**IIT-JEE | Medical | Foundations**

Question 1.
The opposite sides of a parallelogram are of _____ length.
(a) not equal
(b) different
(c) equal
(d) none of these

Answer: (c) equal

---

Question 2.
In the quadrilateral ABCD, the diagonals AC and BD are equal and perpendicular to each other. What type of a quadrilateral is ABCD?
(a) A square
(b) A parallelogram
(c) A rhombus
(d) A trapezium

Answer: (a) A square

---

Question 3.
If ABCD is an isosceles trapezium, what is the measure of ∠C?
(a) ∠B
(b) ∠A
(c) ∠D
(d) 90°

Answer: (c) ∠D

---

Question 4.
Which of the following is true for the adjacent angles of a parallelogram?

(a) they are equal to each other
(b) they are complementary angles
(c) they are supplementary angles
(d) none of these.

Answer: (c) they are supplementary angles

---

Question 5.
State the name of a regular polygon of 6 sides.
(a) pentagon
(b) hexagon
(c) heptagon
(d) none of these

Answer: (b) hexagon

---

Question 6.
The diagonal of a rectangle is 10 cm and its breadth is 6 cm. What is its length?
(a) 6 cm
(b) 5cm
(c) 8cm
(d) 4cm

Answer: (c) 8cm

---

Question 7.
The perimeter of a parallelogram is 180 cm. If one side exceeds the other by 10 cm, what are the sides of the parallelogram?
(a) 40 cm, 50 cm
(b) 45 cm each
(c) 50 cm each
(d) 45 cm, 50 cm

Answer: (a) 40 cm, 50 cm

---

Question 8.
A _____ is both 'equiangular' and 'equilateral'.
(a) regular polygon
(b) triangle

(c) quadrilateral
(d) none of these

Answer: (a) regular polygon

---

Question 9.
Which of the following quadrilaterals has two pairs of adjacent sides equal and diagonals intersecting at right angles?
(a) square
(b) rhombus
(c) kite
(d) rectangle

Answer: (b) rhombus

---

Question 10.
Which one of the following is a regular quadrilateral?
(a) Square
(b) Trapezium
(c) Kite
(d) Rectangle

Answer: (a) Square

---

Question 11.
What do you call a parallelogram which has equal diagonals?
(a) A trapezium
(b) A rectangle
(c) A rhombus
(d) A kite

Answer: (b) A rectangle

---

Question 12.
The sides of a pentagon are produced in order. Which of the following is the sum of its exterior angles?
(a) 540°
(b) 180°
(c) 720°
(d) 360°

Answer: (d) 360°

---

Question 13.
In a square ABCD, the diagonals bisect at O. What type of a triangle is AOB?
(a) An equilateral triangle.
(b) An isosceles but not a right angled triangle.
(c) A right angled but not an isosceles triangle.
(d) An isosceles right angled triangle.

Answer: (d) An isosceles right angled triangle.

---

Question 14.
Which of the parallelograms has all sides equal and diagonals bisect each other at right angle?
(a) square
(b) rectangle
(c) rhombus
(d) trapezium.

Answer: (c) rhombus

---

Question 15.
A diagonal of a rectangle is inclined to one side of the rectangle at 25°. What is the measure of the acute angle between the diagonals?
(a) 25°
(b) 40°
(c) 50°
(d) 55°

Answer: (c) 50°

---

Question 16.
The _____ of a rhombus are perpendicular bisectors of one another.
(a) angles
(b) sides
(c) diagonals
(d) none of these

Answer: (c) diagonals

---

Question 17.
ABCD is a parallelogram. The angle bisectors of ∠A and ∠D meet at O. What is the measure of ∠AOD?
(a) 45°
(b) 90°
(c) 75°
(d) 180°

Answer: (b) 90°

---

Question 18.
he sum of the measures of the three angles of a triangle is _____.
(a) 360°
(b) 210°
(c) 180°
(d) none of these

Answer: (c) 180°

---

Question 19.
How many diagonals does a rectangle have?
(a) 2
(b) 1
(c) 0
(d) none of these

Answer: (a) 2

---

Question 20.
Which of the following quadilaterals has two pairs of adjacent sides equal and diagonals intersecting at right angles?
(a) square
(b) rhombus
(c) kite
(d) rectangle

Answer: (c) kite

---