Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The identity element with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
2	If A = {2m/m^3= 8 , m€ Z} then A =	A. {1,8,27} B. {4} C. (2,4,6} D. {2,16,54}
3	The direction cosines of any normal to the xy-plane are	A. <1, 0, 0> B. <0, 1, 0> C. <1, 1, 0> D. <0, 0, 1>
4	In a triangle ABC, if angle A = 72° , angle B = 48° and c = 9 cm then Ĉ is	A. 69° B. 66° C. 60° D. 63°
5	Question Image	
6	Question Image	
7	Question Image	
8	If b^2- 4ac = 0 then the roots of the equation are	A. Real and distinct B. Real and equal C. Imaginary D. None of these
9	If D = {a} , the P(D) =	A. {a} B. <!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:r>∅</m:r> </m:oMath></m:oMathPara><![endif]--><!--[if !msEquation]--><!--[if gte vml 1]><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="f" stroked="f"> <v:stroke joinstyle="miter"/> <v:formulas> <v:f eqn="if lineDrawn pixelLineWidth 0"/> <v:f eqn="sum @0 1 0"/> <v:f eqn="sum 0 0 @1"/> <v:f eqn="prod @2 1 2"/> <v:f eqn="prod @3 21600 pixelWidth"/> <v:f eqn="prod @3 21600 pixelHeight"/> <v:f eqn="sum @0 0 1"/> <v:f eqn="prod @6 1 2"/> <v:f eqn="prod @7 21600 pixelWidth"/> <v:f eqn="sum @8 21600 0"/> <v:f eqn="prod @7 21600 pixelHeight"/> <v:f eqn="sum @10 21600 0"/> </v:formulas> <v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"/> <o:lock v:ext="edit" aspectratio="t"/> </v:shapetype><v:shape id="_x0000_i1025" type="#_x0000_t75" style='width:6.75pt; height:14.25pt'> <v:imagedata src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip1/01/clip_image001.png" o:title="" chromakey="white"/> </v:shape><![endif]--><!--[if !vml]--><img width="9" height="19" src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip1/01/clip_image002.png" v:shapes="_x0000_i1025" style="font-family: Calibri, sans-serif; font-size: 11pt;">∅<!--[endif]--><!--[endif]--><o:p></o:p> C. {∅,{a}} D. {∅,a}
10	Question Image	
11	w^{-1}= _____	A. 0 B. 1 C. w D. w²
12	Question Image	A. 6x - 2 + c B. x³- x²+ x + c C. 6x - x²+ c D. 6x³- x²+ c
13	At a point 15 meters away from the base of a 15 meters high house, the angle of elevation of the top is	A. 90° B. 60° C. 30° D. 45°

14	The period of cot 8x is	A. π/10 B. 9π/7 C. π/9 D. π/8
15	Question Image	
16	The degree of differential equation is the power of the	A. Lowest order derivative B. Highest order derivative C. Integral D. All are correct
17	A bag contains 7 whit, 5 black and 4 rd balls. If two balls are drawn at random from the bag, the probability that they are not of the same color is	A. 73 / 120 B. 83 / 120 C. 67 / 120 D. 43 / 120
18	Question Image	A. a sin(ax + b) + c B. - a sin(ax + b) + c
19	Range of tan$\theta$is	A. Set of complex numbers B. Set of real numbers C. Set of odd numbers D. Set of positive integers only
20	The distance of the point (-2 , -3) from x-axis is	A. 2 B. -3 C. 3 D. 5