund is called the
- (A) Net Asset Value
 - (B) Issue value
 - (C) Market value
 - (D) Gross Asset value
131. Corporate Social Responsibility (CSR) consists of which of the following four kinds of responsibilities
- (A) Economic, ethical, societal, and altruistic
 - (B) Economic, legal, ethical, and altruistic
 - (C) Fiscal, legal, societal, and philanthropic
 - (D) Economic, legal, ethical, and philanthropic
132. The 'going concern concept' is the underlying basis for
- (A) disclosing the market value of securities
 - (B) consolidating accounts of subsidiary companies with those of parent company
 - (C) depreciating fixed assets over their useful lives
 - (D) disclosing the sales and other operating information in the income statement

133. International Management is concerned with how individual economic units, especially MNCs cope with the complex financial environment of International Business
- (A) Business
 - (B) Financial
 - (C) Legal
 - (D) Economic
134. The value of Special Drawing Right (SDR) is determined by the basket ofcurrencies
- (A) 4
 - (B) 5
 - (C) 6
 - (D) 7
135. Who releases the Global Competitive Report?
- (A) World bank
 - (B) IMF
 - (C) World Trade Organisation
 - (D) World Economic Forum
136. The Attorney General of India is appointed by
- (A) Law Minister
 - (B) Home Minister
 - (C) Prime Minister
 - (D) President of India
137. The recently formed Suresh Mathur Committee is related to
- (A) Digital Payment system
 - (B) AADHAAR -Pan Card Linkage
 - (C) FDI norms in financial markets
 - (D) Microinsurance Framework

138. With reference to the history of India, “Ulgulan” or the Great Tumult is the description of which of the following events
- (A) The Revolt of 1857
 - (B) The Mappila Rebellion of 1921
 - (C) The Indigo Revolt of 1859-1960
 - (D) Birsa Munda’s Revolt of 1899-1900
139. India is a signatory to Ramsar Convention. Ramsar Convention is related to conservation and wise use of
- (A) Water Birds
 - (B) Desert Vegetation
 - (C) Forest land
 - (D) Wetlands
140. To whom the line “A thing of beauty is a joy forever” is attributed?
- (A) Jonathan Swift
 - (B) George Eliot
 - (C) John Keats
 - (D) William Wordsworth
141. Consider the following statement about the electric vehicles in India
- (1) Electric Vehicles can be sold in India without profited batteries
 - (2) The GST rate applied on the electric vehicles is the same as that on the conventional vehicles
 - (3) FAME II scheme, under the Ministry of Road Transport and Highways, aim to promote the electric vehicles and charging infrastructure in India

Which of the statement given above is/ are correct?

- (A) (1) only
- (B) (3) only
- (C) (2) and (3) only
- (D) (1) and (2) only

142. “Gold Tranche” (Reserve Tranche) refers to
- (A) A loan system of the World Bank
 - (B) One of the operation of a Central Bank
 - (C) A credit system granted by WTO to its members
 - (D) A credit system granted by IMF to its members
143. Which part of the Constitution of India declares the ideal of Welfare state?
- (A) Directive principles of State Policy
 - (B) Fundamental Rights
 - (C) Preamble
 - (D) Seventh Schedule
144. Consider the following statement about the Indian Post Payment Bank
- (1) It was launched for improving financial inclusion in the country
 - (2) It is a component of Pradhan Mantri Jan Dhan Yojana
- Which of the statements given above is/are correct?
- (A) (1) only
 - (B) (2) only
 - (C) Both (1) and (2)
 - (D) None of the above
145. Who is the originator of Green Revolution in India?
- (A) Norman E. Borlaug
 - (B) Dr. M.S. Swaminathan
 - (C) Garry Backer
 - (D) Dr. P. M. Jha
146. National Sample Survey (NSS) was established in
- (A) 1950
 - (B) 1951
 - (C) 1952
 - (D) 1947
147. The Finance Commission is appointed in every
- (A) 3 year
 - (B) 4 year
 - (C) 5 year
 - (D) 7 year

148. The Transgender Persons (Protection of Rights) Act came into effect from which year?
- (A) 2001
 - (B) 2020
 - (C) 2010
 - (D) 2021
149. India and which country signed the 375 million dollar deal for the sale of BrahMos Supersonic anti-ship cruise missiles?
- (A) Indonesia
 - (B) Bangladesh
 - (C) Philippines
 - (D) Malaysia
150. Who is the current Chief Economic Advisor?
- (A) Krishnamurthy Subramanian
 - (B) Dr. Rajiv Kumar
 - (C) Ramesh Chand
 - (D) V Anantha Nageswaran

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

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