PRACTICE PAPER

ICSE CLASS 10 – MATHEMATICS

Chapter 3 : Shares and Dividend

(Commercial Mathematics)

Maximum Marks: 40 ***Time allowed: One and a half hours***

1. *Answers to this Paper must be written on the paper provided separately.*
2. *You will not be allowed to write during the first 10 minutes. This time is to be spent in reading the question paper.*
3. ***The time given at the head of this Paper is the time allowed for writing the answers.***
4. *Attempt* ***all*** *questions from* ***Section A*** *and* ***any two*** *questions from* ***Section B****.*
5. ***All working, including rough work, must be clearly shown, and must be done on the same sheet as the rest of the answer.***
6. ***Omission of essential working will result in loss of marks.***
7. *The intended marks for questions or parts of questions are given in brackets [ ].*
8. *Unless stated otherwise, all amounts are in rupees (₹), the dividend is calculated on the nominal value of a share, and income tax is to be ignored.*

SECTION A (20 Marks)

*(Attempt **all** questions from this Section.)*

Question 1

Choose the correct answers to the questions from the given options. [8]

(Do not copy the question, write the correct answers only.)

(i) The market value of a ₹ 80 share quoted at a premium of 25% is:

(a) ₹ 105
(b) ₹ 100
(c) ₹ 60
(d) ₹ 88

(ii) The number of ₹ 50 shares that can be bought for ₹ 21,600 when each share is quoted at ₹ 60 is:

(a) 360
(b) 432
(c) 400
(d) 300

(iii) A man holds 200 shares of nominal value ₹ 25 each. If the company declares a dividend of 12%, his dividend is:

(a) ₹ 3,000
(b) ₹ 300
(c) ₹ 600
(d) ₹ 6,000

(iv) **Assertion (A):** A man buys ₹ 100 shares at ₹ 125 each. If the company pays a dividend of 10%, his return on the investment is 10%.

Reason (R): Dividend is always calculated on the nominal value of a share.

(a) (A) is true and (R) is false.
(b) (A) is false and (R) is true.
(c) Both (A) and (R) are true, and (R) is the correct explanation for (A).
(d) Both (A) and (R) are true, but (R) is not the correct explanation for (A).

(v) The percentage return on investing in ₹ 50 shares paying 18% dividend and quoted at ₹ 60 is:

(a) 18%
(b) 12%
(c) 9%
(d) 15%

(vi) Mr. Khan receives an annual dividend of ₹ 1,260 from 9% ₹ 100 shares. The number of shares he holds is:

(a) 1,400
(b) 126
(c) 140
(d) 14

(vii) A ₹ 10 share quoted at ₹ 8.50 is said to be:

(a) at par
(b) at a premium of ₹ 8.50
(c) at a premium of ₹ 1.50
(d) at a discount of ₹ 1.50

(viii) **Assertion (A):** A dividend of 8% on a ₹ 50 share is ₹ 4 per share.

Reason (R): The market value of a share changes with time, whereas its nominal value does not.

(a) (A) is true and (R) is false.
(b) (A) is false and (R) is true.
(c) Both (A) and (R) are true, and (R) is the correct explanation for (A).
(d) Both (A) and (R) are true, but (R) is not the correct explanation for (A).

Question 2

(i) Mr. Nair invests ₹ 33,000 in ₹ 100 shares quoted at ₹ 110 and paying a dividend of 11%. Find: [4]

(a) the number of shares he buys.
(b) his annual income from the dividend.
(c) his percentage return on the investment.

(ii) A man buys 600 shares of nominal value ₹ 20 each at a premium of 25%. The company pays a dividend of 10%. Find: [4]

(a) the market value of one share and the total money he invests.
(b) his annual dividend.
(c) his percentage return on the investment.

(iii) Mrs. Dutta wants an annual income of ₹ 6,000 from 12% ₹ 50 shares which are quoted at a discount of 20%. Find: [4]

(a) the dividend on one share.
(b) the number of shares she must buy.
(c) the sum she must invest.
(d) her percentage return on the investment.

SECTION B (20 Marks)

*(Attempt **any two** questions from this Section.)*

Question 3

(i) A company pays a dividend of 15% on its ₹ 60 shares. At what price must a man buy a share so that his return on the investment is 10%? State whether the share is bought at a premium or at a discount, and by how much. [3]

(ii) A man buys ₹ 100 shares at a premium of ₹ 25 and gets a return of 12% on his investment. Find the rate of dividend paid by the company. Hence, find his annual income if he holds 200 such shares. [3]

(iii) A company declares a dividend of 12% on its ₹ 25 shares. Rajesh buys some of these shares at ₹ 30 each and receives a dividend of ₹ 1,800. Find: [4]

- (a) the dividend on one share.
- (b) the number of shares he buys.
- (c) the sum he invests.
- (d) his percentage return on the investment.

Question 4

(i) Which is the better investment: 9% ₹ 50 shares quoted at ₹ 60 or 12% ₹ 100 shares quoted at ₹ 125? If a man invests ₹ 30,000 in each, find the difference in his annual incomes. [3]

(ii) A man owns 2,500 shares of nominal value ₹ 10 each in a company paying a dividend of 14%, from which income tax is deducted at 15%. Find: [3]

- (a) his net annual income after paying the income tax.
- (b) his net percentage return, if he had bought the shares at ₹ 14 each.

(iii) Amit and Bimal invest ₹ 30,000 each. Amit buys 8% ₹ 100 shares at a premium of 20%. Bimal buys ₹ 20 shares quoted at ₹ 30. If both receive equal dividends at the end of the year, find: [4]

- (a) the dividend received by Amit.
- (b) the number of shares bought by Bimal.
- (c) the rate of dividend on Bimal's shares.

Question 5

(i) Mr. Rao holds 200 shares of nominal value ₹ 100, each paying a dividend of 6%. He sells all of them at ₹ 120 each and invests the entire proceeds in 9% ₹ 50 shares quoted at ₹ 60. Find: [3]

- (a) his annual dividend from the first investment.
- (b) the number of new shares he buys.
- (c) the change in his annual income.

(ii) A man buys 500 shares of nominal value ₹ 20 each at ₹ 25. The company pays a dividend of 10% for the year, after which he sells all the shares at ₹ 28 each. Find his total gain (dividend and profit on selling) as a percentage of the amount invested. [3]

(iii) Mr. Iyer invests ₹ 36,000 in 5% ₹ 100 shares at ₹ 120. After a year he sells these shares at ₹ 135 each and invests the proceeds, including the dividend received, in 8% ₹ 50 shares quoted at ₹ 56. Find: [4]

(a) the dividend he receives in the first year.
(b) the total amount he has for the second investment.
(c) the number of ₹ 50 shares he buys.
(d) the change in his annual income.

Question 6

(i) Divide ₹ 42,000 into two parts such that one part, invested in 8% ₹ 100 shares at ₹ 80, and the other part, invested in 9% ₹ 100 shares at ₹ 120, give equal annual incomes. [3]

(ii) A man invests equal sums of money in two companies. Company A pays 10% dividend on its ₹ 100 shares, which are available at a premium of 25%. Company B pays 12% dividend on its ₹ 100 shares, which are available at a discount of 20%. If his total annual income from both the investments is ₹ 4,600, find how much he has invested in all. [3]

(iii) Mr. Das has 800 shares of nominal value ₹ 50 each, paying a dividend of 10%. He sells some of these shares at a premium of 20% and invests the proceeds in ₹ 25 shares quoted at ₹ 30 and paying a dividend of 14%. If his annual income increases by ₹ 480, find: [4]

(a) the number of shares he sells.
(b) his annual income after the change.

— End of Question Paper —