

PART B

Workbook [कार्य-पुस्तिका]

[Competency-based Learning through Objective Questions]

SET-1

Fill in the Blanks

Choose appropriate word/term and fill in the blank:

- _____ is the per unit revenue received from sale of a commodity. (Average revenue/Marginal revenue)
($\Sigma MR/TR_n - TR_{n-1}$)
- $AR \times Q =$ _____ . (Average/Marginal)
- _____ revenue curve is also called a firm's demand curve. (Average/Marginal)
- Change in TR with respect to change in output sold is known as _____. (marginal revenue/average revenue)
- MR is _____ AR in case price remains constant. (equal to/less than)
- Total area under MR curve is called _____. (TR/AR)
- Total revenue is maximum when marginal revenue is _____. (zero/maximum)
- The degree of elasticity of demand is _____ in case of perfect competition. (zero/infinity)
- Under perfect competition, rate of change in total revenue never _____. (changes/remains constant)
- When MR becomes _____, TR starts falling. (zero/negative)

SET-2

Multiple Choice

Choose the correct option:

- Profit =**
(a) Revenue - Costs
(b) Revenue + Costs
(c) Revenue \times Costs
(d) Revenue \div Costs
- Money receipts of a producer from the sale of his total output is called:**
(a) total profit
(b) total revenue
(c) average revenue
(d) marginal revenue
- Under perfect competition, MR is a _____ .**
(a) downward sloping line
(b) upward sloping line
(c) horizontal line parallel to X-axis
(d) none of these
- Which of the following equations is incorrect?**
(a) $AR = \frac{P \times Q}{Q}$
(b) $AR = \frac{P - Q}{Q}$
(c) $AR = \frac{TR}{Q}$
(d) $MR_n = TR_n - TR_{n-1}$
- Under perfect competition, AR is:**
(a) equal to MR
(b) parallel to X-axis
(c) both (a) and (b)
(d) none of these

6. When TR increases at a constant rate, MR curve is:
 (a) downward sloping line (b) upward sloping line
 (c) horizontal line parallel to X-axis (d) vertical line parallel to Y-axis
7. Total Revenue (TR) =
 (a) $P \times Q$ (b) ΣMR
 (c) $\frac{AR}{Q}$ (d) Both (a) and (b)
8. When MR is zero, TR is _____ .
 (a) increasing (b) diminishing
 (c) maximum (d) minimum
9. When AR is decreasing:
 (a) MR should be increasing
 (b) MR should be decreasing, no matter faster or slower than AR
 (c) MR should be decreasing faster than AR
 (d) MR should be decreasing slower than AR
10. Declining AR implies:
 (a) less of a commodity is sold
 (b) less of a commodity is sold only when price is lowered
 (c) more of a commodity is sold
 (d) more of a commodity is sold only when price is lowered
11. Constant AR leads to:
 (a) constant MR (b) $AR = MR$
 (c) both (a) and (b) (d) none of these
12. Demand curve under perfect competition is _____ .
 (a) perfectly elastic (b) perfectly inelastic
 (c) relatively more elastic (d) relatively less elastic
13. When profit of a firm is ₹ 270 and the cost incurred is ₹ 900, revenue receipts of that firm will be:
 (a) ₹ 3.33 (b) ₹ 630
 (c) ₹ 1,170 (d) none of these
14. When price of a commodity is ₹ 30 per unit and 5 units of that commodity is sold by the firm in the market, total revenue in this case will be:
 (a) ₹ 5 (b) ₹ 30
 (c) ₹ 150 (d) none of these
15. If first unit of a commodity is sold at a price of ₹ 20 and marginal revenue from second unit is ₹ 16, then TR of the firm would be:
 (a) ₹ 18 (b) ₹ 20
 (c) ₹ 16 (d) ₹ 36

SET-3

True or False

State whether the following statements are True or False:

1. Marginal revenue is equal to average revenue under perfect competition.
2. When MR is positive, TR increases.
3. AR can be zero and negative.

(True/False)

(True/False)

(True/False)

4. When marginal revenue is constant, TR is a straight line shooting from the origin. (True/False)
5. TR increases at a diminishing rate, when MR is diminishing. (True/False)
6. MR is the rate of change in TR. (True/False)
7. AR can never be greater than MR. (True/False)
8. AR is downward sloping under perfect competition. (True/False)
9. Under perfect competition, firm's price line is a horizontal straight line. (True/False)
10. Average revenue can never be equal to the price of the commodity. (True/False)

SET-4

True-False Alternatives

In the following questions (1-5), two statements are given. Read the statements carefully and choose the correct alternative among those given below:

Alternatives:

- (a) Both the statements are true
- (b) Both the statements are false
- (c) Statement 1 is true and Statement 2 is false
- (d) Statement 2 is true and Statement 1 is false

1. **Statement 1** : TR curve is a positively sloped straight line under situations where price remains same at all levels of output.

Statement 2 : MR is the rate of change in TR.

2. **Statement 1** : When MR becomes negative TR starts falling.

Statement 2 : Sum total of MR corresponding to each unit of output is equal to AR.

3. **Statement 1** : Price and average revenue are same concepts.

Statement 2 : Average revenue curve represents the slope of total revenue.

4. **Statement 1** : TR increases at an increasing rate when MR is constant.

Statement 2 : MR and AR curves are a horizontal straight line parallel to X-axis under perfect competition.

5. **Statement 1** : Both AR and MR curves slope upwards when price falls with rise in output.

Statement 2 : Firm's demand curve is inelastic under perfect competition.

SET-5

Choose the Correct Pair of Statements/Identify the Correct Sequence of Alternatives

1. From the set of statements given in Column I and Column II, choose the correct pair of statements:

Column I	Column II
A. Price is not constant	(i) $AR = MR$
B. $MR > AR$	(ii) Perfect competition
C. Average revenue	(iii) Demand curve
D. Perfect competition	(iv) A firm is a price maker

Alternatives:

- (a) A—(i)
- (b) B—(ii)
- (c) C—(iii)
- (d) D—(iv)

2. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I:

Column I	Column II
A. TR increases at a constant rate	(i) $TR_n - TR_{n-1}$
B. MR	(ii) Horizontal straight line under perfect competition
C. AR curve	(iii) Price is declining
D. Negative MR	(iv) $MR = AR$

Alternatives:

- (a) A—(iv), B—(i), C—(ii), D—(iii) (b) A—(ii), B—(iv), C—(iii), D—(i)
 (c) A—(iv), B—(iii), C—(i), D—(ii) (d) A—(iii), B—(i), C—(ii), D—(iv)

SET-6

Assertion and Reasoning

In the following questions (1-5), a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct alternative among those given below:

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
 (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
 (c) Assertion (A) is true but Reason (R) is false
 (d) Assertion (A) is false but Reason (R) is true

1. **Assertion (A)** : TR forms a straight line sloping upward and starting from the origin in case price is constant.

Reason (R) : MR, which is the slope of TR remains unchanged under a perfectly competitive market.

2. **Assertion (A)** : AR slopes downwards in case price is constant.

Reason (R) : Falling price line is an indication towards the fact that a firm must lower its price in order to sell more.

3. **Assertion (A)** : $AR = MR$ under perfect competition.

Reason (R) : MR is a vertical straight line parallel to Y-axis.

4. **Assertion (A)** : Average revenue is equal to price of the commodity.

Reason (R) : Increase in AR leads to increase in TR, other things remaining constant.

5. **Assertion (A)** : Total revenue is maximum when marginal revenue is zero.

Reason (R) : When every additional unit is sold at the same price, marginal revenue is equal to average revenue.

ANSWERS

SET-1

1. Average revenue 2. ΣMR 3. Average 4. marginal revenue 5. equal to
 6. TR 7. zero 8. infinity 9. changes 10. negative

SET-2

1. (a) 2. (b) 3. (c) 4. (b) 5. (c) 6. (c) 7. (d) 8. (c) 9. (c) 10. (d)
11. (c) 12. (a) 13. (c) 14. (c) 15. (d)

SET-3

1. True 2. True 3. False 4. True 5. True 6. True 7. False 8. False 9. True 10. False

SET-4

1. (a) 2. (c) 3. (c) 4. (d) 5. (b)

SET-5

1. (c) 2. (a)

SET-6

1. (a) 2. (d) 3. (c) 4. (b) 5. (b)