

Mathematics

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(Chapter – 1) (Real Numbers)(Exemplar Problems)
(Class – X)

Exercise 1.1

Choose the correct answer from the given four options in the following questions:

Question 9:

The least number that is divisible by all the numbers from 1 to 10 (both inclusive)

- (A) 10 (B) 1000 (C) 504 (D) 2520

Answer 9:

- (D) 2520

Solution:

Factors of 1 to 10 numbers are as follows:

$$1 = 1$$

$$2 = 1 \times 2$$

$$3 = 1 \times 3$$

$$4 = 1 \times 2 \times 2$$

$$5 = 1 \times 5$$

$$6 = 1 \times 2 \times 3$$

$$7 = 1 \times 7$$

$$8 = 1 \times 2 \times 2 \times 2$$

$$9 = 1 \times 3 \times 3$$

$$10 = 1 \times 2 \times 5$$

∴ LCM of number 1 to 10

$$= \text{LCM} (1, 2, 3, 4, 5, 6, 8, 9, 10)$$

$$= 1 \times 2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 7 = 2520$$

