Q. 1 to 17 is for Formative Assessment 2

Choose the correct option in Q. 1, 2, 3 and 4

Q. 1 Unique number (number which is neither prime nor composite) is
(a) 1  (b) 2  (c) 3  (d) 4

Q. 2 The greatest prime number between 1 and 100 is
(a) 93  (b) 95  (c) 97  (d) 99

Q. 3 The HCF of two consecutive even numbers is
(a) 2  (b) 3  (c) 4  (d) 5

Q. 4 A number for which sum of all its factors is equal to twice the number is called
(a) Unique number  (b) Composite number  (c) Perfect no.  (d) None

Q. 5 Write all factors of each of the following numbers.
(i) 60  (ii) 125  (iii) 729

Q. 6 Write first five multiples of each of the following numbers
(i) 25  (ii) 35  (iii) 40

Q. 7 Write all prime numbers between
(i) 10 and 50  (ii) 70 and 90

Q. 8 Express each of the following numbers as the sum of two odd primes
(i) 128  (ii) 42  (iii) 68

Q. 9 Express each of the following numbers as the sum of three odd primes
Q.10 Express each of the following as the sum of twin primes

(i) 120  (ii) 60  (iii) 144  

Q.11 Find prime factorization of each of the following numbers

(i) 216  (ii) 420  (iii) 468  (iv) 945  (v) 7325  

Q.12 Write the smallest 4 digit number and express it as a product of primes.  

Q.13 Write the largest 6 digit number and give its prime factorization.  

Q.14 Which factors are not included in the prime factorization of a composite number?  

Q.15 Write all natural numbers less than 100 which are common multiples of 3 and 4  

Q.16 Find the common factors of the following

(i) 10, 30, 45  (ii) 12, 16, 36  

Q.17 Following list consists of the following pairs of numbers

51, 53; 55, 57; 59, 61; 63, 65; 67, 69; 71, 73  

Categorize them as pairs of

(i) Co-primes  (ii) Primes  (iii) Composite  

Q.18 to 23 are for Summative Assessment 2  

Q.18 Determine the HCF of the following numbers

(i) 300, 450  (ii) 54, 82  (iii) 84, 120, 156  

Q.19 Determine the LCM of the numbers given below

(i) 48, 60  (ii) 18, 17  (iii) 15, 30, 90  (iv) 36, 48, 210  

Q.20 Find the greatest number of four digits which is exactly divisible by 16, 24, 28 and 35.  

Q.21 Find the least number of five digits which is exactly divisible by each of 4, 5, 6 and 7.  

Q.22 Three bells are ringing continuously at intervals of 30, 36 and 45 minutes respectively. At what time will they ring together again if they ring simultaneously at 8 a.m.?  

Q.23 Write all pairs of 2-digit twin primes such that on changing the places of their digits, they still remain prime numbers.