Programme: F.Y.B.COM. (Sem-I)

- 1. How many shares of face value 120 can be purchased in 2,35,000 if brokerage being paid @ 0.2 %?
- 2. If the market price of a share with face value ₹ 100 is ₹ 150,, how many shares of the company can be bought for ₹ 48000, (i) if brokerage 2.5% (ii) if there is no brokerage
- How many shares of company X could vibha buy, from ₹ 48192, if the market value of each share was ₹ 150 and the brokerage was 0.4%.
- 4. How many share of market value 350 each, can be purchased for 214200, brokerage being 0.2%?
- 5. Ms. Anamika sold her shares of SCI, whose market value was ₹ 200 per share and received the amount ₹ 59850. If her broker charged 0.25% brokerage, find the number of shares sold by her.
- 6. If Mr. Ajay invest 50000 to buy the share of face value 120 then how many shares he can buy if brokerage being 1.5%?
- 7. Ms. Manisha Rai had 700 preference share and 500 ordinary shares of ₹ 20 each. The company declared a 1.82% annual dividend on the preference share and 20% annual dividend on the ordinary shares. What was the total annual dividend received by Ms.Rai?
- 8. Ms. Mahek Rajput had 600 preference share and 400 ordinary shares of Rs. 10 each. The company declared a 1.12% annual dividend on the preference share and 10% annual dividend on the ordinary shares. What was the total annual dividend received by Rajput?
- 9. Mr. Mehta invested Rs. 30,000 /- in ₹ 100/- shares of company A at the rate of ₹ 125/- per share. He received 10 % dividend on these shares. Mr. Mehta also invested ₹ 25,000/- in ₹ 10/- shares of company B at ₹ 12/- per share and he received 15 % dividend. Which investment is more beneficial?
- 10. Mr. Suresh bought one share of face value ₹100 for ₹2000. If the company declared the dividend of 300%. Then what will be (i) his dividend and (ii) his rate of return?
- 11. If Mrs. Sunaina sold 300 shares at market value of ₹ 120/-, with the brokerage of 0.25% then find the sum received by her in this transaction?
- 12. Ms. Sonali purchased Siemens shares at the market value of ₹ 650 per shares from integrated enterprises. If the brokerage charged by integrated enterprises to her was 0.4 % on purchase, then find the amount paid in this transaction.
- Ms. Priya purchased 380 shares of market price ₹ 290 per share and afterwards sold them with market price of ₹ 450 per share, she had to pay 1.5% brokerage for both deals. Find
 (i) The purchase amount (ii) The sales amount and (iii) profit she gained.
- A sum of ₹ 70000 was invested in a stock at ₹ 70, the stock was sold at ₹ 85. The brokerage was 0.3% for purchase and 0.4% for the sale. Find (i) The number of stock purchased
 - (ii) The sales amount and (iii) profit gained.

- **15.** Lily purchased 560 shares of market price 380 per share and afterwards sold them with market price of 450 per share, she had to pay 0.5% brokerage for both deals. Find the purchase and sales amount and also profit she gained.
- 16. James purchase 640 shares at a market price of 320 each and sold them afterwards at a price of 380 per share. He was charged brokerage a 0.5% for both deals. Find the purchase and sales amount and also the profit the gain.
- Mr. Chanchal invested 90000 in purchasing of Kotak Comp. shares of face value Rs. 15 at 350 each.
 The brokerage was 3.8% find, (i) the number of shares purchased (ii) total brokerage paid by him.
- 18. Mr. Raj invested ₹ 20000 in a mutual fund when the NAV was 130 find the number of units received by him if (i) entry load was 3% and (ii) no entry load.
- 19. Mr. Sameer invested ₹5000 in MF with NAV ₹ 19.65. Find the number of units acquired by him if (i) entry load is 2.12% (ii) if there is no entry load.
- 20. Karan sold his MF units at NAV ₹ 180 with exist load 1.2%. If he received ₹ 55000, find the number of units sold? Also find how many he will received if there is no exist load.
- Ms. Sneha purchased 832.347 units of a MF on 15th May 2022 with NAV of ₹ 30.65. Its NAV on 20th December 2020 was ₹ 34.73. The fund had no entry and exit load, find the amount invested by her on 15th May and 20th December 2022.
- 22. 40 units of MF were bought when the NAV was ₹ 60. These were sold at NAV ₹80. If the entry and exit load was 1.2 % and 1% respectively, find the amount invested and received on sales of all units.
- 23. Narendra Purchased 200 units of SBI M.F. on 2nd May 2012, when N.A.V. of ₹ 45. His NAV on 30th Dec. 2012 was ₹ 50 and he sold all the units. The fund had 2% entry load and 2.5% exit load. Find amount invested and his net profit.
- 24. Mr. Bajaj invested ₹ 70000 on 10th February 2008 in mutual fund when NAV was ₹ 19.80 an entry load of 2.25%. Calculate the value of his investment on the date of his purchase and the number of unit. Also find its value on 20th October 2008 when NAV was ₹ 32.8.
- 25. An investor joined the S.I.P. scheme for a mutual fund, under which he would invest ₹ 5000 for 5 months. If the NAV's for each months are ₹ 65, ₹ 48.34, ₹ 55.14 and ₹ 50 respectively, find (i) The average unit coast occurred to him using the Rupee Coast Averaging Method.

(ii) If he has sold all the units of MF after 5 months at NAV ₹ 58 then find the gain or loss in this transaction.

- An investor joined the S.I.P. scheme for a mutual fund, under which he would invest ₹ 6000 for 4 months. If the NAV's for each months are ₹ 55, ₹ 78.24, ₹ 75 and ₹ 40 respectively, find
 - (i) The average unit coast occurred to him using the Rupee Coast Averaging Method.
 - (ii) If he has sold all the units of MF after 5 months at NAV \gtrless 79 then find the gain or loss in this transaction.

27. Mr. Rustam invested ₹ 6000 per month in an S.I.P. for four months when the NAV's were ₹ 23.48,
₹ 16.90, ₹ 17, and ₹ 19.67 respectively.

(i) Find the average unit coast occurred to him using the Rupee Coast Averaging Method.

(ii) If he has sold all the units of MF after 5 months at NAV \gtrless 79 then find the gain or loss in this transaction.

- 28. Mr. Desai invested ₹ 5000/- on 1st of every month for 5 months in a SIP of a M.F. with NAV's as ₹ 48.15, ₹ 52.83, ₹ 41.28, ₹ 35.44 & ₹ 32.65 respectively .There was no entry load charged. Find the average price, Mr. Desai paid using the Rupee-cost-Averaging method. After 5 months, he sold all his units, when NAV was Rs. 51.64 with contingent deferred sales charge (CDSC) as 2.25 %. Find his net gain.
- **29.** Write a short note on decision theory.
- **30.** Write a short note on decision tree.
- **31.** Write short notes on (a) Maximax criterion (b) Minimax Criterion
- **32.** Explain decision taken under Certainty and uncertainty.
- **33.** Given the following pay off table , find the optimal decision using

(i)Maximax Criterion

(ii) Maximin Criterion (iii) laplace Criterion

Acts	State of Nature				
	S ₁	S 2	S 3		
A ₁	29	40	11		
A ₂	35	45	20		
A3	40	50	30		

34. Given the following pay off table , find the optimal decision using

(i)Minimin Criterion	(ii) Maximin Criterion		(iii) laplace Criterion	
Acts	State of Nature			
AUS	S ₁	S ₂	S ₃	
Р	35	55	0	
Q	12	53	100	
R	45	75	30	

35. For the following pay-off table, find the best decision using EMV Criterion.

Acts	State of Nature				
Acts	S ₁	S ₂	S ₃		
Р	10	20	50		
Q	40	20	15		
Probability	0.2	0.3	0.5		

36. For the following pay-off table, find the best decision using EMV Criterion.

Acts	State of Nature			
ACIS	S ₁	S ₂	S 3	
Α	5	12	8	
В	10	7	22	
Probability	0.2	0.3	0.5	

 Find the optimal solution for the given pay-off table by using Expected Opportunity Loss Criterion.

Acts	State of Nature			
	S 1	S ₂	S 3	
Α	10	8	12	
В	13	16	15	
Probability	0.3	0.2	0.5	

38. For the following pay-off table, find the best decision using EOL Criterion.

Acts	S 1	S ₂	S3
Р	40	10	30
Q	50	60	30
Probability	0.1	0.4	0.5

39. A company is evaluating 2 alternatives on investments whose return are based on the state of economy.

Alternative	Fair	Good	Great
Р	10	30	60
Q	50	45	60
Probability	0.2	0.3	0.5

Draw a decision a tree and determine the expected return for each alternative. Give your decision using EMV.

40. Draw a decision a tree and give your best decision using EMV.

Acts	E ₁	E ₂	E ₃
Α	12	20	30
В	10	15	8
Probability	0.2	0.3	0.5