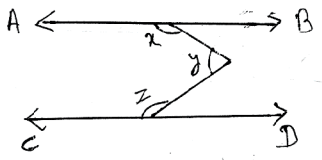
RDM100% MATHS COACHING CENTRE PH:04612376724
9F,BRYANT NAGAR III ST (EAST)
TUTICORIN-8 TAMILNADU

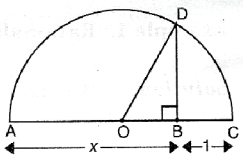
Guess Paper – 2014 SA-1
Class – IX MATHEMATICS

3 HRs 90 MARKS

1. The degree of zero polynomial is
   a. 0 b. 4 c. 1 d. not defined
2. Which of the following is not polynomial
   a. $\sqrt{7}x-1$ b. $x\sqrt{2}+2$
   c. $3x^{-2}-x+1$ d. all are polynomial
3. Zero of polynomial 5x-125 is
   a. -125 b. -25 c. 20 d. none
4. $\left(1+\sqrt{35}\right)\left(1-\sqrt{35}\right)$ is
   a. positive integer b. irrational no
   c. negative integer d. whole no
5. AB CD is a rhombus with angle ABC = 60 the measure of angle ACD is
   a. 30 b. 60 c. 120 d. 50
6. The value of $\angle x+\angle y+\angle z$ in fig is AB parallel CD



   a. 180 b. 220
   c. 360 d. can't say
7. The value of BD in a given fig is:



   a. 2x b. x+1
   c. $\sqrt{x}$ d. x-1
8. The value of $(1728)^{-2/3}$ is
   a. $\frac{1}{12}$ b. $\frac{1}{144}$ c. 144 d. none

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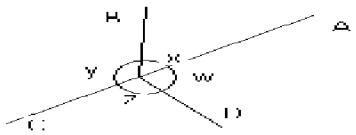
9.Find the remainder when x^3+ax^2-6x+a is divided by $x+a$

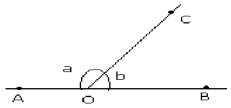
10. Represent $\sqrt{2}$ on the line

11. Simplify $(25)^{-1/3}$ X $\sqrt[3]{16}$.

12. In given figure, if x+y=w+z, then prove that AOB is a line.



13. In the given figure, $\angle$AOC and $\angle$ BOC form a linear pair and a-b=70°, find the value of a and b.



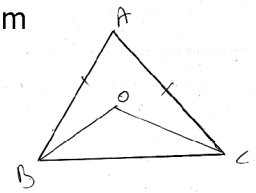
14.AD is an altitude of $\triangle$ABC in which AB=AC.Show that AD bisects $\angle$A.

Section-c 10 X 3 = 30

15. Explain Euclid's fifth postulate with diagram

16.In a given fig AB = AC

and OB = OC prove that $\angle ABO = \angle ACO$



17. Represent $\sqrt{5}$ on no line

18. Factorize $p^3+27q^3+125r^3-45pqr$

19.Without actual calculation evaluate $35^3+(-19)^3+(-16)^3$ using suitable identity.

20. Show that x-2 is a factor $p(x) = x^3-12x^2+44x-48$

21.Find the area of rhombus where one side is 25m and on diagonal is 48m. Find the length of another diagonal also.

22 .Simplify $\dfrac{27^{-2/3}\times 81^{5/4}}{\left(\frac{1}{3}\right)^{-3}}$

23.Factorize x^3-2x^2-5x+6

24.Express $0.7\overline{435}$ as a rational number.

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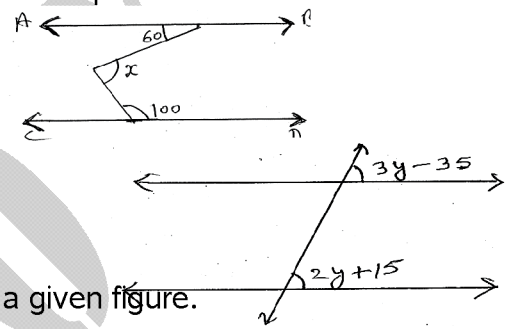
Section-D 10 X 4=40

25. i) If x+p is a factor of p(x) = $x^5-p^2x^3+2x+p+1$ find the value of p

ii) If p = 1- $\sqrt{2}$ Find $\left(p+\frac{1}{p}\right)^3$

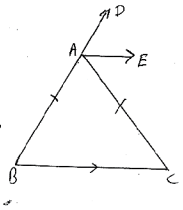
26. Prove hat the two medians of equilateral triangle are equal.

27. In a given fig AB parallel CD determine $\angle x$.



28. For what values of y lines l and m are parallel in a given figure.

29.In a given fig triangle ABC is an isosceles triangle in which AB = AC and AE is a bisects of angle DAC prove that AE parallel BC.



30. Prove the angle sum property of triangle.

31. Plot the points A(4,3), B(4,-2), C(-3, -2) and D (3, 3) in Cartesian plan. Write the name of figure you obtained and find the area of fig.

32. Simplify $\frac{1}{2+\sqrt{5}}+\frac{1}{\sqrt{5}+\sqrt{6}}+\frac{1}{\sqrt{6}+\sqrt{7}}+\frac{1}{\sqrt{7}+\sqrt{8}}+\frac{1}{\sqrt{8}+\sqrt{9}}$

33. State RHS congruence rule using in a triangle ABC, D is a mid point of BC. The perpendiculars DE from D to AB and perpendicular DF from D to AC are equal. Prove that triangle BC is an isosceles triangle.

34. Triangle ABC is an isosceles triangle AB=AC. Side BA is produced to D such that AD = AB. Prove that $\angle BCD = 90$.

ALL THE BEST