

**INDIAN SCHOOL SOHAR  
SUMMATIVE ASSESSMENT 2**

**MATHEMATICS**

**STD VII  
09-03-14**

**Marks :60  
Time: 2 HOURS**

**General Instructions:**

Do the calculations in the working column

Give necessary formulae and steps wherever required

This question paper consists of **28** questions divided into four sections **A , B , C and D**

**Section A** comprises of **10** questions of **1 mark** each

**Section B** comprises of **8** questions of **2 mark** each

**Section C** comprises of **6** questions of **3 mark** each

**Section D** comprises of **4** questions of **4 mark** each

SECTION A

1.  $\triangle ABC$  and  $\triangle DFE$  are such that  $AB = DF$  and  $\angle BAC = \angle FDE$ . Then  $\triangle ABC \cong \triangle DFE$  if

- A.  $AC = DE$                       B.  $BC = EF$                       C.  $AB = DE$                       D.  $AB = EF$

2.  $0.3 =$  \_\_\_\_\_ %

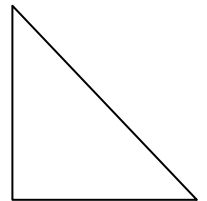
- A. 3                                      B. 30                                      C. 300                                      D.  $\frac{3}{10}$

3. The angle that can be constructed using ruler and compasses is \_\_\_\_\_

- A.  $35^\circ$                                       B.  $85^\circ$                                       C.  $120^\circ$                                       D.  $70^\circ$

4. The area of the given triangle, with sides 6cm, 8cm and 10cm is \_\_\_\_\_  $\text{cm}^2$

- A. 24                                      B. 48                                      C. 40                                      D. 30



5. The sum of the terms  $5bc$ ,  $-8bc$  and  $15bc$  is \_\_\_\_\_

- A.  $28bc$                                       B.  $12bc$                                       C.  $-12bc$                                       D.  $-28bc$

6.  $2^4 \times 5^4$  is equal to

- A. 1000                                      B. 10000                                      C. 0                                      D. 100

7. Which of the following is a positive rational number?

- A.  $\frac{2}{-3}$                                       B.  $\frac{-2}{3}$                                       C.  $\frac{-2}{-3}$                                       D. -8

8. Find  $\frac{5}{6} \div 6 =$  \_\_\_\_\_

- A. 5                                      B.  $\frac{6}{5}$                                       C.  $\frac{5}{36}$                                       D.  $\frac{1}{5}$

9.  $(3^0 + 4^0) \div 5^0 =$  \_\_\_\_\_

- A. 0                                      B. 1                                      C. 2                                      D.  $\frac{7}{5}$

10. The area of a circle with radius 'r' units is \_\_\_\_\_

- A.  $\pi r^2$                                       B.  $2\pi r$                                       C.  $2\pi r^2$                                       D.  $\pi r$

**SECTION B**

11. Out of 20 matches, a team won 25%. How many matches did they lose?

12. Write any four rational numbers between 0 and 2.

13. The radius of a circle is 3.5cm Find its circumference. (take  $\pi = \frac{22}{7}$ )

14. Find the value of the expression  $n^3 + n^2 + 5n$  when  $n = -2$

15. Construct a  $\triangle ABC$  with  $AB = BC = 6.8\text{cm}$  and  $\angle B = 70^\circ$

16. Simplify and write the answer in exponential form : i)  $\left(\frac{3^7}{3^2}\right) \times 3^5$

ii)  $(6^4)^4 \div 6^2$

17. Express the following numbers in standard form : i) 89068.6

ii) 890004500

18. Simplify  $\left(\frac{-7}{6}\right) + \frac{3}{8} + \frac{1}{4}$

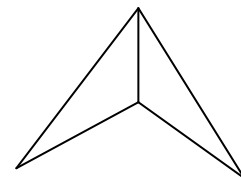
**SECTION C**

19. In the adjoining figure,

(i) State the pair of equal parts.

(ii) Is  $\triangle ADB \cong \triangle ADC$ ? If so, write the congruence condition.

(iii) Is AD bisector of  $\angle BAC$ ? Give reason



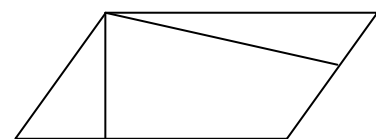
20. Construct a right-angled triangle ABC whose hypotenuse AC is 6cm long and BC is 4cm long.

Find length of side AB

21. A man borrowed Rs. 25000 at 2.5% p.a. Find the interest and amount paid by him at the end of 4 years.

22. In the parallelogram ABCD, AD = 6cm and CD = 4cm. The height corresponding to the base AD is 3cm. Find the

- i) area of the parallelogram  
ii) the height corresponding to the base CD



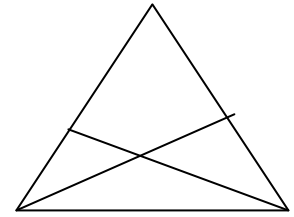
23. Simplify and find the value of  $\frac{2 \times 3^4 \times 2^5}{9 \times 4^2}$

24. Simplify and find the value of  $3(m^2 + mn) + 2 - mn$  when  $m = -10$  and  $n = 5$

**SECTION D**

25. In the given fig. BD and CE are the altitudes of  $\triangle ABC$  such that  $BD = CE$ .

- i) State the three pairs of equal parts in  $\triangle CBD$  and  $\triangle BCE$
- ii) Is  $\triangle CBD \cong \triangle BCE$ . Give reasons.
- iii) Is  $\angle DCB = \angle ECB$ ? Give reasons



26. From the sum of  $2y^2 + 3yz$ ,  $-y^2 - yz - z^2$  and  $yz + 2z^2$  subtract  $-y^2 + 4yz + z^2$

27. The area of a square and a rectangle are equal. If the side of the square is 40cm and breadth of the rectangle is 25cm, find the length of the rectangle. Also, find the perimeter of the rectangle.

28. i) The sum of two rational numbers is  $\frac{15}{16}$ . If one of them is  $\frac{-5}{8}$ , find the other.

ii) By what number should we multiply  $\frac{-16}{21}$ , so that their product will be  $\frac{4}{7}$ ?

\*\*\*\*\* THE END \*\*\*\*\*