MALINI KISHOR SANGHVI COLLEGE OF COMMERCE & ECONOMICS
SUBJECT: BUSINESS MATHEMATIS

CLASS: F.Y.B.A.F.	SEM-II	SEAT NO.
Name:		

Note: (i) All Questions are compulsory with internal choice.
  (ii) Simple Calculator is allowed.
  (iii) Graph papers will be provided on request.

Q.1

[A] Fill in the blanks. **(Any 8 out of 10)** [8]

i. At the time of purchasing the shares, brokerage is ………….to the M.P. to calculate the net P.P.
   (added, subtracted, multiplied)

ii. If the M.V. of a share is equal to its F.V. then the share is said to be……….
   (at a premium, at par, at a discount)

iii. The charge to an investor at the time of he redeems his units from fund is known as……..
   (Recovery charge, Redemption charge, Exit load)

iv. At the time of selling shares, brokerage is ………….. to the M.P. to calculate the net S.P.
   (added, subtracted, multiplied)

v. Purchase Price of NAV is obtained by adding ………… to the NAV.
   (entry load, exit load, dividend)

vi. Dividend paid for a share by the company is based on its-----.
   (F.V., M.V., share holders discretion)

vii. The simple interest on Rs. 6000 for 4 years @5% p.a. is…….
   (400,1200, 850)

viii. Rs. 8000 will amount to Rs.8840 at 3.5% p.a. simple interest in …………..years.
   (2, 3, 4)

ix. The inverse ratio of a:b is……….
   (b:a, a/b :b/a, 1/a : 1/b)

x. Three number a,b,c are said to be in continued proportion if………
   (a/c=b/c, a/b :c/a, a/b=b/c)

[B] State True or False. **(Any 7 out of 10)** [7]

i. NAV is calculated as difference between total assets and liabilities of the scheme.

ii. The charge to an investor at the time of the redeems his units from fund is known as Recovery charge

iii. The rate at which a share is traded in the market is called the Face value of the share

iv. If the F.V. of a share is Rs. 100 and it is traded at 14 % premium then ite M.V. is Rs. 96.

v. If the F.V. of a share is Rs. 100 and it is traded at 12 % discount then its M.V. is Rs. 112.

vi. If there is no trade discount then list price is same Invoice price.

vii. If there is no trade and cash discount both then the List price is same as N.S.P.

viii. Cash discount is usually calculated as a percentage on the Net selling price.

ix. For Compound Interest, the formula for Amount (A) is $A = P(1+i)^n$.

x. Present value is also known as discounted value

Q:2 Solve the following: **(ANY-ONE)** [15]

[A]

i. Mr. ABC estimates that after 3 years he would require Rs.50,00,000 for his new business. He wishes to put aside money now, invested in an instrument giving interest 7% p.a. compounded half-yearly to meet his requirement then. How much money should he invest presently?

ii. Kartik purchased a TV set and paid Rs. 5.000 immediately, anther Rs. 5000 after a year and Rs.5000 after 2 years and thus became debt free. Find the price of TV set if compound interest charged was 3.5%.

<div align="center">OR</div>

[B]

i. The compound interest and the simple interest on a sum of money at a certain rate for 2 years is Rs.3000 and Rs.3090 respectively. Find sum and the rate.

ii. A company decide to set aside a certain sum at the end of each year to create a sinking fund, which should amount to Rs.5 lakhs in 4 years at 12% p.a. Find the amount to be kept aside each year.

Q:3 Solve the following: (ANYONE)   [15]

[A]

i. Ramu Industries has issued 60,000 shares of par values Rs.10 each. The company declared a total dividend of Rs.72000. Find the rate of dividend paid by the company.

ii. Mr.IJK invested Rs. 94070 in a mutual fund. When NAV was Rs. 460 with the entry load of 2.25%. He received a dividend at Rs. 5 per unit. He later sold all the units of the fund when NAV was Rs. 476 with exit load of 0.5%. What is the percentage gain?

<div align="center">OR</div>

[B]

i. Mr. XYZ invested in a stock having face value Rs.100. He received net dividend of Rs. 54 at the rate 4.5%. His total investment in the shares is Rs. 1284. The rate of brokerage is 1%. Find the market value of the shares?

ii. If NAV was Rs. 72/- at the end of the year, with 12.5 % increase during the year, find NAV at the beginning of the year.

Q:4   Solve the following: (ANY-ONE)   [15]

[A]

i. Divide a profit of Rs.25.828 between 2 partners in the ratio 4.7

ii. By selling an article at Rs.3,000, a person earned 20% profit. What would have been the percentage profit or loss, if he had sold it at Rs.2,750?

<div align="center">OR</div>

[B]

i. If 40% of a number is equal to 2/3rd of another number, what is the ratio of 1st number to the 2nd number?

ii. If A takes 5 days to complete a task when he works for 8 hrs a day, how many days he will take to complete the task if he works 5 hrs a day?

Q:5 Solve the following: (ANY-ONE)   [15]

[A]

i. If A takes 5 days to complete a task when he works for 8 hrs a day, how many days he will take to complete the task if he works 5 hrs a day?

ii. By selling an article at Rs.3,000, a person earned 20% profit. What would have been the percentage profit or loss, if he had sold it at Rs.2,750?

<div align="center">OR</div>

[B] Write short notes. (ANY THREE)

i. Flat rate of interest and reducing balance interest

ii. Types of annuity.

iii. Entry load and exit load

iv. Types of share

v. Dividend and bonus share