

GENERAL INSTRUCTIONS:

- Read the questions carefully.
- All the questions are compulsory.
- Section A is of 15 marks (1 marks each question), Section B is of 20 marks (2 marks each question), Section C is of 30 marks (3 marks each question) and Section D is of 35 marks (5 marks each question).

SECTION – A

A) Fill in the blanks:-

- 1) The successor of 2345679 is _____.
- 2) 52 as a mixed fraction _____.
- 3) The preceding number of the number 1 is _____.
- 4) $(+ 1) + (+ 2) =$ _____.
- 5) The simplest form of $12/20$ is _____.

B) Tick the correct options:-

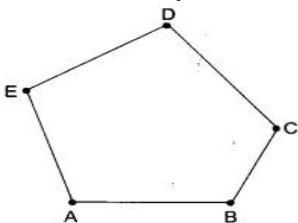
- 1) Using the digits 1, 2, 3, 4 without repetition, the greatest 4-digit number that can be made is
(a) 4321 (b) 4312 (c) 4213 (d) 4231
- 2) The difference between the successor of a number and the number itself is
(a) 0 (b) $- 1$ 1 (d) none of these.
- 3) Two intersecting lines intersect in
(a) 1 point (b) 2 points (c) 3 points (d) 4 points
- 4) Through what angle measure does the hour hand of a clock turn through, when it goes from 5 to 8?
(a) 90° (b) 180° (c) 360° (d) none of these
- 5) The succeeding number of the number $- 1$ is
(a) $- 1$ (b) 1 (c) 0 (d) $- 11$

C) Write true or false for the followings:-

- 1) $(- 1) - (- 2) = 1$. []
- 2) Every positive integer is larger than every negative integer. []
- 3) The smallest prime number is 1. []
- 4) The least prime number between 1 and 10 is 1. []
- 5) The product of two even numbers is always even. []

SECTION – B

- 1) What fraction of the number from 2 to 12 are prime numbers?
- 2) Arrange the following numbers in ascending order.
a) 98001, 97554, 79794, 978981
b) 25751, 36501, 38802, 257451
- 3) Find the sum by suitable rearrangement:
a) $987 + 362 + 255$ b) $2190 + 349 + 1678 + 988$
- 4) How many vertices are there in the following figure?



- 5.a) How many pairs of adjacent sides are there in a quadrilateral?
- 5.b) How many pairs of opposite sides are there in a quadrilateral?
- 6) Solve $2 - (- 1) - 2 - (- 3) = ?$
- 7) Express the mixed fraction $1\frac{1}{2}$ as an improper fraction.
- 8) Which of the following pairs of fractions are equivalent?
(a) $\frac{1}{2}$, $\frac{2}{4}$ (d) $\frac{4}{7}$, $\frac{8}{13}$
(b) $\frac{1}{3}$, $\frac{3}{7}$ (c) $\frac{2}{5}$, $\frac{4}{9}$

9) Write these in descending order:-

- a) $1/5, 3/5, 13/5, 11/5, 5/5, 9/5$ b) $1/3, 11/3, 4/3, 7/3, 13/3$

10) Write opposites of the following:

- a) 34 km north b) Loss of Rs 500

SECTION – C

1) Find the solution of the following:-

- a) $(+7) + (-10)$ b) $(-9) + (+12)$ c) $35 - (-20)$

2) Draw number lines and locate the points on them.

- a) $1/2, 1/4, 3/4, 4/4$ b) $2/4, 3/5, 8/5, 4/5,$

3) Draw a 5 sided polygon. Name it and shade its interior.

4) Define the following with figures:

a) Circumference of a circle

b) Segments of a circle

5) Solve :

- a) $3/4 - 1/3$ b) $21/3 - 7/3$ c) $1/2 + 1/4 + 1/6$

6) Explain the various types of triangle considering the length of their sides.

7) The sum of two numbers is 55 and the HCF and LCM of these these numbers are 5 and 20 respectively, then find the sum of the reciprocals of the numbers.

8) Solve the followings:-

a) What fraction of an hour is 35 minutes?

b) Write a fraction equivalent to $4/5$ with numerator 16.

9) Write three equivalent fraction for each of the following:-

- a) $3/7$ b) $300/900$

10) Reduce into the simplest form $225/500$.

SECTION – D

A) Word Problems.

1.a) if the product of two whole numbers is zero, can we say that one or both of will be zero? Justify through examples.

1.b) In an election , the successful candidate registered 675831 votes and his nearest rival secured 493534votes. By what margin did the successful candidate win the election?

2.a) Ramesh has 30 pencils, Sheelu had 50 pencils and Jamaal had 60 pencils. After 4 months, Ramesh used up 15 pencils, Sheelu used up 25 pencils and Jamaal used up 30 pencils. What fraction did each use up? Check if each has used up an equal fraction of her/ his pencils.

2.b) Apala typed 50 pages of a book containing 100 pages. Meenu typed 25 pages of the same book. Who typed more?

3.a) Deepika read 12 pages of a book containing 48 pages. Lalita read $2/5$ of the same book. Who read less?

3.b) Sanjay exercised for $3/6$ of an hour, while, Arpit exercised for $3/4$. Who exercised for a longer time?

4.a) Find the difference of place values two 6's in 65810624.

4.b) Express as given:

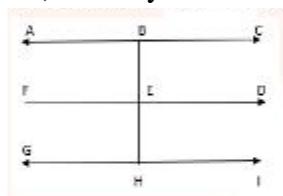
i) CDLXV as numeral

ii) 1984 as Roman numerals

5.a) How many degrees are there in between the clock hands when it displays 7o' clock.

5.b) Find the angles of a triangle which are in ratio 4:6:8.

6.a) Identify and name the line segments and rays.



6.b) Define the following with figures:

a) Curve and its types

b) Intersecting lines

c) Collinear points

d) Chord of a circle

7) Draw a rough diagrams of two angles such that they have

a) One point in common

b) Two points in common

c) Three points in common

d) Four point's in common

e) One ray in common

