MODEL QUESTION PAPER FOR VALUATION EXAMINATION IN THE ASSET CLASS: SECURITIES OR FINANCIAL ASSETS (BASED ON REVISED SYLLABUS WITH EFFECT FROM 1st JUNE 2020)

- 1. The national output is measured at which of the following price?
 - a. Production price
 - b. Market price
 - c. Cost prices
 - d. Wholesale prices

Ans. (b)

- 2. Which of the following relation between fiscal deficit (FD) and primary deficit (PD) is correct?
 - a. PD = FD depreciation
 - b. PD = FD interest payments
 - c. FD = PD interest payments
 - d. FD = PD depreciation

Ans. (b)

- 3. Quantitative easing is an unconventional monetary policy in which a central bank purchase government securities or other securities from the market in order to_____.
 - a. rise interest rate and increase the money supply in the economy
 - b. lower interest rate and decrease the money supply in the economy
 - c. lower interest rate and increase the money supply in the foreign economy
 - d. lower interest rate and increase the money supply in the economy

Ans. (d)

- 4. An investment pays Rs. 300 annually for five years, with the first payment occurring today. The present value (PV) of the investment discounted at a 4% annual rate is approximately _____.
 - a. 1336
 - b. 1389
 - c. 1625
 - d. 1925

Ans. (b)

- 5. Which of the following measures does not take into account the time value of money?
 - a. Payback period
 - b. Net present value
 - c. Internal rate of return
 - d. Discounted cash flow

- 6. If a firm has a P/E ratio of 15, and a ROE of 14 %, what is the market to book value of equity?
 - a. 2.1
 - b. 1.5
 - c. 1.6
 - d. 3.0

- 7. The formula, long-term debt divided by (long-term debt plus shareholders' equity) determines the ______ of a company.
 - a. Debt ratio
 - b. Debt to equity ratio
 - c. Capitalisation ratio
 - d. Profitability index

Ans. (c)

- 8. Which of the following is not a cash outflow?
 - a. Increase in prepaid expenses
 - b. Increase in debtors
 - c. Increase in stocks
 - d. Increase in creditors

Ans. (d)

- 9. Which of the following statements is not true regarding Cash and Cash equivalents in a cash flow statement?
 - a. Cash comprises cash on hand and demand deposits with the bank
 - b. Cash equivalents are short-term in nature
 - c. There is an insignificant risk of change in value of cash equivalents
 - d. Cash equivalents are highly illiquid investments

Ans. (d)

- 10. Which of the following is not a conduct most people associate with ethical behaviour?
 - a. Bribing
 - b. Negotiating
 - c. Advocating
 - d. Lobbying

Ans. (a)

11. As an independent valuer, the valuer should not charge_____fee.

- a. professional
- b. success
- c. mandate
- d. legal

- 12. Professional independence is a subset of which one of the following pairs of fundamental principles?
 - a. Integrity and due diligence
 - b. Integrity and objectivity
 - c. Due diligence and professional competence
 - d. Objectivity and due diligence

- 13. Which of the following would not be included in Valuer's Engagement Letter?
 - a. Timeline of the engagement
 - b. Management's responsibilities with respect to financial records and accuracy of information
 - c. Terms of payment
 - d. Management representation

Ans. (d)

- 14. Which of the following capital is not shown in a company's balance sheet?
 - a. Reserve capital
 - b. Authorised Capital
 - c. Issued and Subscribed Capital
 - d. Called and paid up capital

Ans. (a)

- 15. A Tribunal makes an order under section 230 of the Companies Act, 2013 sanctioning a compromise or an arrangement in respect of a company. In this context, which of the following cannot be true?
 - a. It will supervise the implementation
 - b. It can give order for winding up of the company
 - c. It can modify the order or compromise
 - d. It can ask for creditors responsibility statement

Ans. (d)

- 16. Who is the authority for registration of valuers under the Companies (Registered Valuers and Valuation) Rules, 2017?
 - a. MCA
 - b. NFRA
 - c. IBBI
 - d. NCLT

- 17. Which of the following is not eligible to be registered as a valuer?
 - a. Registered partnership firm
 - b. Limited liability partnership
 - c. Limited liability company
 - d. Hindu undivided family

Ans. (d)

- 18. Which of the following can be transferred under the Transfer of Property Act, 1882?
 - a. An easement along with the dominant heritage
 - b. Political pension
 - c. Succession
 - d. Stipends allowed to the civil pensioners of the Government

Ans. (a)

- 19. 'A' leases land to 'B' on condition that he shall walk a hundred miles in an hour. The lease is _____.
 - a. valid
 - b. void
 - c. voidable
 - d. legal

Ans. (b)

- 20. How is stamp duty paid in transactions where more than one instrument is required?
 - a. Stamp Duty is paid on all the instruments equally
 - b. Stamp Duty is paid on any one of the instrument
 - c. Stamp duty is paid only on one of the principal instruments and on the balance documents only minimum duty is payable
 - d. Stamp duty is paid on ad valorem basis

Ans. (c)

- 21. As per section 40(b) of the Income Tax Act, 1961, up to _____ % per annum simple interest on capital is allowed towards remuneration of working partners.
 - a. 6
 - b. 12
 - c. 15
 - d. 16

22. Salary under section 17(1) of the Income Tax Act, 1961 does not include _____.

- a. wages
- b. pension
- c. interest
- d. gratuity

Ans. (c)

23. The exemption under section 54 of the Income Tax Act, 1961 is available

- a. to the extent of capital gain invested in the House property
- b. proportionate to the net consideration price invested
- c. to the extent of amount actually invested
- d. to the extent of net consideration

Ans.(a)

- 24. Who determines the amount of claim due to a creditor under the Insolvency and Bankruptcy Code, 2016?
 - a. Committee of creditors.
 - b. Resolution professional.
 - c. Adjudicating authority.
 - d. Corporate debtor

Ans. (b)

25. Under the Insolvency and Bankruptcy Code, 2016, debts owed to a secured creditor in the event such secured creditor has relinquished security ranks equally with

- b. workmen's dues for a period of 24 months prior to liquidation commencement date
- c. wages and any unpaid dues owed to employees other than workmen for the period of twelve months preceding the liquidation commencement date
- d. dues to Central Government

Ans. (b)

- 26. Which of the following is not a financial service under the Insolvency and Bankruptcy Code, 2016?
 - a. Accepting of deposits
 - b. Effecting contracts of insurance
 - c. Payment of wages to employees
 - d. Establishing or operating an investment scheme

a. insolvency resolution process costs

- 27. Under the SARFAESI Act, 2002, the Central Registrar may allow the filing of the particulars of creation of security interest within _____ following the expiry of the period of initial thirty days on payment of additional fee.
 - a. ten days
 - b. thirty days
 - c. twenty-five days
 - d. fifteen days

28. As per SEBI (ICDR), 2009, which of the following come under qualified institutional buyer:

- a. A provident fund with minimum corpus of twenty crore rupees.
- b. A provident fund with minimum corpus of twenty-five crore rupees.
- c. A provident fund with minimum corpus of fifteen crore rupees.
- d. A provident fund with minimum corpus of sixty-four crore rupees.

Ans. (b)

- 29. As per SEBI (Share based Employee Benefits) Regulation, 2014, appreciation means the difference between the ______.
 - a. market price of the share of a company on the date of exercise of stock appreciation right (SAR) or vesting of SAR, as the case may be, and the SAR price.
 - b. face value of the share of a company on the date of exercise of stock appreciation right (SAR) or vesting of SAR, as the case may be, and the SAR price.
 - c. market price of the share of a company on the date of exercise of share appreciation right (SAR) or vesting of SAR, as the case may be, and the SAR price.
 - d. face value of the share of a company on the date of exercise of share appreciation right (SAR) or vesting of SAR, as the case may be, and the SAR price.

Ans. (a)

- 30. Which statute governs external commercial borrowing?
 - a. Foreign Exchange Maximization Act, 1972
 - b. Foreign Exchange Management Act, 1999
 - c. Foreign Exchange Minimization Act, 2004
 - d. Foreign Exchange Regulation Act, 1972

- 31. As per the RBI (Prudential Framework for Resolution of Stressed Assets) Directions, 2019 banks shall recognise incipient stress in loan accounts, immediately on default, by classifying such assets as _____.
 - a. non-performing account
 - b. sub-standard account
 - c. standard account
 - d. special mention account

Ans. (d)

- 32. Ind AS 113 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in _____ between market participants at the measurement date.
 - a. an orderly transaction
 - b. a quick transaction
 - c. a purchase transaction
 - d. a sale transaction

Ans. (a)

- 33. As per Ind AS 113 which of the following is not a valuation technique?
 - a. Market approach
 - b. Cost approach
 - c. Income approach
 - d. Worth approach

Ans. (d)

- 34. The scope of Ind AS 36 includes impairment of which of the following assets?
 - a. inventories
 - b. financial assets classified as subsidiaries
 - c. deferred tax assets
 - d. assets arising from employee benefits

Ans. (b)

- 35. As per Ind AS 103, accounting for Business Combinations using the acquisition method requires which of the following?
 - a. Identifying the acquirer
 - b. Determining the acquisition date
 - c. Recognising and measuring the unidentifiable assets acquired
 - d. Recognising and measuring any goodwill or bargain purchase

36. Which of the following statements is true regarding Ind AS 109?

- a. The standard applies to employers' rights and obligations under employee benefit plans
- b. The standard applies to financial instruments including options and warrants
- c. The standard applies to rights and obligations arising out of Insurance contracts
- d. The derivatives embedded in leases

Ans. (d)

- 37. Karan bought 1000 shares of Infosys Limited at Rs. 910/- from his broker excluding brokerage and taxes however, current market price of that share was Rs. 915/-. In this statement Rs. 915/- reflects ______.
 - a. fair value of the share
 - b. cost of his investment
 - c. investment value of the share
 - d. price of the share transaction

Ans. (a)

- 38. Under the Insolvency and Bankruptcy Code, 2016, fee of the liquidator is paid from the proceeds of sale of _______ of the corporate debtor.
 - a. unencumbered liabilities
 - b. liquidation assets
 - c. liquidation fund
 - d. unencumbered reserves

Ans. (b)

- 39. Value of a firm is usually based on _____.
 - a. the value of debt and equity
 - b. the value of assets and liabilities
 - c. the value of debt
 - d. the value of equity

Ans. (a)

- 40. An asset is officially appraised and priced on _____.
 - a. verification date
 - b. valuation date
 - c. report date
 - d. effective date

- 41. Which of the following methods is included in 'asset based approach' (cost-based approach)?
 - a. Comparable Companies' Multiple Method
 - b. Replacement Method
 - c. Earnings Capitalization Method
 - d. Discounted Cash Flow Method

- 42. Which of the following valuation methods would most likely not be used for business valuation of a firm/entity?
 - a. Discounted cash flow (DCF)
 - b. Net assets method
 - c. Multi-period excess earning method
 - d. Industry price earnings ratio DCF

Ans. (c)

- 43. An analyst is valuing a firm's equity using the 'Enterprise Value to Revenue Ratio' of similar firms. Which of the following is not a factor that the analyst should use?
 - a. Revenue growth
 - b. EBITDA margins
 - c. Expected return
 - d. Net Present Value

Ans. (d)

- 44. Labour laws, product standards, waste disposal rules etc are all ______ factors required to be considered while performing a Business Environment Analysis.
 - a. economic
 - b. legal
 - c. social
 - d. cultural

Ans. (b)

45. In a SWOT analysis, the difficult cash flow situation of the business will be treated as

a

- b. opportunity
- c. weakness
- d. threat

a. strength

46. 'Economies of Scale' arises from ______ synergy in Merger and Acquisitions.

- a. operating
- b. financial
- c. managerial
- d. market

Ans. (a)

- 47. Which of the following represent the three major categories of risks faced by a business organisation?
 - a. Business risks, personnel risks, budget risks
 - b. Project risks, technical risks, business risks
 - c. Planning risks, technical risks, personnel risks
 - d. Management risks, technical risks, design risks

Ans. (b)

- 48. Which of the following requires the need for due diligence considerations?
 - a. selection of statistical samples
 - b. selecting and evaluating samples based on judgement
 - c. selection of random samples
 - d. selection of random variables

Ans. (b)

- 49. In time-series analysis, which source of variation can be estimated by the ratio-to-trend method?
 - a. Cyclical
 - b. Trend
 - c. Seasonal
 - d. Irregular

Ans. (c)

- 50. In case of valuation of firms for takeovers, which of the following provides a better estimate of value?
 - a. Cash flows
 - b. Free cash flows
 - c. Future cash flows
 - d. Free cash flow to equity

Ans. (d)

- 51. When investors use a derivative instrument to reduce his exposure to the price volatility of certain underlying assets, he is said to be _____.
 - a. speculating
 - b. investing
 - c. arbitraging
 - d. hedging

Ans. (d)

- 52. The beta factor for a company is 0.863. The risk-free interest rate is 7 % and the market rate is 13 %. What is the cost of equity capital using CAPM approach?
 - a. 12.18 %
 - b. 18.80 %
 - c. 9.80 %
 - d. 13.00 %

Ans. (a)

- 53. Which of the following is an asset pricing model based on the ideas that an asset's returns can be predicted using the relationship between that asset and common risk factors?
 - a. Arbitrage pricing theory
 - b. Arbitrage risk theory
 - c. Arbitrage asset theory
 - d. Risk pricing theory

Ans. (a)

- 54. Which of the following factors are not associated with Arbitrage Pricing Theory Model?
 - a. Inflation and money supply
 - b. Interest rate
 - c. Industrial production and personal consumption
 - d. Exchange rate

Ans. (d)

- 55. Typical parameters used in quantitative methods to estimate discount for lack of marketability include _____.
 - a. duration of the restriction and risk of the investment
 - b. return of the investment
 - c. dividends paid
 - d. market size

- 56. Which is a type of preferred stock that stockholders can exchange for a predetermined number of a company's common stock?
 - a. Prior preferred stock
 - b. Convertible preferred stock
 - c. Participating preferred stock
 - d. Cumulative preferred stock

- 57. Agency bonds are issued by _____.
 - a. local governments
 - b. national governments
 - c. quasi-government entities
 - d. corporates

Ans. (c)

- 58. If interest rates are expected to increase, the coupon payment structure most likely to benefit the issuer is a _____.
 - a. step-up coupon
 - b. inflation-linked coupon
 - c. put option
 - d. cap in a floating rate note

Ans. (d)

- 59. Which of the following bonds has the shortest duration?
 - a. A bond with 20-year maturity, 10% coupon rate
 - b. A bond with 20-year maturity, 6% coupon rate
 - c. A bond with 10-year maturity, 6% coupon rate
 - d. A bond with 10-year maturity, 10% coupon rate

Ans. (d)

- 60. ______ is the risk that the issuer will fail to satisfy the terms of the obligation with respect to the timely payment of interest and principal.
 - a. Default risk
 - b. Spread risk
 - c. Volatility risk
 - d. Downgrade risk

- 61. What is the value of Three-Year 4.25% Annual Coupon Bond Puttable at Par one year from now if one year forward rates at T (0), T (1) and T (2) are 2.5%, 3% and 4.5% respectively?
 - a. 101.5
 - b. 101.71
 - c. 102.67
 - d. 102.89

Ans. (c)

62. The fixed-rate payer in an interest-rate swap has a position equivalent to a series of

- a. long interest-puts and short interest-rate calls
- b. short interest-rate puts and long interest-rate calls
- c. long interest-rate puts and calls
- d. short interest-rate puts and calls

Ans. (b)

63. The collar of a floating-rate bond refers to the minimum and maximum _____.

- a. call periods
- b. maturity dates
- c. coupon rates
- d. yields to maturity

Ans. (c)

- 64. A perpetual bond does not have a fixed _____.
 - a. interest rates
 - b. maturity period
 - c. duration
 - d. underlying assets

Ans. (b)

- 65. Which principle refers to the concept that an investor will not invest in an asset if a more attractive substitute exists?
 - a. Principle of alternative
 - b. Principle of expectation
 - c. Principle of substitution
 - d. Principle of risk and return

66. The first step in the Monte Carlo simulation process is to _____.

- a. generate random numbers
- b. set up cumulative probability distributions
- c. establish random number intervals
- d. set up probability distributions

Ans.(d)

- 67. Individuals hold their claims on real assets through ______ in a well-developed economy.
 - a. intangible assets
 - b. tangible assets
 - c. real estate
 - d. financial assets

Ans.(d)

- 68. The credit default spread method of valuation of a guarantee given by a parent company on behalf of its subsidiary involves estimating the value _____.
 - a. using credit default spread based on the credit rating of the subsidiary
 - b. using credit default spread based on the credit rating of the guarantor
 - c. based on probability of default
 - d. of the guarantee using an option pricing model

Ans.(a)

- 69. What are intangible assets?
 - a. Non-monetary assets with physical substance
 - b. Monetary assets without physical substance
 - c. Non-monetary assets without physical substance
 - d. Monetary assets with physical substance

Ans.(c)

- 70. Relief-from-royalty method estimates the value of an asset based on the value of the royalty payments ______.
 - a. from which the company is relieved due to its ownership of the asset
 - b. made by the company to acquire ownership of the asset
 - c. received by the company from the useful life of the asset
 - d. over and above the internal rate of return

- 71. If the aggregate fair market value of prescribed movable property received by a taxpayer as gift during the year is Rs.1,50,000, tax will be charged on _____.
 - a. Rs.1,00,000
 - b. Rs.50,000
 - c. Rs.1,50,000
 - d. Rs.0

Ans. (c)

- 72. Which of the following method, would you consider appropriate while valuing the intangible assets?
 - a. Multiple
 - b. Relative
 - c. Consistent
 - d. Exclusive

Ans. (b)

- 73. What are the parameters considered to compare subject intangible assets to other comparable assets to estimate appropriate royalty rate?
 - a. Contribution to the business enterprise
 - b. Debt to equity ratio of company
 - c. Return on equity
 - d. Beta factor

Ans. (a)

- 74. During Mergers and Acquisitions (M&A) transaction, the ability to find and use good comparable data for a valuation is relatively ______.
 - a. easy because each successful company within an industry uses the same ratios

b. easy because public stock price fluctuation is not sufficient or erratic enough to make a difference

c. difficult because book value is adjusted in small companies as FIFO (first-in first out) is the method of choice and in public companies' book value is static due to LIFO (last-in-first our method)

d. difficult because size differential, management depth, product diversity and access to lines of credit will seldom match the company you are valuing

Ans. (d)

75. Which of the following is not method of valuation of Start-up Entities?

- a. Venture Capital method
- b. Berkus method
- c. Risk Free Factor Summation method
- d. Scorecard Valuation method

- 76. What adjustment is made while using the Discounted Cash Flow method to value cyclical companies?
 - a. Normalize earnings
 - b. Use high discount rate
 - c. Use bank rate for discounting
 - d. Use high growth rate

Ans. (a)

- 77. XYZ company has 50 lakh shares outstanding and plans to raise Rs.20 lakh by offering 10 lakh shares at Rs.2 per share. What is XYZ's post-money valuation?
 - a. Rs.1.2 crore
 - b. Rs.1 crore
 - c. Rs.50 lakh
 - d. Rs.2 crore

Ans. (a)

- 78. A decline in the combined ratio is most likely to indicate that the insurer has
 - a. increased its administration expenses
 - b. increased its long-term borrowing
 - c. improved its investment returns
 - d. improved its underwriting results

Ans. (d)

- 79. Which of the following cases fair exchange ratio based on Manageable Profit Method, Net Worth or Break up Method and market value accepted by the court?
 - a. Wenger & Co. Vs. D.V.O. (115 I.T.R. 648)
 - b. Gold Coast Trust Ltd. Vs. Humphray (1949) 17 ITR 19
 - c. Rustam C Cooper Vs. Union of India AIR 1970 SC 564
 - d. Miheer H. Mafatlal Vs. Mafatlal Industries case

Ans. (d)

- 80. Which of the following case dealt with 'valuation of infrequent traded share'?
 - a. G.L. Sultania and Another Vs. SEBI, 2007
 - b. Wenger & Co. Vs. D.V.O. (115 I.T.R. 648)
 - c. Rustam C Cooper Vs. Union of India AIR 1970 SC 564
 - d. Miheer H. Mafatlal Vs. Mafatlal Industries case

Attempt questions 81-90 based upon the following case studies:

- I. In 1995, Daimler Benz reported an operating loss of Rs.2,016 crore and a net loss of Rs.5,674 crore. Much of the loss could be attributed to firm-specific problems including a large write-off of a failed investment in Fokker Aerospace, an aircraft manufacturer. To estimate normalised earnings at Daimler Benz, we eliminated all charges related to these items and estimated a pre-tax operating income of Rs.5,693 crore. To complete the valuation, the following additional assumptions are made.
 - 1. Revenues at Daimler had been growing 3-5 % a year prior to 1995 and we anticipated that the long-term growth rate would be 5 % in both revenues and operating income.
 - 2. The firm had a book value of capital invested of Rs.43,558 crore at the beginning of 1995 and was expected to maintain its return on capital (based upon the adjusted operating income of Rs.5,693 crore).

3. The tax rate applicable to the firm is 44 %.

Further information is as follows:

- i. Bottom-up beta of 0.95.
- ii. The long-term bond rate is 6 %, and Daimler Benz could borrow long term at 6.1 %.
- iii. Market risk premium of 4 %.
- iv. The market value of equity was Rs.50,000 crore and there was Rs.26,281 crore in debt outstanding at the end of 1995.

(4x2 = 8 marks)

- 81. Calculate return on capital at the firm, using the adjusted operating income?
 - a. 7.32 %
 - b. 8.30 %
 - c. 9.32 %
 - d. 5.32 %

Ans. (a)

82. Calculate the Reinvestment rate using 5 % expected growth rate?

- a. 69.31 %
- b. 68.31 %
- c. 70.31 %
- d. 85.31 %

Ans. (b)

83. Calculate cost of capital using bottom up beta of 0.95?

- a. 8.60 %
- b. 9.60 %
- c. 6.60 %
- d. 7.60 %

Ans. (d)

84. Calculate expected free cash flows in 1996?

- a. Rs.900
 b. Rs.1061
 c. Rs.1210
 d. Rs.1105
 Ans. (b)
- II. Mr. Dev, a research analyst, has been hired to value RC Ltd., a company that is currently experiencing rapid growth and expansion. Dev is an expert in the communications industry and has had extensive experience in valuing similar firms. He is convinced that a value for the equity of RC Ltd. can be reliably obtained through the use of a three-stage free cash flow to equity (FCFE) model with declining growth in the second stage. Based on up-to-date financial statements, he has determined that the current FCFE per share is Rs.1.00. He has prepared a forecast of expected growth rates in FCFE as follows:

Stage 1:8% for years 1 through 3

Stage 2: 7.0% in year 4, 6.5% in year 5, 6.0% in year 6

Stage 3: 4.0% in year 7 and thereafter

Moreover, Dev has determined that the company has a beta of 1.6. The current risk-free rate is 3.0%, and the equity risk premium is 5.0%.

Other financial information:

Outstanding shares: 100 lakh shares Tax rate: 40.0% Interest expense: Rs.30,00,000

(3x2 = 6 marks)

85. The required rate of return is closest to _____.

- a. 10.012%
- b. 7.062%
- c. 0.062%
- d. 11.065%

Ans. (c)

86. The terminal value in year 6 is closest to _____.

- a. Rs.22.57
- b. Rs.20.42
- c. Rs.24.30
- d. Rs.25.70
- Ans. (a)

87. The per-share value Dev should assign to RC Ltd. is closest to ______.

- a. Rs.15.35
- b. Rs.20.86
- c. Rs.17.35
- d. Rs.18.46
- Ans. (c)

III. Based on the credit rating of the bonds Mr. Drona has decided to apply the following discount rates for valuing bonds:

Credit Rating	Discount rate
AAA	364-day T-bill rate + 3% spread
AA	AAA + 2% spread
А	AAA + 3% spread

He is considering investing in an AA rated, Rs. 1000 face value bond currently selling at Rs. 1025.68. The bond has five years to maturity and the coupon rate on the bond is 15% per annum payable annually. The next interest payment is due one year from today and the bond is redeemable at par.

Assuming the 364-day bill rate to be 9%, you are required to answer the following questions.

(3x2 = 6 marks)

88. Calculate the intrinsic (fair) value of the bond.

- a. Rs. 515
- b. Rs. 1000
- c. Rs. 1025.86
- d. Rs. 1034

Ans. (d)

89. What is the current yield of the bond?

- a. 15.00 %
- b. 14.62 %
- c. 14.24 %
- d. 14.00 %

Ans. (b)

90. Should Mr. Drona invest in the bond?

- a. Yes, because the current market price of the bond is less than its fair value
- b. Yes, because the current market price of the bond is more than its fair value
- c. No, because the fair value of the bond is less than its current market price
- d. Cannot be decided with the given information

Ans. (a)
