

First Semester Examination-mathematics Marks: 40

- Please note:**
1. All sums must be done on composition sheets.
 2. On each side of the composition sheet mention your name, roll no., std., and div.
 3. Take clear picture of answer sheets and submit it as pdf.
 4. Rename your pdf as your 'Roll no name subject Sem.1'

(Example: 23 Akash Jain Math Sem.1)

Q.1) Fill in the blanks :- (write only the answers) [10]

- (a) If 5 represents height of 5m, then -5 represents _____
- (b) $-8 - (-8) =$ _____
- (c) $\frac{3}{4} \times 36 =$ _____
- (d) $\frac{5}{4} \times \frac{1}{2} \div \frac{4}{3} =$ _____
- (e) Convert into decimals : $\frac{987}{10^5} =$ _____
- (f) Convert to lowest term : $0.01395 =$ _____
- (g) $9y^2 - 9y + 2$ is a _____ (mention the type of polynomial)
- (h) Write the coefficient of :- xy in $\frac{-5}{7}xyz^2 =$ _____
- (i) _____ is a part of line as well as of a ray.
- (j) Surface may be _____ or _____

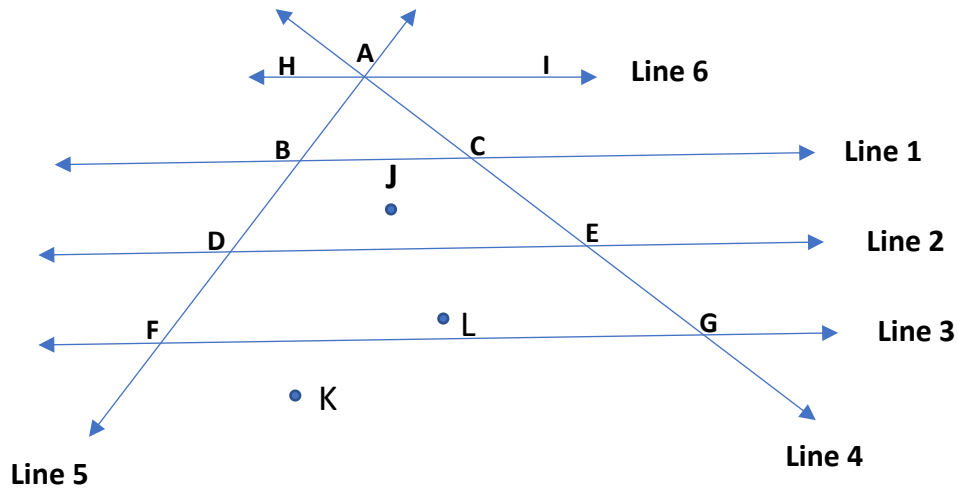
Q.2) [10]

(a) Simplify :- (4)

(i) $\frac{15}{8} \div \left(\frac{1}{3} \times \frac{9}{7}\right)$

(ii) $0.9 \times 0.69 \times 0.36$

(b) Use the figure and answer the questions given below: (6)



- (i) Pair of intersecting lines.
- (ii) Three collinear points on line AF.
- (iii) Point of intersection of line ED and AG.
- (iv) Name the line parallel to the line BC passing through point A.
- (v) Name the point of concurrence in the figure.
- (vi) What type of points are point J, point K and point L.

Q.3) Solve :- [10]

(i) $5.63 \times 0.5 - 82.8 \div 0.4$ (3)

(ii) $43.12 - (-350.895 + 393.12)$ (2)

(iii) Add 392cm to 53.62m giving answer in meter. (1)

(iv) Subtract 3.542kg from 4kg giving answer in gram. (1 ½)

(v) Add 2 and 4, represent the answer obtained on number line. (1)

(vi) Subtract -324 from -682 (1 ½)

Q.4)

[10]

(a) Do as directed: -

(6)

- (i) State the numeral coefficient of the term $9bc^2$.
- (ii) Add the terms $2bc^2$ and $9bc^2$.
- (iii) Subtract the term $3a^2$ from a^2 .
- (iv) Write the degree of the term $2a^2b^2$.
- (v) State the number of terms in the expression. $2bc^2+2b^2c-2a^2b^2$.
- (vi) Express in algebraic form: 5 times of 'a' is less than 9 times 'b'.

b) $\frac{3}{7}$ part of a price of computer which cost Rs. 49000/- was paid by Jashmin and the $\frac{2}{7}$ part was paid by Jash.

(4)

Rest of the amount was a Diwali discount. Calculate

- (i) Amount paid by Jash. (ii) Amount in excess paid by Jashmin?
- (iii) Amount of discount in rupees.

-----The End-----