

FYBAF sem II Reg. Exam April- 2023

MALINI KISHOR SANGHVI COLLEGE OF COMMERCE & ECONOMICS

SUBJECT: BUSINESS MATHEMATIS

CLASS: F.Y.B.A.F.

SEM-II

SEAT NO.

Name:

15/4/23

- 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]

-is always declared on the F.V. of a share irrespective of its M.V.
(bonus share, dividend, brokerage)
- 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)
- The charge to an investor at the time of he redeems his units from fund is known as.....
(Recovery charge, Redemption charge, Exit load)
- At the time of selling shares, brokerage is to the M.P. to calculate the net S.P.
(added, subtracted, multiplied)
- Purchase Price of NAV is obtained by adding to the NAV.
(entry load, exit load, dividend)
- Brokerage paid for a transaction of shares is based on its ---
(F.V., M.V., share holders discretion)
- Given $P=3000, n=4$ years, $SI = Rs.720$ then the rate of simple interest will be.....
(4%, 5%, 6%)
- The compound interest on Rs. 2000 for 2 years at the rate of 5% p.a. compounded annually is Rs....
(200, 202, 205)
- The inverse ratio of a:b is.....
(b:a, a/b :b/a, 1/a : 1/b)
- 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]

- SIP means super investment plan.
- The value of a share printed on the certificate of the share is called its market value.
- The rate at which a share is traded in the market is called the face value of the share.
- A Mutual Fund is a pool of losses.
- Future value is also known as accumulated value.
- In EMI calculation, the rate of interest is compounded yearly.
- For Compound Interest, the formula for Amount (A) is $A = P(1+n)^i$
- Profit is usually considered as a percentage on the cost price and loss is usually considered as a percentage on the list price.
- A person who brings together a prospective buyer and seller and negotiates a settlement for a remuneration is called as Auctioneer.
- The invoice price minus cash discount is Net selling price price.

Q:2 Solve the following: (ANY-ONE)

[15]

[A]

- 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, another 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%.

OR

[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 decides 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 value Rs. 10 each. The company declared a total dividend of Rs. 72,000. Find the rate of dividend paid by the company.
- ii. Mr. IJK invested Rs. 94,070 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?

OR

[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. A, B and C started business with total capital of Rs. 1,00,000. At the end of the year, the profits received by A, B and C were Rs. 2,000, Rs. 3,000 & Rs. 5,000 respectively. Find the amount of capital invested by B.
- 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?

OR

[B]

- i. The marks of Babita and Bharat are in the ratio 7:3. The difference between their marks is 56. What are their marks?
- 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. An agent charged 8% commission on sales and thus earned Rs. 3,708. Find the original selling price.
- ii. A salesperson is allowed 9% commission on total sales plus a bonus at 1.5% on the sales exceeding Rs. 20,000. If he earned Rs. 4,104 on commission alone, find his total earnings.

OR

[B] Write short notes. (ANY THREE)

- i. Future value and present value of annuity
- ii. Time value of money
- iii. Shares and mutual fund
- iv. Sinking fund
- v. Market value and face value of a share