

**Maths Revision Test**

**Time : 60 mins**

**Max Marks : 30**

Q1. Find the  $n$ th term of the series 1, 2, 4, 8.....

3 marks

Q2. Fourth and seventh terms of a GP  $1/18$  and  $-1/486$  respectively. Find the GP.

3 marks

Q3. Find the geometric progression with 4<sup>th</sup> term =54 and 7<sup>th</sup> term = 1458.

3 marks

Q4 The fifth, eighth and eleventh terms of a geometric progression are  $p$ ,  $q$ , and  $r$  respectively. Show that:  $q^2 = pr$ .

3 marks

Q5 Find number of terms in the arithmetic progression 6, 15, 24, 33, ... such that sum of the series is 2850?

3 marks

Q6. For what values of  $a$  are  $3a + 24$ ,  $4a + 29$ , and  $6a + 31$  sequential members of an arithmetic progression?

3 marks

Q7. What is the sum of all natural numbers between 100 and 250 which are divisible by 4?

.3 marks

Q8. If the  $n$ th term of an arithmetic progression is given by  $-7 - 6n$ , then what is the sum of the first 20 terms of the AP?

. 3 marks

Q9. The sum of first 10 terms of an arithmetic progression is 230. The sum of the first 20 terms is 860. What is the sum of the first 30 terms of the AP?.

4 marks

Q 10 Which term of the arithmetic progression 11, 24, 37, 50 is 921?