RRB Group D Mensuation Questions

Q1. **The area of a triangle having base 9 cm and height 16 cm is:**
(a) 62 cm^2
(b) 72 cm^2
(b) 92 cm^2
(d) 82 cm^2

Q2. **Find the area (in cm^2) of a triangle with sides 3 cm, 6 cm, and 7 cm.**
(a) $5\sqrt{6}$
(b) 4
(b) $\sqrt{5}$
(d) $4\sqrt{5}$

Q3. **The perimeter of a triangle is 36 units. Its area cannot be more than _____ square units.**
(a) $36\sqrt{2}$
(b) $36\sqrt{3}$
(b) $12\sqrt{7}$
(d) $18\sqrt{5}$

Q4. **A fence is constructed along the diagonal of a square field. What is the length of the fence (in km) if the area of the square field is $2km^2$?**
(a) 2
(b) 5
(b) 4
(d) 3

Q5. **If the perimeter of a square is 44 cm , then find the perimeter of a circle whose radius is equal to the length of a side of the given square.**
(a) 22π
(b) 11π
(b) 12π
(d) 21π

Q6. **The side of a rhombus is 20 cm and the length of the one of the diagonals is 32 cm. Find the area (in cm^2) of the rhombus**
(a) 484
(b) 384
(b) 424
(d) 560

Q7. **The diagonals of a rhombus are 12 cm and 8 cm, respectively. The area of the rhombus (in cm^2) is:**
(a) 72
(b) 24
(b) 96
(d) 48

Q8. **What will be the area (in cm^2) of a semicircle whose perimeter is 72 cm? (Take π=22/7)**
(a) 308
(b) 144
(b) 616
(d) 154

Q9. **If the area of a circle is 196π m^2 then the perimeter of the circle is**
(a) 58m
(b) 88m
(b) 44m
(d) 76m

Q10. **A parallelogram has one parallel side length of 12 cm and perpendicular distance between its base and other parallel side is 8 cm. Its area is_____.**
(a) 96 cm^2
(b) 192 cm^2
(b) 48 cm^2
(d) 24 cm^2

Q11. **Find the area of the parallelogram whose base is 15 cm and the corresponding heigh is 6 cm.**
(a) 80cm^2
(b) 45cm^2
(b) 90cm^2
(d) 60cm^2

Q12. **The surface area of a sphere is 196π cm^2. The volume of the sphere is:**
(a) $\frac{1372\pi}{3}$ cm^3
(b) $\frac{1572\pi}{3}$ cm^3
(b) $\frac{1472\pi}{3}$ cm^3
(d) $\frac{1272\pi}{3}$ cm^3

Q13. **A hollow spherical shell is made of a metal of density 6 g cm^3. Its internal and external radii are 8 cm and 9 cm. respectively. What is the weight (in kg) of the shell (take π = 22/7)?**
(a) 5.456
(b) 6.642
(b) 4.546
(d) 6.462

Q14. **How many cubic cm of water can a hemispherical container of radius 7 cm hold (rounded off to 2 decimal places) (use π =22/7)?**
(a) 1437.33
(b) 616.25
(b) 154.75
(d) 718.67

Q15. What is a cone's total surface area it its height is 20 cm and radius is 15 cm? (Useπ=22/7)

(a) $\frac{14870}{7}cm^2$

(b) $\frac{14860}{7}cm^2$

(b) $\frac{13200}{7}cm^2$

(d) $\frac{14880}{7}cm^2$

Q16. If a cone has base with radius of 5 cm and height of 10 cm, then its volume (correct to 2 decimal places) is _____cm^3. (Use π = 3.14)

(a) 261.70

(b) 261.60

(b) 261.67

(d) 261.50

Q17. The curved surface area of a cylinder is 1848 cm^2 and its base radius is 19.6 cm. The height of the cylinder is:

(a) 13 cm

(b) 14 cm

(b) 15 cm

(d) 17 cm

Q18. The diameter of the base of a cylinder is 3 cm and its height is 14 cm. The volume of the cylinder is:

(a) 79 cm^3

(b) 99 cm^3

(b) 89 cm^3

(d) 69 cm^3

Q19. The volume of a cube whose side is 12 cm is:

(a) 1628cm^3

(b) 1728cm^3

(b) 1928cm^3

(d) 1828cm^3

Q20. The volume of a cuboid whose length. breadth and height are 3 cm 4 cm and 5 cm. respectively, is:

(a) 90cm^3

(b) 60cm^3

(b) 80cm^3

(d) 70cm^3

Solutions

S1. Ans.(b)

S2. Ans.(d)

S3. Ans.(b)

S4. Ans.(a)

S5. Ans.(a)

S6. Ans.(b)

S7. Ans.(d)

S8. Ans.(a)

S9. Ans.(b)

S10. Ans.(a)

S11. Ans.(c)

S12. Ans.(a)

S13. Ans.(a)

S14. Ans.(d)

S15. Ans.(c)

S16. Ans.(c)

S17. Ans.(c)

S18. Ans.(b)

S19. Ans.(b)

S20. Ans.(b)