

FYBAF

Maths

L

210

23/4/18

2 to 4:30

Q.P. Code :12026

Pg. 4.

[Time: 2:30 Hours]

[ Marks:75]

Please check whether you have got the right question paper.

- N.B:
1. All question are compulsory.
  2. Figures to the right indicate full marks.

- Q.1 (A) Attempt 8 out of 10 sub questions. Select the correct option. 08
- (A-1) The simple interest for an investment of Rs. 10,000 at 5 % p.a for 3 years is
- a. Rs. 1,500/-
  - b. Rs. 1.600/-
  - c. Rs. 1,400/-
  - d. None of these
- (A-2) The future value after 3 years of Rs. 20,000 today, taking 10% p.a. compound interest rate is:
- a. Rs. 24,142
  - b. Rs. 26,620
  - c. Rs. 23,872
  - d. None of these
- (A-3) The formula for Simple Interest is
- a.  $SI = pnr/100$
  - b.  $SI = P+n+r$
  - c.  $SI = P \times A$
  - d. None of these
- (A-4) Nominal interest rate and Effective interest rate are same for
- a. No compounding
  - b. Quarterly compounding
  - c. Half yearly compounding
  - d. None of these
- (A-5) The present value of an amount is generally \_\_\_\_\_ its future value
- a. Same as
  - b. Less than
  - c. More than
  - d. None of these
- (A-6) EMI stands for:
- a. Equated Monthly Installments
  - b. Equal Monetary Installments
  - c. Equal Monetary Investments
  - d. None of these
- (A-7) 8% share means
- a. Current share price is 8 % of FV
  - b. Dividend paid is 8 % of FV
  - c. Profit of the company is 8 %
  - d. None of these

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- (A-8) A sequence of payments made at successive time periods or intervals of time is called
- Annuity
  - Net present value
  - Internal rate of return
  - None of these
- (A-9) Simple interest and compound interest for first year are
- same
  - added every year by the bank
  - different
  - None of these
- (A-10) A sinking fund is an example of
- EMI
  - Annuity
  - Simple interest
  - None of these

(B) Attempt 7 out of 10 sub Questions. State True or False.

- (B-1) 2:3 and 3:2 are inverse ratios of each other
- (B-2) Simple interest for an investment of Rs. 10,000/- at 9 % p.a. for one year is Rs. 900.
- (B-3) Trade discount is calculated as % on the Cost price.
- (B-4) Profit % is calculated as % of Net selling price.
- (B-5) The invoice price minus the cash discount is called the list price.
- (B-6) For a fixed sum invested for four years, the simple interest will always be lesser than the compound interest.
- (B-7) If a share is available at discount, then its face value is more than its current market value.
- (B-8) The face value of the share reduces after the bonus is declared.
- (B-9) In mutual fund, a load is expressed as a percentage of number of units
- (B-10) The legal organization that manages the operations of a mutual fund is SEBI.

- Q.2 (2-a) i) If 28 toys are sold for Rs. 126, what amount should be charged for 34 toys? 08
- ii) If a person's salary increases from Rs. 8000 to Rs. 9600. Find % change in his salary.
- (2-b) Calculate accumulated value for an immediate annuity of Rs, 5000/- for 8 years at 10 % percent per annum. 07

OR

- Q.2 (2-c) Mr. Mehta saved 15 % of his salary. If his saving was Rs. 1500/- find Mr. Mehta's salary. 08
- Calculate present value of an Annuity of Rs, 5000 for 6 years at 9 % pa.
- (2-d) In 7 days, 9 workers make 21 toys. In 4 days, how many toys will 6 workers make? 07

- Q.3 (3-a) i) Anand, Birju, and Chinn have their capital in the ratio 3:5:2. They make profit of Rs. 10,000/- at the end of the year, Find their profits. 08
- ii) A trader buys an article for Rs. 5,000 and sells the same for Rs. 6,000. Find his percentage profit or loss.
- (3-b) A machine was bought for Rs. 2,00,000/-. Calculate its depreciated value after 10 years at 10 % pa depreciation. 07

**OR**

- Q.3 (3-c) Mr. Raja' has taken a loan of Rs. 80,000 to be repaid in 3 months. If the interest rate is 12% pa, find the EMI using reducing balance method. 08  
 Calculate effective interest rate equivalent to nominal interest rate 12% pa compounded half yearly.
- (3-d) Find NPV of the following project, given the cost of capital is 10 % pa. 07

Year	0	1	2	3
Cash flow (in Rs)	-10000	5000	4000	5000

- Q.4 (4-a) i) Calculate amount payable for an investment of Rs. 20,000/- for 8 years at 8 % compound interest. 08  
 ii) The face value of a company's share is Rs. 10. The company declare 20% dividend. If Mr. Desai holds 300 share of this company, how much dividend he receives?
- (4-b) Mr. Basu bought 50 shares at MV of Rs. 56. He receives 10% dividend. He sells all shares when MV was Rs. 66. Find the gain in rupees and in %. 07

**OR**

- Q.4 (4-c) Mr. Patel invested Rs. 50,000 in "1CICI-Prudential Top 100 fund" when its NAV was Rs. 138.850, 1CICI Prudential declared dividend of Rs. 1.5 per unit in this scheme. If Mr. Patel redeemed all the units when its NAV was Rs. 152.354 after receiving the dividend, calculate his gain/loss in %. 08
- (4-d) At what compound interest rate will Rs. 33,000 amount to Rs. 48,315.50 in 4 years? 07

- Q.5 (5-a) Explain Ratio, Continued ratio and continued proportion. 08  
 (5-b) Explain differences between bonus shares and splitting of shares with suitable examples. 07

**OR**

- Q.5 Write **any three** short notes. 15
- (5-a) Dividend reinvestment plan.
- (5-b) Net present value of a project.
- (5-c) EMI.
- (5-d) Stated and Effective interest rates. Entry and Exit load in mutual funds.