

APPENDIX – C

First Draft of Achievement Test

Achievement Test

Name of the Student: _____

Name of the School: _____

Date: _____

Note: - Read the questions properly

- Number on the on the right side in bracket indicates total marks for each Question

Q.I Fill in the blanks by selecting the correct alternative from the options given on the right. (40)

1. Every line has atleast _____ distinct points. (0,1,2)

2. If $\overline{XY} = \overline{YZ}$ then Y _____ \overline{XZ} . (\subset , \in , \notin)

3. Exactly _____ lines can be determined by three distinct non-collinear points. (1,2,3)

4. If $P \in \overline{QR}$ then P, Q, R are _____. (equal, collinear, non-collinear)

5. Two distinct points P,Q are on both the lines ℓ_1 and ℓ_2 , then ℓ_1 _____ ℓ_2 . ($=$, \neq , \in)

6. If $P \in L$ & $Q \notin L$, then \overline{PQ} _____ L. ($=$, \neq , \subset)

7. Two distinct lines intersect in exactly one point. Then they are _____ lines. (parallel, non-parallel, same)

8. If $R \in \overline{PQ}$ & $S \notin \overline{PQ}$, then $\overline{PQ} \cap \overline{RS} =$ _____. ($\{S\}$, $\{P\}$, $\{R\}$)

9. For points P, Q, R , $PQ+QR$ _____ PR. ($=$, \leq , \geq)

10. For distinct collinear points P, Q & R if $RP+PQ=QR$, then _____. (P-Q-R, R-P-Q, R-Q-P)

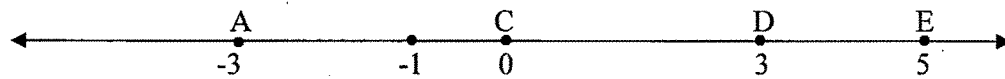
11. A & B are the end points of _____.
(\overleftrightarrow{AB} , \overrightarrow{AB} , \overline{AB})
12. Line-segments having equal lengths are called _____ line-segments.
(congruent, parallel, same)
13. If P-Q-R & _____ then Q is a midpoint of a line-segment \overline{PR} .
(PQ=PR, PR=QR, PQ=QR)
14. Every line-segment has _____ mid-point.
(0, 1, 2)
15. For D-E-F-G, $\overline{DE} \cap \overline{EG} =$ _____.
(\overline{DE} , \overline{FG} , \overline{EF})
16. For \overrightarrow{AB} , _____ is called the initial point.
(A, {A}, {B})
17. For \overrightarrow{PQ} , the ray extends infinitely towards _____.
(P, Q, nowhere)
18. \overline{AB} _____ \overrightarrow{AB} .
(\in , $=$, \subset)
19. $\overline{AB} \cup \{P/A-B-P\} =$ _____.
(\overline{PB} , \overrightarrow{BP} , \overline{AB})
20. For E-D-F, _____ will be the opposite rays.
(\overrightarrow{ED} & \overrightarrow{DF} , \overrightarrow{FD} & \overrightarrow{DE} , \overline{DE} & \overline{DF})
21. A _____ has a bisector.
(line, line-segment, ray)
22. If MN=PQ, then \overline{MN} _____ \overline{PQ} .
($=$, \subset , \cong)
23. Three non-collinear points determine _____ plane.
(more than two, two, one and only one)
24. For plane α , it contains atleast _____ non-collinear points.
(1, 2, 3)
25. If P & Q are points of plane α then \overrightarrow{PQ} _____ α .
(\in , $=$, \subset)
26. The intersection of two intersecting distinct planes is a _____.
(line, ray, plane)

27. Let X_1 & X_2 be two half planes formed by line l & plane α , then
 $X_1 \cap X_2 = \underline{\hspace{2cm}}$.
(X_1, l, ϕ)
28. If A & B are in the same half plane made by l then $\overline{AB} \cap l = \underline{\hspace{2cm}}$.
(A, ϕ, l)
29. For points P & Q and a plane X, $P \neq Q$ & $P, Q \in X$; $X \cap \overline{PQ} = \underline{\hspace{2cm}}$.
($\{P, Q\}, \text{Plane } X, \overline{PQ}$)
30. If three non-collinear points A, B, C are in plane X as well as in plane Y, then $\underline{\hspace{2cm}}$.
($X=Y, X \neq Y, X \subset Y$)
31. For an angle $\angle ABC$ if A-O-C, then O is in the $\underline{\hspace{2cm}}$ of $\angle ABC$.
(exterior, cross, interior)
32. If D is in the $\underline{\hspace{2cm}}$ of an angle $\angle ABC$, then \overline{BD} intersects \overline{AC} .
(interior, exterior, union)
33. An angle has $\underline{\hspace{2cm}}$ measure between 0 & 180.
(exactly one, more than one, no)
34. For point D in the interior of $\angle BAC$, $m\angle BAD + \underline{\hspace{2cm}} = m\angle BAC$.
($m\angle ACD, m\angle DAC, m\angle ADC$)
35. An angle has $\underline{\hspace{2cm}}$ bisector.
(one, two, no)
36. If two congruent angles are supplementary, then each of them is a $\underline{\hspace{2cm}}$ angle.
(right, acute, obtuse)
37. If one angle of a pair of supplementary angles is acute then the other is $\underline{\hspace{2cm}}$ angle.
(acute, right, obtuse)
38. The bisector of $\angle MON$ is \overline{OP} . If $m\angle MOP = 45^\circ$, then $\angle MOP$ is $\underline{\hspace{2cm}}$ to $\angle MON$.
(supplementary, obtuse, complementary)
39. If S is in the interior of $\angle PQR$ then point P is in the exterior of $\underline{\hspace{2cm}}$.
($\angle PQS, \angle SQR, \angle SPQ$)
40. Each of the angles from a pair of complementary angles is $\underline{\hspace{2cm}}$.
(obtuse, right, acute)

Q.II Look at the following figures and answer the respective questions:

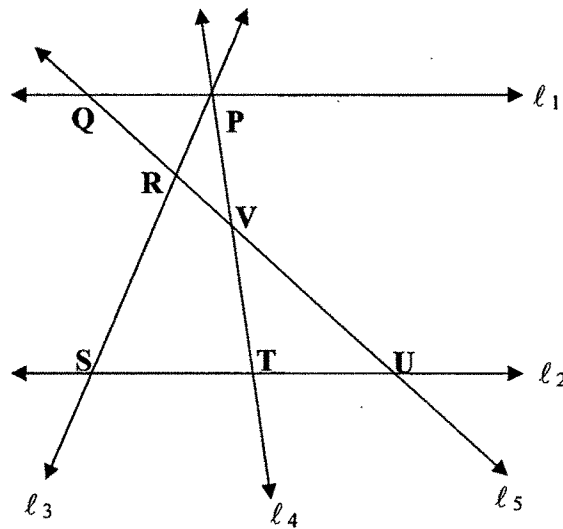
[A] Figure – 1

(05)

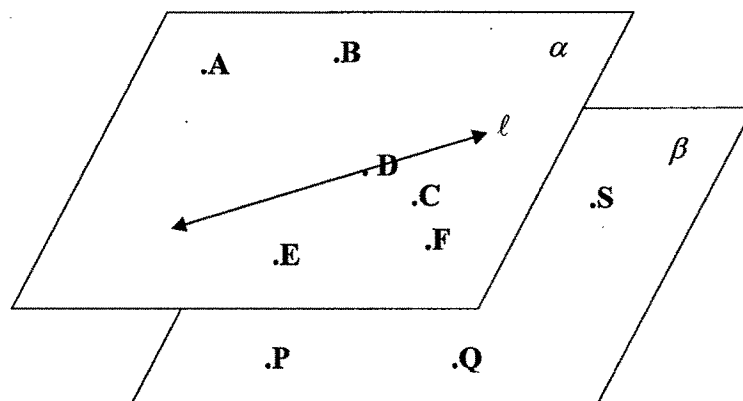


1. Is $\overline{AC} \cong \overline{CD}$? Ans. _____
2. What will be the number corresponding to the mid-point of \overline{BD} ? Ans. _____
3. What will be \overline{AE} ? Ans. _____
4. For the point F, if A-F-E and $\overline{AF} = 4$, then what will be the number corresponding to F? Ans. _____
5. For C-O-P-E, if $OP = 2 = PE$, then what will be CO? Ans. _____

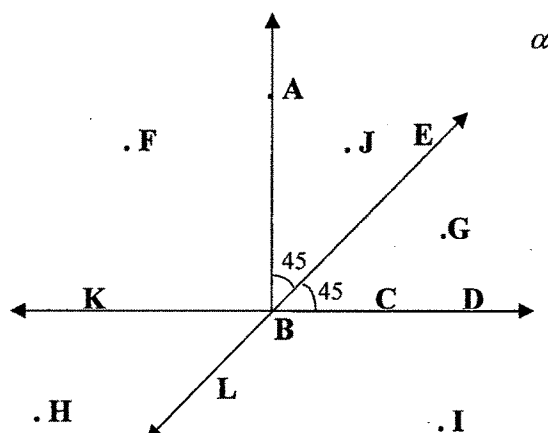
(15)



1. What is $l_1 \cap l_2$? Ans. _____
2. Which are the points on line l_4 ? Ans. _____
3. Which four points are collinear? Ans. _____
4. Which are the lines that intersect in P? Ans. _____
5. If $PT=9.5$ & $PV=3$, then what is VT ? Ans. _____
6. If T is a mid-point of \overline{SU} & numbers corresponding to S & U are -6 & 7 respectively, then what is the number corresponding to T? Ans. _____
7. Are lines \overleftrightarrow{QV} & \overleftrightarrow{ST} intersecting? Ans. _____
8. What is the intersection of \overleftrightarrow{RV} & \overleftrightarrow{UV} ? Ans. _____
9. What is $\overleftrightarrow{QV} \cap \overleftrightarrow{RU}$? Ans. _____
10. What is $\overleftrightarrow{PV} \cap \overleftrightarrow{TU}$? Ans. _____
11. What is the intersection of \overleftrightarrow{UQ} & \overleftrightarrow{TS} ? Ans. _____
12. What is the intersection of \overleftrightarrow{UV} & \overleftrightarrow{PQ} ? Ans. _____
13. Are \overleftrightarrow{RQ} & \overleftrightarrow{VU} opposite rays? Ans. _____
14. What is the intersection of line l_1 and \overleftrightarrow{QP} ? Ans. _____
15. What is $\overleftrightarrow{RS} \cap l_3$? Ans. _____



1. Which points are in the plane α ? Ans. _____
2. Are planes α & β parallel? Ans. _____
3. Of which plane is \overline{PS} subset? Ans. _____
4. Are \overline{AF} and l intersecting lines? Ans. _____
5. \overline{AC} & \overline{PQ} , are they coplanar or skew lines? Ans. _____
6. Mention the points of α lying in the same half planes? Ans. _____
7. Are \overline{AE} & \overline{QS} intersecting each other? Ans. _____
8. What is the intersection of planes α & β ? Ans. _____
9. Is l a subset of closed half plane of α ? Ans. _____
10. Is P, Q & S coplanar points? Ans. _____



1. Name the arms of $\angle ABC$? Ans. _____
2. List the points in the exterior of $\angle EBC$? Ans. _____
3. List the points in the interior of $\angle ABD$? Ans. _____
4. List the points on the $\angle ABD$? Ans. _____
5. Which rays will intersect \overline{AD} ? Ans. _____
6. Are $\angle ABC$ & $\angle BCA$ same? Ans. _____
7. Are $\angle ABE$ & $\angle EBA$ same? Ans. _____
8. Are $\angle ABK$ & $\angle KBL$ adjacent angles? Ans. _____
9. Which is the bisector of $\angle ABD$? Ans. _____
10. Which are the complementary angles?
Ans. _____
11. Are $\angle ABL$ & $\angle ABE$ supplementary angles? Ans. _____
12. Is $\angle ABD$ & $\angle ABL$ linear pair of angles? Ans. _____
13. Are $\angle EBD$ & $\angle KBL$ congruent angles? Ans. _____
14. Are $\angle EBA$ & $\angle LBD$ vertically opposite angles? Ans. _____
15. $\angle ABL$ is which type of angle? Ans. _____

Q.III: Represent each of the following by a figure:

(15)

1. $P \notin \overleftrightarrow{AB}$ but $Q \in \overleftrightarrow{BP}$.

2. $\overleftrightarrow{AB} = \overleftrightarrow{PQ}$, but $\overleftrightarrow{AB} \neq \overleftrightarrow{PR}$ & $S \in \overleftrightarrow{QR}$ & R-Q-S.

3. A-B-C, C-D-E, A-F-E, D-G-A.

4. $R \in \overleftrightarrow{PQ}$ & $S \notin \overleftrightarrow{PQ}$, $\overleftrightarrow{PQ} \cap \overleftrightarrow{RS} = \{R\}$.

5. For distinct lines ℓ_1, ℓ_2, ℓ_3 ; $\ell_1 \cap \ell_2 = \emptyset$ and $\ell_1 \cap \ell_3 = \{X\}$.

6. $\overrightarrow{AB} = \overrightarrow{CD} \neq \overrightarrow{CE}$.

7. X,Y and Z are collinear, l is a line, $X \notin l$, $Y \in l$, $Z \notin l$.

8. P,Q,R & P,S,T are non-collinear triplets; but P,Q,S & P,R,T are not.

9. $\overrightarrow{PQ} \subset \overrightarrow{AB} \neq \overrightarrow{PR}$.

10. A, O, B are 3 non-collinear points and $\overrightarrow{AO} \cap \overrightarrow{OB} = \{O\}$.

11. l_1, l_2 and l_3 are three distinct lines and $l_1 \cap l_2 \cap l_3 = \{P\}$.

12. $A \notin \overline{PQ}$ but $B \in \overline{AQ}$.

13. X, Y and Z are non-collinear points and l is a line, $X \in l, Y \in l$ and $Z \notin l$.

14. $\overline{RQ} \subset l_1$ and $S \in l_1, S-R-Q$.

15. $\overline{PQ} \cap l_1 \cap l_2 = \{P\}; Q \notin l_1, Q \notin l_2$.