

Sanskardham Kelavani mandal's Jashbhai Maganbhai patel College of Commerce

## F.Y.B.Com. (SEM-I)

## <u>Course: Mathematical And Statistical Techniques-I</u> <u>Topic: Unit-I: Shares & Mutual Fund</u>

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Q. 1 Naveen owned 120 shares at market value of Rs. 375 each and brokerage 0.4%. Calculate the sum he paid for the transaction

Since market value (M.P.) of share = Rs. 375 Brokerage rate = 0.4% /total number of share owned = 120

Amount paid to buy 120 share = 375\*120 = 45000

Total brokerage paid to buy 120 share= 45000\*0.4% = 180

Therefor the total sum he paid for this transaction = Amt. paid to buy 120 shares + total Brokerage paid for 120 shares

= 45000+180

= 45180



Q.2 If Shikha sold 200 shares at market value of Rs. 40/-, with the brokerage of 0.3% then find the sum received by shikha in this transaction?

M.P. of each share = 40 Brokerage rate = 0.3% Total no. of shares sold= 200

The due to shikha= 40\*200 = 8000 Brokerage paid to 200 share= 8000\*0.3% = 24

Therefore the net amount shikha received in this transaction =8000-24 = 7976



Q.3 How many share of market value 120 each, can be purchased for 60180, brokerage being 0.3%?

M.P. of one share = 120 Brokerage rate = 0.3%

Therefore Brokerage paid on each share= 120\*0.3% = 0.36

Cost price of each share = 120+ 0.36 = 120.36

No. of share purchased in 60180 = total amount / cost of each share = 60180 / 120.36 = 500



Q. 4 How many shares of market value Rs. 900 were sold for the amount 268650, the brokerage being 0.5%?

M.P. of each share = 900 Brokerage rate = 0.5% Total amount received = 268650

Brokerage paid on one share = 900\*0.5% = 4.5

S.P. of one share= 900-4.5 = 895.5

Total number of share sold in 26865 = total amount received / S.P. of each share = 268650/ 895.5 = 30



Q.5 if the market price of a share with face value 100 is Rs. 130, how many shares of the company can be bought for Rs. 3236, brokerage being 0.4%?

M.P. of one share= 130 Brokerage rate = 0.4% Total Amt. invested = 3236

Price of one share = M.P. Of one share+ brokerage paid on one share

= 130 + (130\*0.4%) = 130+ 0.52 = 130.52

Total number of share bought in Rs. 3236 = Total Amount / Price of one share

= 3236 / 130.52 = 25



Q.6 A Company paid 97890 to Motilal Oswal for buying the shares of Tech Mahindra at market value of Rs. 650/-. If the brokerage charged by Motilal Oswal was 0.4 %, find the number of share purchased by the company.

M.P of one share of Tech Mahindra= 650Brokerage on share= @ 0.4%Total amount paid to Motilal Oswal = 97890

Amount paid to buy one share of Tech Mahindra by the company to Motilal Oswal = 650 + (650\*0.4%)= 650 + 2.6= 652.6

Total number of share purchased by the company = 97890 / 652.6 = 150



Q.7 Anita sold her shares of SCI, whose market value was 200 per share and received the amount 59850. if her brokerage Parag Parikh charged 0.25% brokerage, find the number of shares sold by her?

Market value of each share = 200 Brokerage on share =@ 0.25% Total amount received by Anita = 59850

S.P of one share = Market value of one share – Brokerage paid on one share

= 200 - (200\*0.25%) = 200 - 50 = 199.5

Number of shares sold by Anita = Total amount received / price received on one share

= 59850 / 199.5 = 300



Total Dividend = (Rate of Dividend \* Face Value of all shares) / 100

Rate of Dividend = (Total Dividend / Face value of all share) \* 100

Rate of return on Investment = (Total Income / Total Investment) \* 100

Rate of return on Investment = (Income per share / Investment per share) \* 100



Q.8 Pratik owned 300 shares of a company with face value of Rs. 10 each. Find his annual dividend if the company declare 12% dividend.

Dividend rate =12% Face Value = 10 No. of shares 300

Dividend received on one share = Rate of dividend \* F.V. of one share = 12% \* 10

= 1.2

Total dividend received on 300 shares = Dividend received on one share \* no. of share

= 1.2 \*300 = 360

## OR

Total dividend received on 300 shares = Rate of dividend \* F.V. \* No. of share = 12% \* 10 \* 300 = 360



Q.9 Reena invested in shares of a certain company of nominal value Rs. 10. the company declared 7% dividend and she received a total dividend of Rs. 52.50. Find the number of shares she bought?

Nominal Value / F.V. = 10 Rate of Dividend = 7% Total Dividend received = 52.50

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Dividend received on one share = 7% of F.V.
= 7% * 10
= 0.7
Total dividend received = total no. of share * dividend on one share
52.50 = total no. of shares * 0.7
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Total no. of share = 75



Total Dividend received = Rate of dividend \* F.V \* No. of shares 52.50 = 7% \* 10 \* No. of shares 52.50 / (7% of 10) = No. of shares No. of shares = 75



Q.10 Riya wants to invest some amount in a company A or company B by purchasing equity shares of face value Rs. 20 each, with market price of Rs. 220 and Rs. 190 respectively. The companies are expected to declare dividends at 25% and 15% respectively. In which company it is profitable to invest her money?

For Company A F.V. = 20 M.V. = 220 Dividend rate= 25%

Dividend received on one share = 25% of 20 = 5

For Company B F.V. = 20 M.V. = 190 Dividend rate= 15%

Dividend received on one share = 15% of 20 = 3



Find how many shares of market value of Rs. 50 with face value of Rs. 10 can be purchased for Rs. 10,000, If 0.2 % Brokerage will pay?

Mr. Sandeep received Rs. 4,30,272 /- after selling shares of a company at market price of Rs. 720 /- through Sharekhan Ltd., with brokerage 0.4%. Find the number of shares he sold

How many share of face value ₹ 210 can be purchased in ₹ 3,50,000 if

(i) Brokerage being paid @ 2.1% (ii) No brokerage paid

Ms. Preet Singh purchased 360 shares of market price ₹ 280 per share and afterwards sold them with market price of ₹ 750 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.



Ms. Priya purchased 380 shares of market price  $\gtrless$  290 per share and afterwards sold them with market price of  $\gtrless$  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.

No. of share = 380M.P. = 290S.P. = 450Rate of Brokerage = 1.5%Amount paid to buy 1 share = 290 + 1.5% of 290 = 290 + 4.35 = 294.35The purchase amount =  $380 \ge 294.35 = 111853$ Amount Received after selling 1 share = 450 - 1.5% of 450 = 450 - 6.75 = 443.25The sales amount =  $380 \times 443.25 = 168435$ Profit = Sales amount - Purchased Amount = 168435 - 111853 =**56582** Ms. Aayesha Ansari- Asst. Prof.-JMPC 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.

No. of share = 560 M.P. = 380 S.P. 450 Rate of Brokerage = 0.5% Purchased Amount = ( 380 + 0.5% of 380 ) x 560 = 213864 Sales Amount = (450 - 0.5% of 450 ) x 560 = 250740 Profit = Sales Amount - Purchased Amount = 250740 - 213864 = 36876