

Department of Education – Western Province
First Term Evaluation-2018
Grade 7
Mathematics

Name-

Time: 2 Hours

Part I

- Answer all the questions on this paper itself.
- Each question carries 02 marks.

01. Draw all the axes of symmetry of the following figure.



02. If the following statements are true put \surd and if they are false put x in front of the each statement.

- a) In a bilaterally symmetric figure, the two parts on either side of an axis of symmetry are equal in shape and in area. (...)
- b) When you fold a plane figure along a straight line, if the two parts obtained are equal in area but does not coincide, the folded line is called the axis of symmetry (.....)
- c) Number of axes of symmetry in a square and a rectangle are equal. (.....)
- d) There will be 2 axes of symmetry in a bilaterally symmetric figure. (...)

03. Write the set $A = \{\text{Digits of the number three thousand six hundred and sixty six}\}$ by writing all the elements that belong to A within curly brackets.

04. Express the set $A = \{a, e, i, o, u\}$ in a Venn diagram.

05. Simplify.

i) $8 + 3 \times 5 =$

ii) $5 \times 8 - 8 =$

06. Find the value. $15 + (14 - 5) \div 3 =$

07. From the following, select and underline the numbers which are divisible by 9.

i. 2106

ii. 8342

iii. 5628

iv. 9991

08. The number $19\boxed{}2$ is divisible by 6. Find the suitable digit for the empty space.

09. Write 60 as a product of its prime factors.

10. Find the Highest Common Factor of 2, 3, 5.

11. In a^3 ,

i. Write the base -

ii. Write the index-

12. i. Expand and write as a product. 5^3a^2

ii. Write the expression using index notation. $2 \times 2 \times 2 \times p \times p$

13. To which century does the time period from AD 2001 to AD 2100 belongs?

14. From the following years, select an underline the leap years.

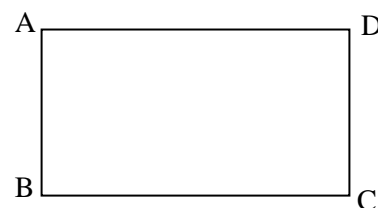
i. AD 1900

ii. AD 2000

iii. AD 2004

iv. AD 2010

15. ABCD is a rectangle. If there are parallel lines, indicate them using the parallel notation.



16. Draw a perpendicular to AB from A and name it as AP.



17. i. Indicate how to obtain the answer of $(-4) + (+6)$ using the number line.

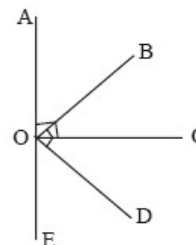
ii. Write the answer.



18. Find the value $[-\frac{2}{5}] + [-\frac{2}{5}]$

19. Write a time which the angle between the hour hand and minute hand of a clock becomes an acute angle.

20. According to the data given in the figure, name an obtuse angle.



Part II

- Answer the first question and another 04 questions only.
- First question carries 16 marks and the other question carry 11 marks each.

01. a) Recollect the lesson factors and multiples, which you have learnt in the class room.
- What is the digital root of 6521?
 - Two products of 72 are 2×36 and 3×24 . Write another 3 products of 72.
 - Write 24, 30, 18 as a product of its prime factors.
 - Find the least common multiple of those three numbers.

b) A doctor recommended 3 types of tablets for a child. He has to take it 3 hours, 6 hours and 8 hours respectively. If he took all the three types of tablets at 8.00 a.m, after how many hours will he has to take all the three tablets at once?

02. a) i) A child went to school for 2 years 9 months 21 days by van and 5 years 11 months 18 days by bus. Find the total time he traveled by the bus and the van.

ii) The age of a child on the date 2018.02.15 is 5 years 11 months and 18 days. What is his date of birth?

b) A tree which grows at a uniform speed, grow 3 cm per day. What will be the height of this tree after a leap year? Write the answer in meters.

03. Simplify

i. $(36 \times 3) \div 9$

ii. $36 \div (4 \times 3) - 3$

iii. In a clinic, a doctor charges Rs 1200 for every 15 minutes. If he attends to the clinic 2 hours per day for seven days, how much will he earn during a week?

04. Simplify

i. $(-3) + (+1)$

ii. $(-5) + (-4)$

iii. $(-5) + (+5)$

iv. $(+4.25) + (-3.75)$

v. $(-2.15) + (-1.63)$

05. Using only the straight edge and sets square, do the following constructions on the same diagram.

i. Draw a straight line segment AB such that $AB = 7$ cm and mark points A and B.

ii. Draw a perpendicular to AB at the point A and mark the point C, 5 cm away from A.

iii. Draw a straight line through C parallel to AB.

iv. Complete the rectangle ACBD.

06. Draw the following angles using protractor and write down the type of each of the angles.

i) 40°

ii) 110°

iii) 260°

iv) Name the 40° angle that have drawn as \hat{ABC} , and name the vertex and an arm of it.

07. (a) Complete the figure to obtain a bilateral symmetric figure.

(b) If $x=2$ and $y=3$, find the value of $2x^2y$.

(c) Write down the set A which is represented in a Venn diagram in terms of a common property of its elements by words within curly brackets.

