

VENUS WORLD SCHOOLS

Academic Session-2021-22 Half Yearly Test

Grade -VII Time -2 hr
Sub – Mathematics Max Marks- 50

General Instructions: Section A consists 1 mark questions

Section B consists 2 mark questions

Section C consists 3 mark questions

Section D consists 4 mark questions

Attempt any 14 questions of section A;

any 8 questions of section B;

any 4 questions of section C,

any 2 questions of section D

Section A

Q.1 The ratio of a unit is:

- (a) rupees
- (b) metres
- (c) no unit
- (d) grams

Q.2. The ratio of 20 days to 72 hours is

- (a) 2:1
- (b) 3:20
- (c) 4:5
- (d) 20:3

Q.3 Perimeter of a square =

- (a) side x side
- (b) $3 \times \text{side}$
- (c) $4 \times \text{side}$
- (d) $2 \times \text{side}$

Q. 4 Area of a parallelogram =

- (a) base × height
- (b) $12 \times \text{base} \times \text{height}$
- (c) $13 \times \text{base} \times \text{height}$
- (d) $14 \times \text{base} \times \text{height}$

Q.5 The circumference of a circle of radius r is

- (a) πr
- (b) 2πr
- (c) πr^2
- (d) $14 \, \text{mr}^2$

Q.6 If r and d are the radius and diameter of a circle respectively, then (a) $d=2$ r (b) $d=r$ (C) $d=12$ r (d) $d=r^2$
Q. 7 1 m ² = (a) 10 cm ² (b) 100 cm ² (c) 1000 cm ² (d) 10000 cm ²
Q. 8 The cost of 4 m cloth is Rs 140. Find the cost of 9 m of cloth. (a) Rs 215 (b) Rs 300 (c) Rs 320 (d) Rs 315
Q. 9 Which of the following is not the value of π ? (a) 22/7 (b) 7/22 (c) 355/113 (d) 3.14
Q.10 On a number line, when we add a positive integer, we (a) move to the right (b) move to the left (c) do not move at all (d) none of these
Q. 11 (- 20) × (- 5) is equal to (a) 100 (b) - 100 (c) 20 (d) 5
Q.12 Write the following statement in the form of an equation "The number b divided by 6 gives 5". (a) $b-5=6$ (b) $5b=6$ (c) $b+5=6$ (d) $b/6=5$ Q.13 The solution of the equation $4p-3=13$ is

Q.14 (-6) \div (-3) is equal to

- (a) 1
- **(b)** 2
- **(c)** 3
- **(d)** 6

Q.15 Which of the following statements is wrong?

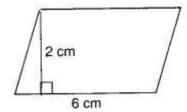
- (a) When a positive integer and a negative integer are added, we always get a negative integer
- (b) Additive inverse of 8 is (-8)
- (c) Additive inverse of (-8) is 8
- (d) For subtraction, we add the additive inverse of the integer that is being subtracted, to the other integer.

Section B

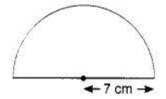
Q.16 Arrange the following fractions in ascending order:

2/7 3/5 5/6

- **Q.17** In a computer lab, there are 3 computers for every 6 students. How many computers will be needed for 24 students?
- **Q 18.** Find the area of the following; parallelogram:



Q19 The perimeter of the following figure is



Q. 20 Solve.

(i)
$$(-8) \times (-5) + (-6)$$

- Q.21 The sum of two integers is 116. If one of them is -79, find the other integers.
- **Q.22** Find the ratio of:
- (a) 5 km to 400 m

Q. 23 Convert the following equations in statement form:

a)
$$3z = 27$$

b)
$$2x + 3 = 5$$

- Q.24 Draw any two figure having no lines of symmetry.
- **Q.25** State the order of rotational symmetry of the following figures.



Equilateral triangle (i)



Regular pentagon

(ii)

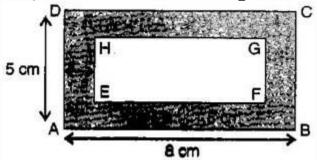
Section C

- Q.26 State whether the following ratio is equivalent or not?
- (a) 2:3 and 4:5
- **Q. 27.** A wire is in the shape of a rectangle. Its length is 40 cm and breadth is 22 cm. If the same wire is rebent in the shape of a square, what will be the measure of each side. Also find which shape encloses more area?
- Q.28 Write down a pair of integers whose
 - (i) sum is -5
 - (ii) difference is -7
 - (iii) difference is -1
- **Q.29** The perimeter of a circle is 176 cm, find its radius.
- **Q.30** $9 \{7 24 \div (8 + 6 \times 2 16)\}$
- Q. 31 Evaluate

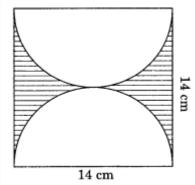
a)
$$(-30) \div 10$$

Section D

Q.32 A door of length 2 m and breadth 1 m is fitted in a wall. The length of the wall is 4.5 m and the breadth is 3.6 m. Find the cost of white washing the wall, if the rate of white washing the wall is Rs. 20 perm2m2.



Q. 33 Find the area of the shaded portion in the figure given below.



Q. 34 A square paper sheet has 10 2/5 cm long side. Find its perimeter and area.

Q. 35 The length of a rectangle is twice its breadth. If its perimeter is 60 cm, find the length and the breadth of the rectangle.