PRACTICE PAPER

ICSE CLASS 10 – MATHEMATICS

Chapter 1 : Value Added Tax

(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, tax means Sales Tax / Value Added Tax (VAT), and all prices are in rupees (₹).*

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) A dealer buys an article for ₹ 2,000 and sells it for ₹ 2,600, both prices being exclusive of tax. If the rate of tax is 12%, the VAT payable by the dealer is:

(a) ₹ 72
(b) ₹ 312
(c) ₹ 240
(d) ₹ 120

(ii) A customer pays ₹ 5,400 for an article including sales tax at 8%. The price of the article before tax is:

(a) ₹ 4,968
(b) ₹ 5,000
(c) ₹ 5,400
(d) ₹ 5,832

(iii) A trader paid a tax of ₹ 360 at 6% on the purchase of an article. He sold the article for ₹ 8,000 (excluding tax) and charged tax at 6%. The VAT paid by him is:

(a) ₹ 480
(b) ₹ 360
(c) ₹ 120
(d) ₹ 840

(iv) **Assertion (A):** A shopkeeper marks an article at ₹ 1,500 and allows a discount of 20%. The price on which sales tax is levied is ₹ 1,200.

Reason (R): Sales tax is always calculated on the marked price of the article, whether a discount is given or 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).

(v) A dealer pays a VAT of ₹ 90 at the rate of 12%. The value added by him is:

(a) ₹ 10,800
(b) ₹ 7,500
(c) ₹ 1,080
(d) ₹ 750

(vi) The marked price of a bag is ₹ 4,000. A shop allows a discount of 10% and charges tax at 5% on the discounted price. The customer pays:

(a) ₹ 3,800
(b) ₹ 3,780
(c) ₹ 4,200
(d) ₹ 3,600

(vii) A customer pays ₹ 2,268 for an article whose price before tax is ₹ 2,100. The rate of tax is:

(a) 6%
(b) 7%
(c) 8%
(d) 9%

(viii) **Assertion (A):** A dealer buys an article for ₹ 5,000 and sells it for ₹ 5,000 (both prices exclusive of tax, same rate of tax). The VAT payable by him is zero.

Reason (R): The final consumer bears the entire tax on the full price of the article.

(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) A shopkeeper allows a discount of 20% on the marked price of a school bag and charges tax at 12% on the reduced price. Rohan pays ₹ 2,688 for the bag. Find: [4]

(a) the marked price of the bag.
(b) the amount of tax Rohan has paid.
(c) how much more Rohan would have paid had no discount been given (the rate of tax remaining the same).

(ii) The printed price of a wrist-watch is ₹ 5,000. A dealer allows a discount of 12% on it and then charges sales tax on the discounted price. A customer pays ₹ 4,664 for the watch. Find: [4]

(a) the price of the watch after discount.
(b) the amount of sales tax charged.
(c) the rate of sales tax.

(iii) A shopkeeper sells an article at its marked price of ₹ 9,600 and charges tax at 5%. The VAT paid by him to the Government is ₹ 120. Find: [4]

(a) the tax charged by the shopkeeper.
(b) the tax paid by him when he bought the article.
(c) the price at which he bought the article, excluding tax.
(d) the price he paid for the article, including tax.

SECTION B (20 Marks)

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

Question 3

(i) A shopkeeper allows a discount of 10% on the listed price of a laptop and then a further festival discount of 5% on the balance. Sales tax at 12% is charged on the final reduced price. Amit pays ₹ 38,304 for the laptop. Find: [3]

(a) the listed price of the laptop.
(b) the amount of tax paid by Amit.

(ii) A trader buys an article for ₹ 7,500 and spends 20% of this cost on transportation. He marks the article at 30% above his total cost and allows a discount of 10% on the marked price to a customer. The rate of sales tax is 8%. Find: [3]

(a) the marked price of the article.
(b) the trader's profit percent.
(c) the amount the customer pays.

(iii) The price of a refrigerator, inclusive of sales tax, is ₹ 17,600. If the rate of sales tax is increased by 4 percentage points, the customer has to pay ₹ 640 more. Find: [4]

(a) the price of the refrigerator before tax.
(b) the present rate of sales tax.
(c) the new price the customer has to pay.

Question 4

(i) A dealer purchased 50 identical articles at ₹ 480 each and paid tax at 5%. He sold 30 of these articles at ₹ 650 each and charged tax at 12%. Find the VAT paid by the dealer on these 30 articles. [3]

(ii) A dealer buys an article for ₹ 14,000 and sells it for ₹ 18,000, both prices being exclusive of tax. The rate of tax is the same on purchase and sale, and the VAT paid by him is ₹ 320. Find: [3]

(a) the rate of tax.
(b) the amount a customer pays to buy the article from the dealer.

(iii) A retailer buys a camera for ₹ 20,160 which includes tax at 12%. He sells it to a customer at a profit of 30% on his cost price (excluding tax) and charges tax at 12%. Find: [4]

(a) the cost price of the camera for the retailer, excluding tax.
(b) the selling price of the camera, excluding tax.
(c) the VAT paid by the retailer.
(d) the amount the customer pays for the camera.

Question 5

(i) A manufacturer sells an article to a wholesaler for ₹ 12,000. The wholesaler sells it to a retailer at a profit of 25%, and the retailer sells it to a consumer at a profit of 20% on his cost price. The rate of tax is 10% at every stage and all the given prices exclude tax. Find: [3]

(a) the VAT paid by the wholesaler.
(b) the VAT paid by the retailer.
(c) the amount paid by the consumer.

(ii) A manufacturer buys raw material for ₹ 4,000 and sells the finished article to a wholesaler for ₹ 7,000. The wholesaler sells it to a retailer for ₹ 9,000, and the retailer sells it to a consumer for ₹ 11,000. The rate of tax is 10% at every stage and all prices exclude tax. [3]

(a) Find the VAT paid by the manufacturer, the wholesaler and the retailer.

(b) Find the total VAT received by the Government and show that it equals the tax on the total value added, from the raw material to the consumer.

(iii) A retailer sells an article to a customer for ₹ 30,000 (excluding tax) and pays a VAT of ₹ 640. The rate of tax is 8% at every stage. The wholesaler from whom the retailer bought the article made a profit of ₹ 5,000 on it. Find: [4]

(a) the price at which the retailer bought the article, excluding tax.

(b) the VAT paid by the wholesaler.

(c) the amount the wholesaler paid to the manufacturer, including tax.

Question 6

(i) During a financial year, a dealer purchased goods worth ₹ 6,00,000 and paid a total tax of ₹ 42,000. During the same year he sold goods worth ₹ 2,40,000 at 5% tax, goods worth ₹ 3,00,000 at 12% tax and goods worth ₹ 1,20,000 which are exempt from tax. Find: [3]

(a) the rate of tax at which he purchased the goods.

(b) the total tax charged by him on his sales.

(c) his tax liability (under VAT) for the year.

(ii) The marked prices of two articles A and B together amount to ₹ 9,000. The rate of sales tax on article A is 5% and on article B is 12%. If the total sales tax collected on both the articles is ₹ 639, find the marked price of each article. [3]

(iii) The printed price of an inverter is ₹ 15,000. A shopkeeper buys it from a wholesaler at a discount of 20% and pays tax at 12.5%. He then sells it to a customer at a discount of 8% on the printed price and charges tax at 12.5%. Find: [4]

(a) the price (inclusive of tax) paid by the shopkeeper.

(b) the VAT paid by the shopkeeper to the Government.

(c) the price (inclusive of tax) paid by the customer.

(d) the shopkeeper's profit percent on his cost price (excluding tax).

— End of Question Paper —