## DELHI PUBLIC SCHOOL, JAMMU SESSION 2024-25

Assignment -3

**Topic:** Fractions

Read all the questions carefully.

## Assertion reasoning questions

This type of reasoning questions consists of two statements: an assertion (statement of fact) and a reason (explanation for the assertion). You must determine whether each statement is correct. If both the statements are correct, you must determine whether the reason supports the assertion. There will be four answer choices for the possible outcomes, and you must select the correct one.

- a) Both A and R are true and R is the correct explanation of A
- b) Both A and R are true but R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

1. Assertion (A): The fraction  $\frac{105}{168}$  in simplest form is  $\frac{5}{8}$ .

Reason (R): A fraction is said to be in the simplest form if its numerator and denominator are coprimes.

2. Assertion (A): The fraction  $\frac{5}{7}$  lies between the whole number 0 and 1

Reason (R): The numerator and denominator of  $\frac{5}{7}$  are 5 and 7

3. Assertion (A): A fraction equivalent to  $\frac{15}{35}$  with denominator 21 is  $\frac{12}{21}$ .

Reason (R): We can get equivalent fractions of a fraction by multiplying( or dividing) the numerator and denominator by the same non-zero number.

Q4. Arrange the following in descending order :  $\frac{5}{12}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{11}{24}$ 

Q5. Simplify:

 $5\frac{1}{2} + 2\frac{1}{2} - \frac{1}{2}$ 

Q6. Subtract the sum of  $4\frac{2}{3}$  and  $1\frac{2}{9}$  from the sum of  $2\frac{5}{7}$  and  $3\frac{2}{3}$ 

Q 7. From a rope of length  $16\frac{1}{3}$  m, three parts measuring  $6\frac{1}{2}$  m,  $4\frac{1}{3}$  m and  $3\frac{1}{2}$  m was cut what was the length of the rope left ?

Class: VI

## Case based questions

Q8. The diagram shows a road map. Raj drives from P to R passing through Q. He comes back to P using the shortest route. Dilip drives from P to R passing through S. he comes back to P also using the shortest route. Dev drives from P to R and comes back from the same route.



- 1. What is the distance travelled by Dilip from P to R Passing through S?
- (a)  $5\frac{7}{10}$  (b)  $3\frac{7}{10}$  (c)  $7\frac{7}{10}$  (d)  $1\frac{7}{10}$

2. If they started at the same time and with the same speed, who reaches the first?

(a) Dev (b) Dilip (c) Raj (d) Cannot de determined

3. what is the total distance travelled by Raj from P to R passing through Q ?

(a)  $2\frac{3}{10}$  (b)  $3\frac{3}{12}$  (c)  $6\frac{3}{10}$  (d)  $5\frac{3}{12}$ 

4. What is the total distance covered by all of them ?

(a) 28km (b)  $27\frac{1}{2}$ km (c)  $28\frac{2}{5}$  km (d)  $29\frac{1}{3}$  Km