

## Assignment of class X Ch 1 Real Numbers

- Q1 For some integer  $m$ , every even integer is of form  
(a)  $m$  (b)  $m+1$  (c)  $2m$  (d)  $2m+1$  (ans, c)
- Q2 The largest number which divides 70 and 125, leaving remainders 5 and 8 resp. is  
(a) 13 (b) 65 (c) 875 (d) 1750 (Ans, a)
- Q3 If two +ve integers  $P$  and  $Q$ , can be expressed as  $P = ab^2$  and  $Q = a^3b$ , where  $a, b$  being prime numbers then L.C.M. ( $P, Q$ ) is.  
(a)  $ab$  (b)  $a^2b^2$  (c)  $a^3b^2$  (d)  $a^3b^3$  (ans, c)
- Q4 If H.C.F. of 65 and 117 is expressible in the form of  $65m - 117$  then value of  $m$  is  
(a) 4 (b) 2 (c) 1 (d) 3 (ans, b)
- Q5 Product of three consecutive +ve integers is divisible by 6. Is this true or false. Justify it.
- Q6 Show that cube of any +ve integer is of form  $4m, 4m+1, 4m+3$  for some integer  $m$ .
- Q7 Use Euclid division lemma to find H.C.F. of 441, 567, 693
- Q8 Prove that  $\sqrt{5} + \sqrt{7}$  is an irrational number. (ans 63)
- Q9 Prove that one and only one out of  $n, n+2, n+4$  is divisible by 3, where  $n$  is any +ve integer.
- Q10 For any +ve integer Prove that  $n^3 - n$  is divisible by 6.

Q.11 Explain why  $3 \times 5 \times 7 + 7$  is a composite number.

Q.12 Explain why ~~is a~~  $\sqrt{13}$  is an irrational number, without calculation. (1 Mark.)

Q.13 After what decimal expansion of the rational number  $\frac{14587}{1250}$  will terminate

(Ans 4)

Q.14 Find least number that is divisible by all the numbers from 1 to 11.

(ans 27720)

Q.15 Check whether  $13 \times 1973$  is a composite number. Give reason.

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