THE VILLAGE
INTERNATIONAL SCHOOL

QUESTION BANK - MATHEMATICS GRADE –x

Chapter- 5 ARITHMETIC PROGRESSION:

OBJECTIVE & SUBJECTIVE TYPE QUESTIONS:

1) $\sqrt{3}$ + 5 is ……..number.

a) irrational b) rational

c)neither rational nor irrational d)none of them

2)The decimal representation of $\frac{71}{150}$ is

a) terminating b) non terminating, repeating decimal

c) non-terminating and non-repeating d) none of these

3)Which of the following is a pair of co-primes.

a) (14,35) b) (18,25)

c) (31,93) d) (32,62)

4) $2.\overline{35}$ is

a) an integer b) an irrational number

c) a rational number d) none of these

5) The HCF of (240 , 10 32) is

a) 22 b) 21

c) 34 d)24

6)If a = $(2^2 \times 3^3 \times 5^4)$ and b = $(2^3 \times 3^2 \times 5)$,then HCF of (a,b) is

a) 90 b) 180

c) 360 d)540

7)The simplest form of $\frac{1095}{1168}$ is

a) $\frac{17}{26}$ b) $\frac{25}{26}$

c) $\frac{13}{16}$ d) $\frac{15}{16}$

8)2.131131111311113…is a

a) an integer b) a rational number

c) an irrational number d)none of these

9)π is ……..

a) an integer b) a rational number

c) an irrational number d)none of these

10)Which of the following has a terminating expansion?

a) $\frac{32}{91}$ b) $\frac{19}{80}$

c) $\frac{23}{45}$ d) $\frac{25}{42}$

SUBJECTIVE TYTPE :

1)Prove that 5+ $2\sqrt{3}$ is an irrational number.

2)Find the largest number that will divide 398,436 and 542 leaving remainders 7,11,15 respectively.

(Ans: 17)

3)The LCM of two numbers is 23 and their L.C.M is 1449.if one of the numbers is 161,find the other.

(Ans: 207)

4) Prove that $\sqrt{3}$ is an irrational number.

5)Express 1080 as a product of prime factors.

6)Explain why 7×11× 13 +13 is a composite number.

7) Use Euclid's algorithm to find the HCF of 1651 and 2032.Express the HCF in the form of 1651m + 2032 .Also find the values of m and n .

8) An electronics device makes a beep after every 60 seconds. Another device makes a beep after every 62 seconds .They beeped together at 10:00 a.m . At what time will they beep together at the earliest?

9) Given that HCF (306,657)= 9,Find the LCM (306,657). (Ans: 22338)

10)three pieces of timber 42m,49m and 63m long have to be divided into planks of the same length. What is the greatest possible length f each plank. (Ans; 7m ,22planks)