VCD:_____ **FYFMG SEM: I BUSINESS MATHEMATICS** 2.30 HOURS MARKS:75
All questions are compulsory
All questions carry equal marks.
Figures to right indicate full marks.

Q.I **A)** **Fill in blanks choosing the correct alternative: (Any eight)** (8)

1) Nitin sold a LCD T.V for Rs.24000 and got 5%commission on it. If his salary was Rs.15000 p.m., the total payment he received in the month is_____
   a) Rs.16000 b) Rs 1740
   c) Rs.16200 d) Rs.15800

2) Two numbers are in the ratio 3:4. If 6 is added to each term of the ratio, the new ratio is 4:5 so the given numbers are _____
   a) 9,12 b) 18,24
   c) 15,20 d) 16, 13

3) If the cost price exceeds the net selling price, then there is_____
   a) Profit b) Loss
   c) No profit no loss d) Invoice price

4) A fee levied on an investor at the time of purchasing units is called _____
   a) Entry load b) Exit load
   c) No load d) Closed end load.

5) A share of face value Rs. 100 has a market price of Rs.10 below par means its market price is
   a) Rs. 90 b) Rs.110
   c) Rs.95 d) Rs.85

6) If the face value of a share is less than its market value, then the share is said to be ___
   a) at a premium b) at par
   c) below par d) none of these

7) The sub-triplicate ratio of 1:27 is_____
   a) 1:3 b) 1:9
   c) 1:81 d) 1:27

8) A sinking fund is an example of_____
   a) EMI b) Annuity
   c) Simple interest d) None of these.

9) Nominal interest rate and effective interest are same for _____
   a) No compounding b) Quarterly compounding
   c) Half yearly compounding d) None of these.

10) If the cost price exceeds the net selling price, then there is_____
    a) Profit b) Loss
    c) No profit no loss d) Invoice price

B) **State True or False: (Any seven)** (7)
1. The invoice price minus the cash discount is called the list price.
2. Profit % is calculated as % of Net Selling Price.
3. Trade discount is calculated as % on the Cost price.
4. Simple interest for an investment of Rs. 10000 at 9% p.a for one year is Rs. 900.
5. The inverse ratio of 2:3 is 3:2.
6. A mutual fund can never make a loss.
7. Trade discount is calculated as % on the cost price.
8. The legal organization that manages the operations of a mutual fund is SEBI.
9. EMI consists of two parts interest part and principal part.
10. If a share is available at discount, then its face value is more than its current market value

Q.2] Solve the following

A) Amar, Akbar and Anthony are partners in a business. Amar and Akbar's capital are in the ratio 5:4 and Akbar and Anthony are in the ratio 3:1. At the end of the year the profit is 62000. How much should be distributed among the three partners? (8)

B) A article was sold for Rs.2975 and 15% loss was earned on it. Find the price at which it was bought (7)

OR

C) Monthly income of A and B are in the ratio 7:4 and the expenditure are in the ration 9:5. Each of the them saves Rs 5000. Find their income. (8)

D) A person sold two watches at Rs 240 each and this made 20% gain on first watch and 20% loss on second watch. Find his % gain or loss on both watches purchased together. (7)

Q.3]Solve the following

A) The simple and compound interest for 2years on same principal and same rate of interest are Rs.7200 and Rs. 7632. Find principal amount and rate of interest. (8)

B) Sahel invested Rs. 10,000 at the end of every year in a bank of offering compound interest at 8% p.a. What will be the accumulated sum after 5 years? (7)

OR (8)

C) Find the amount at the end of the year of an annuity of Rs. 4000 payable at each quarter with rate 12% p.a

D) Find the total amount with interest if a sum of Rs. 8000 is kept in a bank for 3 years with 12% p.a compounded it half yearly (7)

Q.4] Solve the following

A) Mr. Karan invested Rs.33,000 in shares of face value Rs.100 at a market value of Rs.550 each. (8) Six months later the company declared 3 bonus shares for every 5 existing shares. She sold all the shares at market value of Rs.450. Find percentage gain / loss. **(8)**

B) Mr Sharma invested Rs 12000 in a mutual fund at a NAV of Rs 13.2 and entry load of 1.5%. If the fund declared the dividend of 30% on face value Rs 10. Find the dividend received by him

OR

C) Hardik invested Rs 27,216 to buy equity shares of a company at a market price of Rs 180 per share at 0.8% brokerage. Find the number of shares he purchased. (8)

D) Calculate the NAV for the following.
No of units =10,000
Market value of investment in government securities = Rs.1, 12,512 (7)
Market value of investment in corporate bond = Rs. 1, 15,000.
Other assets of fund = 25,000
Other liabilities of fund = 37,000
Payable of fund = 7500

Q.5A) Explain different types of Shares. (7)
B) Explain briefly simple interest and compound interest. (8)

OR

C) Write short notes on : (Any three)   (15)
1. Loads on mutual funds.
2. Equated monthly installment(EMI)
3. Types of Ratio and Proportion.
4. Commission agent, a del credere agent and an auctioneer.
5. Discount ,trade discount and cash discount

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