Department of Education -Western Province

Year End Evaluation Test - 2007

Mathematics - Grade 10

Time :- 1 Hours

All answers should be written in the given space

Name / Number :

Part I

01. Give 1.3m in centimetres

02. Simplify (-6) + 3

03. Find the value of 1.1 - 0.09

04. Find the value of $(-3)^3$

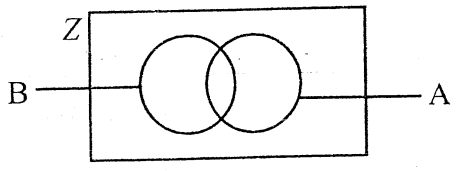
05. Find the perimeter of a square of side 4.2 cm.

06. Complete the blank with a suitable number
2 : 3 = ☐ : 9

07. Give a prime number between 5 and 10.

8. Find the value of a in equaltion $a + 5 = 8$

9. Shade the area belongs to set A in the given diagram.



10. Simplify $\frac{3}{x} + \frac{2}{x}$

(1 x 10 = 10 marks)

11. Arrange the following according to the ascending order

$\frac{3}{5}$, $\frac{3}{12}$, $\frac{3}{8}$

12. Find the value by using the knowledge of factors
53 x 47

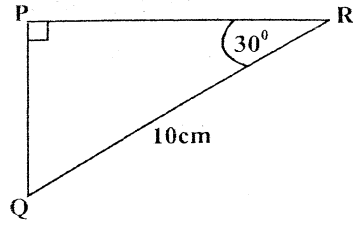
13. If $x = 2$ and $y = (-3)$ find the value of $3x - y$

14. Find the value of 40% of Rs. 750

15. (i) Give 225 as a product of prime factors
(ii) Find $\sqrt{225}$ by using the above

16. Find the least common factor of $2x,\ 3x^2,\ 2(x-2)$

17. If $\cos 60^0 = \frac{1}{2}$ calculate length of PQ



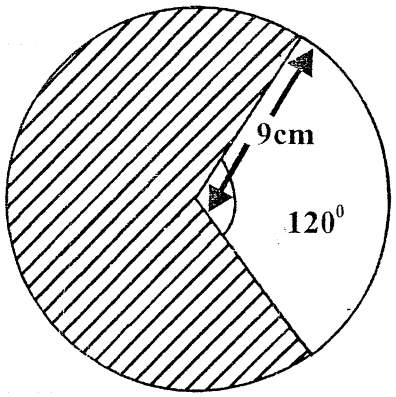
18. Calculate the value of $1011_{two} + 101_{two}$ and give the answer as a decimal number.

19. Consider $2y = x - 5$
    (i) Find the gradiant of the given straight line.
    (ii) Write the intercept of the straight line.

20. The distance between two cities is 5cm of a map drawn to the scale 1 : 50 000. Give the real distance in kilometers

(2 x 10 = 20 marks)

21. Find the perimeter of the shaded sector



22. If log 3 = 0.48 and log 2 = 0.30

Find the value of $\log\left(\frac{9}{2}\right)$

23. (i) Make the subject as l in the equation

$$S = \frac{n}{2}(a + l)$$

(ii) If S = 90 , n = 20 and l = 8
find the value of a.

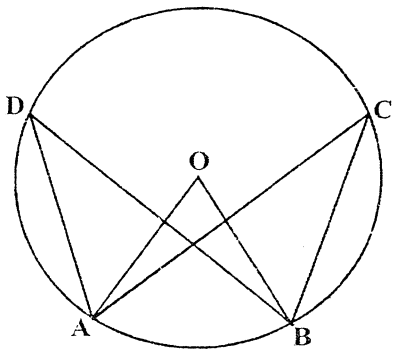
24. There is a bag with 7 balls marked even numbers between 1 and 15 on them. If a ball is taken out randomly.

(i) Write the sample space (S) which all the elements can be obtained.

(ii) Find the number of subsets, of the set S.

(iii) Find the probability of getting a trangular number written ball randomly.

25. A, B, C, D points lie on the circle of centre O



(i) Name an angle equal to $C\hat{B}D$

(ii) If $A\hat{O}B = 102^0$
find the value of $A\hat{D}B$

(iii) Write a theorem you used to obtain the above answer.