

**SINDHI HIGH SCHOOL, BENGALURU**

**HALF YEARLY EXAMINATION [2023-24]**

**SUBJECT: MATHEMATICS**

**Class: VII Max Marks: 80**

**Duration : 2 hrs 45 mins**

**Date: 06 /10/2023 Reading Time: 15 mins**

**No. of Sides: 7 Writing Time: 2½ hrs**

**GENERAL INSTRUCTIONS:**

* This Question Paper has 5 Sections A, B, C, D and E.
* Section A has 20 MCQs carrying 1 mark each
* Section B has 5 questions carrying 02 marks each.
* Section C has 6 questions carrying 03 marks each.
* Section D has 4 questions carrying 05 marks each.
* Section E has 3 case based integrated units of assessment (04 marks each) with sub- parts of the values of 1, 1 and 2 marks each.
* All Questions are compulsory.
* Draw neat figures wherever required.

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|  | **Section A** |  |
|  | **Section A consists of 20 questions of 1 mark each.** |  |
| 1 | The reciprocal of is  a) b) c) d) 0 | **1** |
| 2 | The product of -3 and -5 is    a) -15 b) 15 c) -8 d) -2 | **1** |
| 3 | The height of 5 students in the class is given as  120cm , 110 cm , 101 cm , 110 cm , 103cm. The mode of the data is  a) 120 cm b)110 cm c)101 cm d)110 cm | **1** |
| 4 | 3.452 x 100 =  a) 34.52 b) 0.3452 c) 3452 d) 0345.2 | **1** |
| 5 | The temperature at Ranigunj at 3 pm is 15⁰C. Every hour the temperature decreases by 2 ⁰C. What will the temperature be at 11 pm.  a) 10⁰ C b) 2⁰C c)-1⁰ C d) 0⁰ C | **1** |
| 6 | =  a)11 b) c) d) 5 | **1** |
| 7 | Simplify 22  ⨯ 3 2  a) 36 b) 25 c) 6 4 d) 60 | **1** |
| 8 | The median of the first 9 even numbers is  a)5 b) 9 c)10 d) 2 | **1** |
| 9 | Golu is 5 years more than twice Seema’s age. Golu is 25 years old , so Seema is  a)5 years b)10 years c) 15 years d) 9 years. | **1** |
| 10 | Two angles are called as supplementary angle if  a)They have a common vertex  b)The difference of their angles is 180 ⁰  c)The sum of their angles is 90⁰  d)The sum of their angles is 180⁰ | **1** |
| 11 | In the following figure *m ⃦ n* and p is the transversal .Which of the given statements is false    a) ∠3 = ∠5 b) ∠3 + ∠2 = 90⁰ c) ∠3 = ∠4 d) ∠8 = ∠7 | **1** |
| 12 | In 32 the base is  a) 2 b) 3 c) 9 d) 8 | **1** |
| 13 | tikz pgf - A 3D "ell" shape or "L" shape - TeX - LaTeX Stack ExchangeThe number of vertices of the given solid is  a) 12 b) 14 c)16 d) 18 | **1** |
| 14 | 4 subtracted from 9 times x is 14.  The above statement as an equation is  a) 4 - 9x = 14 b) 9x – 4 =14  c) (9 –x ) -4 =14 d) ( 9 – 4)x = 14 | **1** |
| 15 | Which of the following form a pair of complementary angles.  a) 120⁰ , 60⁰ b) 30⁰ , 60 ⁰ c) 40⁰ , 60 ⁰ d) 45⁰ , 35⁰ | **1** |
| 16 | = 64. The value of x is  a) -8 b) 8 c) 6 d) -6 | **1** |
| 17 | The solution for the equation 5x = 23 is  a) x= 4 b)x= 2 c) x = 3 d) x = 4 | **1** |
| 18 | The cross section obtained when a die is horizontally  a) square b) rectangle c) triangle d) circle | **1** |
| 19 | **Assertion** : 7 x (-4) = -(7 x 4) = -28  **Reason** : The product of two integers is always positive.  a) Both Assertion and Reason are correct and Reason is the correct explanation of assertion.  b) Both Assertion and Reason are correct , but Reason is the not the correct explanation of assertion.  c) Assertion is correct but Reason is incorrect.  d) Assertion is incorrect but Reason is correct. | **1** |
| 20 | **Assertion** : The solution for the equation y + 3 = 10 is y = 7  **Reason :** Subtracting 3 on both sides we get  y+3 -3 = 10 - 3  y= 7  a) Both Assertion and Reason are correct and Reason is the correct explanation of assertion.  b) Both Assertion and Reason are correct , but Reason is the not the correct explanation of assertion.  c) Assertion is correct but Reason is incorrect.  d) Assertion is incorrect but Reason is correct. | **1** |
|  | **SECTION-B** |  |
|  | **Section B consists of 5 questions of 2 marks each** |  |
| 21 | A batsman scored the following runs in 4 matches. Calculate the mean of the numbers  40, 67 , 52 , 21 | **2** |
| 22 | In the following figure *l ⃦m* and t is the transversal . Find the measure of angles x and y | **2** |
| 23 | Name the solid shape got when the following nets are folded up  a)  b) | **2** |
| 24 | Find the value of {6 x (7) x 8} (-2) | **2** |
| 25 | An angle of a supplementary pair measures 82⁰. Find the measure of the other angle. | **2** |
|  | **SECTION-C** |  |
|  | **Section C consists of 6 questions of 3 marks each** |  |
| 26 | Identify the property  a)12 x (-3) + 5 x (-3 ) = (-3) x [12 + 5]  b) + () = +  c) (-25 ) 56 = 56 (-25) | **3** |
| 27 | The following table show the number of students in class V to  class VIII in our school. Represent the information on a bar graph.   |  |  |  |  | | --- | --- | --- | --- | | V | VI | VII | VIII | | 35 | 32 | 37 | 42 | | **3** |
| 28 | In a class test consisting of 20 questions ,4 marks are given for every correct answer ,1 mark is deducted for every incorrect answer and 0 is given for questions not attempted . Answer the following questions.  a) Rohit gets 6 correct and 6 incorrect answers . What is his score ?  b) Meena gets 30 marks . If she had attempted 8 correct questions ,how many questions were wrong?  c) Rahul got ( 1) inspite of getting 3 correct answers . How many questions did he get wrong.. | **3** |
| 29 | Solve  a) = 7 b) = 4 | **3** |
| 30 | The product of three numbers is 0.234. If two of the numbers are 0.12 and 3 , find the third number. | **3** |
| 31 | a)Which is greater 53 or 35  b) The speed of light is 300,000,000 metres per second .Express this in its standard form . | **3** |
|  | **SECTION-D** |  |
|  | **Section D consists of 4 questions of 5 marks each** |  |
| 32 | Fill in the blank  a) x \_\_\_\_ = (1mark)  b) ÷\_\_\_\_\_\_\_= (2marks)  c) 2 \_\_\_\_\_ = (2marks) | **5** |
| 33 | Form equations and solve.  a) Ramu is 2 more than 3 times his son’s age. If Ramu is 32 years old how old is his son?  b)Subtracting 7 from a 4 times a number gives 29 . Find the number | **5** |
| 34 | a) **l** and m are two lines cut by a transversal t. Find whether l m  b) In the given figure E F ⃦ GH. Find the value of  i) ∠ ABC ii) ∠ACH iii) ∠BAC v)∠CAF  650    65⁰ | **5** |
| 35 | a)Express 416 as a product of prime numbers in exponential form  b) Simpify using laws of exponents | **5** |
|  | **SECTION-E** |  |
|  | **Section E consists of 3 case study based questions.** |  |
| 36 | Rahul’s school conducted the term 1 and term 2 examinations. They had tabulated all the marks of the students but found it difficult to interpret the data when it was in the tabular form. So they represented the marks of individual students in a double bar graph.  Observe the double bar graph and answer the questions.    a) Name the two subjects in which Rahul scored less than 70  in term 1.  b) In which subject has Rahul shown most improvement and in which subject has his performance gone down.  c) What is the total score of Term2 English and Mathematics | **4** |
| 37 | Playing with clay is great fun. Students are asked to make models out of clay as it improves their motor skills and hand eye coordination. Gopal and his friends were trying to make solid shapes with clay.  a) Raunak made three cubes of equal dimension 2cm x 2 cm x 2cm and placed them end to end. What is the name of the resulting shape that he got and what are the dimensions of the shape.  b) Mohit placed a pyramid over a cube. How many faces and vertices are there ?  c) Geeta made a cylinder . Draw net of the cylinder. | **4** |
| 38 | Ronu is organizing a birthday party . She has invited her friends for the party.  a) She was decorating her room. She needs 7 strips of satin ribbon each 2m. What is the total length of the ribbon she needs to buy?  b) 20 pasteries were ordered. The total cost was Rs 870.What is the cost of each pastery?  c) 3 ½ litres of mango juice was prepared. It was poured equally into glasses such that each glass had ¼ litres of juice. Into how many glasses was the juice poured? | **4** |

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