INDIAN SCHOOL SOHAR
SUMMATIVE ASSESSMENT II
MATHEMATICS

STD VIII   **Marks : 60**
08-03-15   **Time : 2 HOURS**

General Instructions:
Do the calculations in the working column.

Give necessary formulae and steps wherever required.

This question paper consists of **24** questions divided into four sections **A** , **B** , **C** and **D**

Section A comprises of **6** questions of **1 mark** each.

Section B comprises of **6** questions of **2 marks** each.

Section C comprises of **6** questions of **3 marks** each.

Section D comprises of **6** questions of **4 marks** each.

SECTION A

1. The factors of $(9m^2 - 4)$

A.$(9m+4)(9m-4)$ B. $(3m+2)(3m-2)$ C. $(3m-2)^2$ D. $(9m+2)(9m-2)$

2. $a^{25} \div a^{12}$ is

A. a^{27} B. a^{37} C . a^{13} D. none of these

3. How many terms are there in the expression : $(4m^4)(6xyz)$?

A. One   B. two   C. three   D. four

4. On performing, $6(3m+1)(4n-3) \div 6(4n-3)$, the value obtained is

A. 6   B. $(4n-3)$ C. $(3m+1)$ D. $6(3m+1)$

5. The product of $5bc^4x - 8b^3 x 2bc$ is _____

A. $80b^5c^5$ B. $-b^5c^5$ C. $-80b^4c^5$ D. $-80b^5c^5$

6. $2^4 x (-5)^4$ is equal to

A.-10000 B. 10000   C. 1000   D. $(-10)^8$

SECTION B

7. Using identity, evaluate 7.9^2

8. Factorise : $28m - 21n + 8 m^2 - 6mn$

9. If x and y vary directly,find the missing entries

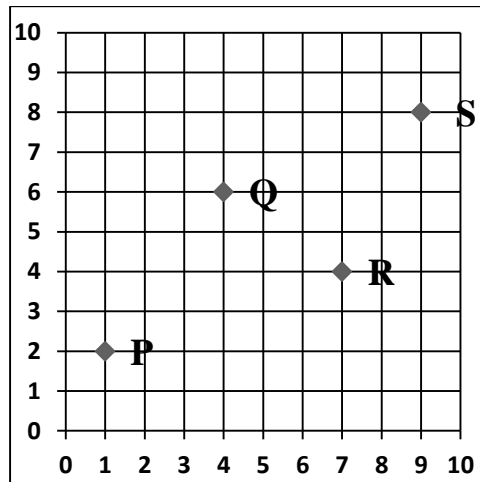| x	5	------	10
y	8	12	-------

10. Write in usual form : i) $3.48 x 10^5$

ii) $1.54 x 10^{-4}$

11. Identify whether the following quantities vary directly or inversely.

  i) The length (x) of a journey and price (y) of a ticket.

 ii) Distance (x) and time (y), speed remaining constant.

iii) Area of a land (x) and its cost (y)

 iv) The number of men (x) hired to construct a wall and the time (y) taken to finish the job.

12. Write the coordinates of P,Q,R and S

SECTION C

13. A 4m90cm high pole casts a shadow 2m80cm long. At the same time, find

   i) The length of shadow cast by another pole 7m70cm long.

   ii) The height of a pole which casts a shadow 2m long.

14. The circumference of the base of a cylindrical tank is 88m and it is 15m deep. Find how much litres of water can be filled in the tank?

15. The dimensions of a cuboid are in the ratio 1 : 2 : 3 and its total surface area is 88m^2 . Find its

   dimensions.

16. The population of a town is decreasing every year due to migration. The present population is 81000.

   If the rate of migration is 10% , find the population of the town after 2 years.

17. The cost price of a carpet is Rs7560 including 8% VAT. Find the cost before VAT was added.

18. The following table gives information regarding the number of persons employed to a piece of work and time taken to complete the work.
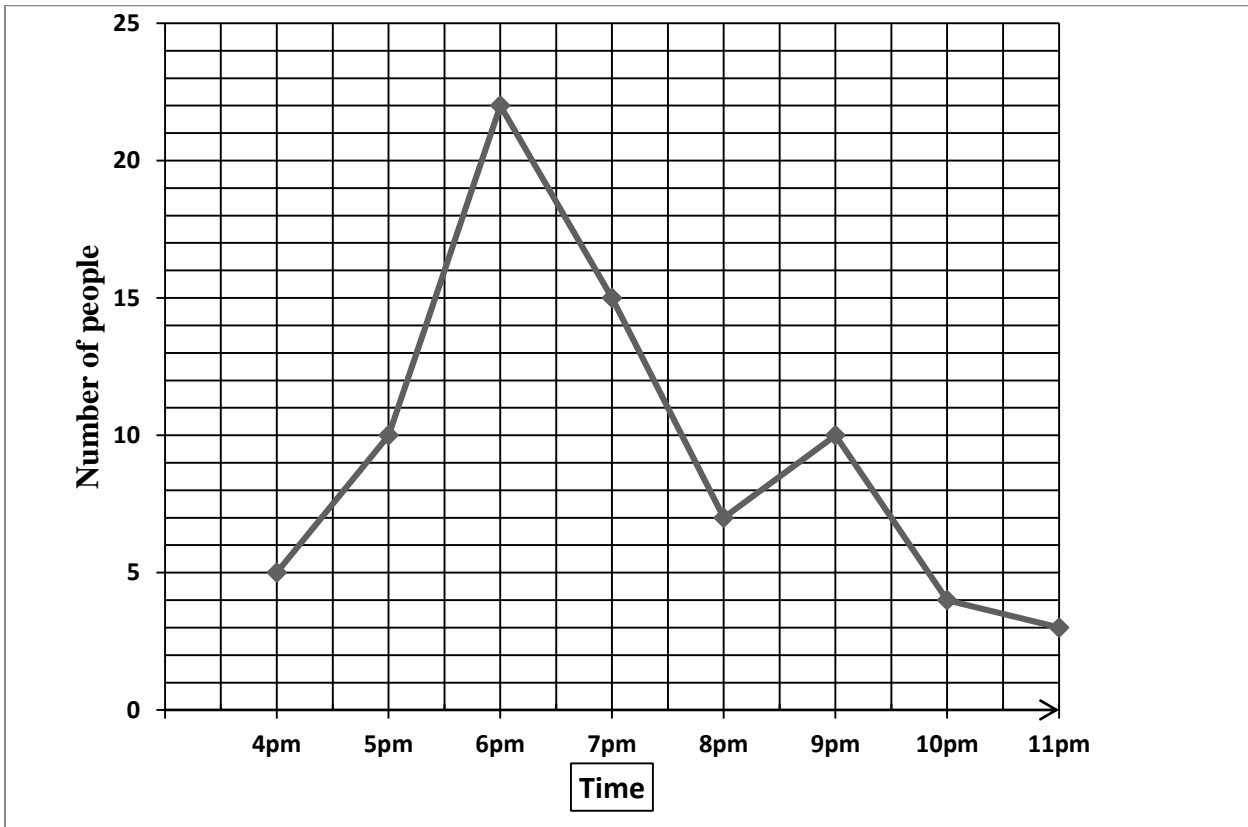
Number of persons	2	4	6	8
Time taken (in days)	12	6	4	3

   Draw a graph for this information.

SECTION D

19. Factorise: i) $m^2 - 8m - 48$

                ii) $p^2 - q^2 - p - q$

20. Show that $(3p + 5q)^2 - (3p - 5q)^2 = 60pq$

2

21. The following graph shows the number of people present in a shop from 4pm to 11pm on a particular day.

i) What is the scale taken on the X axis?

ii) At what time were there 4 people present in the shop?

iii) How many people were present at 6pm?

iv) There were same number of people present at two times during the given period. What were these two times?

22. Reema is painting the walls and the ceiling of a cuboidal room with length, breadth and height of 12m , 8m and 5m respectively. If each can of paint covers 8sq.m of area, find how many cans of paint will be required to paint the room?

23. Find the amount on Rs 20000 at 10 % per annum for 2 years and 6 months compounded annually.

24 . Simplify and write the answer in exponential form.

i) $(2^5 \div 2^8) \times 2^{-5}$

ii) $(-4)^{-3} \times (5)^{-3} \times (-5)^{-3}$

*********THE END *******

3