APPENDIX – H
First Draft of Parallel Test

Achievement Test

Name of the Student:_____ Date: _____

Name of the School: _____ Division: _____

Note: - Read the questions properly

- Number on the on the right side 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. A line is determined by _____ distinct points.

(0,2,1)

2. If $\overrightarrow{AB} = \overrightarrow{BC}$ then B_____$\overrightarrow{AC}$.

$(\subset, \notin, \in)$

3. Three distinct non-collinear points determines exactly _____ lines.

(3,2,1)

4. If A$\in \overrightarrow{BC}$ then A,B,C are _____.

(equal, non-collinear, collinear)

5. Two distinct points A and B are on both the lines ℓ_1 and ℓ_2. So ℓ_1 ___ℓ_2.

$(=, \neq, \in)$

6. If A$\in \ell$ & B$\notin \ell$, then $\overrightarrow{AB}$ ___ℓ.

$(\subset, \neq, =)$

7. Two distinct intersecting lines are always _____ lines.

(parallel, non-parallel, same)

8. IF A$\in \overrightarrow{BC}$ & O$\notin \overrightarrow{BC}$, then $\overrightarrow{AO} \cap \overrightarrow{BC}$ = _____.

({C}, {A}, {B})

9. For points A, B, C , AB+BC _____ AC.

$(=, \leq, \geq)$

10. For distinct collinear points A, B & C if CA+AB=BC, then _____.

(A-B-C, C-A-B, C-B-A)

11. P & Q are the end points of _____.

$(\overrightarrow{PQ}, \overrightarrow{PQ}, \overline{PQ})$

12. Line-segments having equal lengths are called _____ line-segments.

(same, congruent, parallel)

13. If A-B-C & _____ then B is a midpoint of a line-segment $\overline{AC}$.

(AB=BC, AB=AC, AC=BC)

14. Every line-segment has _____ mid-point.

(2, 0, 2)

15. For A-B-C-D, $\overline{AC} \cap \overline{BD}$ = _____.

($\overline{AC}$, $\overline{BC}$, $\overline{BD}$)

16. For $\overrightarrow{PQ}$, _____ is called the initial point.

({P}, P, {Q})

17. For $\overrightarrow{AB}$, the ray extends infinitely towards _____.

(A, B, nowhere)

18. $\overline{PQ}$_____ $\overrightarrow{PQ}$.

(=, $\subset$, $\in$)

19. $\overline{RS} \cup$ {P/R-S-P} = _____.

($\overrightarrow{BP}$, $\overrightarrow{PB}$, $\overrightarrow{AB}$)

20. For P-Q-R, _____ will be the opposite rays.

($\overrightarrow{RQ}$&$\overrightarrow{QP}$, $\overrightarrow{QP}$&$\overrightarrow{QR}$, $\overrightarrow{PQ}$&$\overrightarrow{QR}$)

21. A _____ has a bisector.

(line, ray, line-segment)

22. If AB=CD, then $\overline{AB}$ __ $\overline{CD}$.

(=, $\cong$, $\subset$)

23. _____ non-collinear points determines one and only one plane.

(three, two, four)

24. A _____ contains atleast three non-collinear points.

(point, line, plane)

25. If A & B are points of plane α then $\overrightarrow{AB}$ ___ α. (=, $\subset$, $\in$)

26. Two intersecting distinct planes intersect in a _____.

(ray, plane, line)

27. Let Y_1 & Y_2 be two half planes formed by line ℓ & plane α, then $Y_1 \cap Y_2$ = _____. (Y_1, ϕ, ℓ)

28. If P & Q are in the same half plane made by ℓ then $\overline{PQ} \cap \ell$ = _____.

(ϕ, P, ℓ)

29. For points A & B and a plane Y, A≠B & A, B ∈ Y; Y∩ $\overleftrightarrow{AB}$ = _____.

(Plane Y, {A,B}, $\overleftrightarrow{AB}$)

30. If three non-collinear points P, Q, R are in plane X as well as in plane Y, then _____.

(P≠Q, P=Q, P⊂Q)

31. For an angle $\angle PQR$ if P-O-R, then O is in the _____ of $\angle PQR$.

(interior , exterior, cross)

32. If S is in the _____ of an angle $\angle PQR$, then $\overrightarrow{QS}$ intersects $\overline{PR}$.

(interior, exterior, intersection)

33. There _____ measure of an angle between 0 & 180.

(is exactly one, are more than one, is no)

34. For point D in the interior of $\angle PQR$, m$\angle PQD$ +_____ = m$\angle PQR$.

(m$\angle DQR$, m$\angle RQP$, m$\angle RDQ$)

35. An angle has _____ bisector.

(two, no, one)

36. For two supplementary angles, if they are congruent then each of them is a _____ angle.

(acute, right, obtuse)

37. If one angle of a pair of supplementary angles is obtuse then the other is _____ angle.

(right, acute, obtuse)

38. The bisector of $\angle ABC$ is $\overrightarrow{BO}$. If m$\angle ABO$ = 45°, then $\angle ABO$ is _____ to $\angle OBC$.

(complementary, obtuse, supplementary)

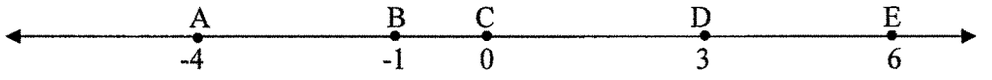
39. If O is in the interior of $\angle ABC$ then point A is in the exterior of _____.

($\angle OBC$, $\angle ABO$, $\angle ABC$)

40. For a pair of complementary angles, each of the angles is _____.

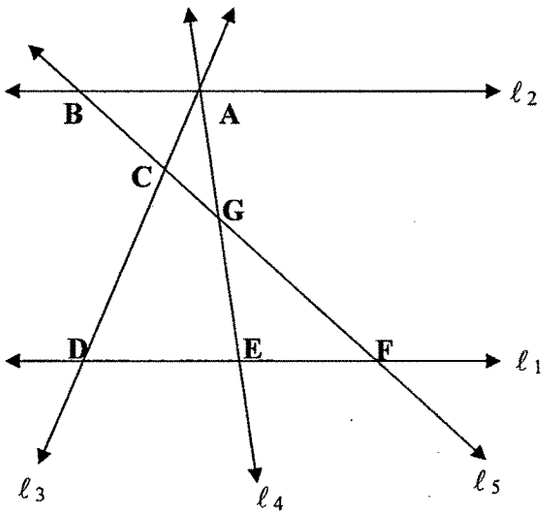
(obtuse, right, acute)

Q.II [A]
Look at the following figure of the number-line and answer the respective questions:
Figure – 1 (05)



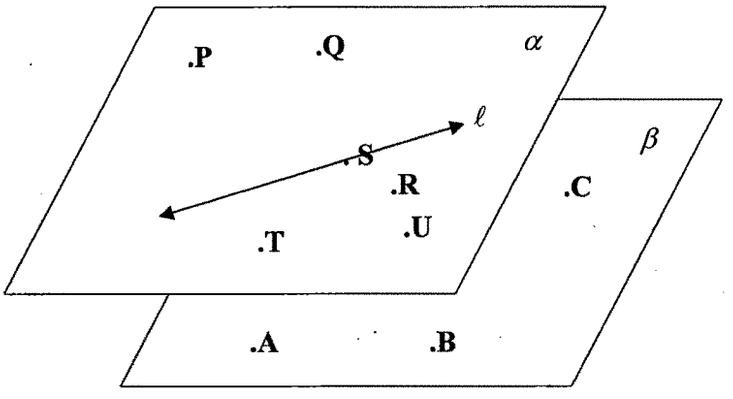
1. Is $\overline{AB} \cong \overline{CD}$? Ans. _____
2. What will be the number corresponding to the mid-point of $\overline{BD}$? Ans. _____
3. What will be AE? Ans. _____
4. For the point F, if A-F-E and AF=5, then what will be the number corresponding to F? Ans. _____
5. For C-O-P-E, if OP=2=PE,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

Q.II [B]
Look at the following figure and answer the respective questions:
Figure – 2 (15)



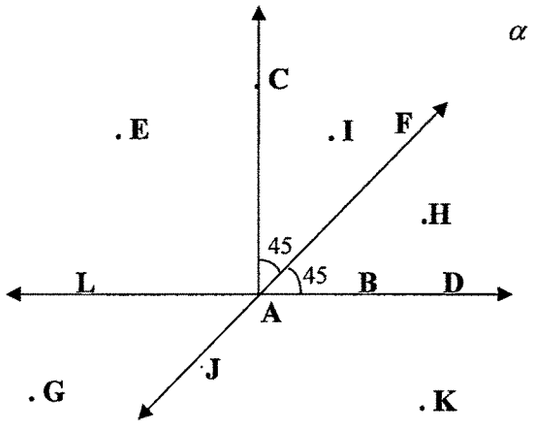
1. What is $\ell_1 \cap \ell_2$? Ans. _____
2. Which are the points on line ℓ_4? Ans. _____
3. Which four points are collinear? Ans. _____
4. Which are the lines that intersect in A? Ans. _____
5. If AE=6.5 & AG=3, then what is GE? Ans. _____
6. If E is a mid-point of $\overline{DF}$ & numbers corresponding to D & F on ℓ_2 are -3 & 7 respectively, then what is the number corresponding to T? Ans. _____
7. Are lines $\overleftrightarrow{BG}$ & $\overleftrightarrow{DE}$ intersecting? Ans. _____
8. What is the intersection of $\overline{CG}$ & $\overline{FG}$? Ans. _____
9. What is $\overline{BG} \cap \overline{CF}$? Ans. _____
10. What is $\overline{AG} \cap \overline{EF}$? Ans. _____
11. What is the intersection of $\overleftrightarrow{FB}$ & $\overleftrightarrow{ED}$? Ans. _____
12. What is the intersection of $\overleftrightarrow{FG}$ & $\overleftrightarrow{AB}$? Ans. _____
13. Are $\overrightarrow{CB}$ & $\overrightarrow{GF}$ opposite rays? Ans. _____
14. What is the intersection of line ℓ_2 and $\overleftrightarrow{BA}$? Ans. _____
15. What is $\overline{CD} \cap \ell_3$? Ans. _____

Q.II [C]
Look at the following figure and answer the respective questions:
Here α &β are parallel planes.
Figure – 3 (10)



1. Which all points are in the plane α ? Ans. _____
2. What is the intersection of the line ℓ and $\overleftrightarrow{AC}$? Ans. _____
3. Of which plane is $\overleftrightarrow{AC}$ subset? Ans. _____
4. Are $\overleftrightarrow{PU}$ and ℓ intersecting lines? Ans. _____
5. $\overleftrightarrow{AC}$ &$\overleftrightarrow{PQ}$, are they coplanar or skew lines? Ans. _____
6. Mention the points of α lying in the same half plane?
   Ans. _____
7. Are $\overleftrightarrow{PT}$ &$\overleftrightarrow{BC}$ 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. Are A, B & C coplanar points? Ans. _____

Q.II [D]
Look at the following figure and answer the respective questions:
Figure – 4 (15)



1. Name the arms of ∠DAB Ans. _____
2. List the points in the exterior of ∠FAB? Ans. _____
3. List the points in the interior of ∠DAC? Ans. _____
4. List the points on the ∠DAC? Ans. _____
5. Which rays will intersect $\overline{DC}$? Ans. _____
6. Are ∠DAB & ∠ABD same? Ans. _____
7. Are ∠DAF & ∠FAD same? Ans. _____
8. Are ∠DAL & ∠LAJ adjacent angles? Ans. _____
9. Which is the bisector of ∠DAC? Ans. _____
10. Which is the complementary angle to an ∠DAF? Ans. _____
11. Are ∠DAJ & ∠DAF supplementary angles? Ans. _____
12. Is ∠DAC & ∠DAJ a linear pair of angles? Ans. _____
13. Are ∠FAC & ∠LAJ congruent angles? Ans. _____
14. Are ∠FAD & ∠JAC vertically opposite angles? Ans. _____
15. ∠DAJ is which type of angle? Ans. _____

Q.III: Represent each of the following by a figure: (15)

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

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

3. P-Q-R, R-S-O, P-T-O, S-U-P.

4. O$\in \overleftrightarrow{PQ}$ & R$\notin \overleftrightarrow{PQ}$, $\overleftrightarrow{PQ} \cap \overleftrightarrow{OR} = \{R\}$.

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

6. $\overleftrightarrow{PQ} = \overleftrightarrow{RS} \neq \overleftrightarrow{RO}$.

7. A, B and C are collinear, ℓ is a line, $B \notin \ell$, $A \in \ell$, $C \notin \ell$.

8. A,B,C & A,D,E are non-collinear triplets; but A,B,D & A,C,E are collinear points.

9. $\overline{AB} \subset \overleftrightarrow{PQ} \neq \overleftrightarrow{AC}$.

10. P, O, Q are 3 non-collinear points and $\overleftrightarrow{PO} \cap \overleftrightarrow{OQ} = \{O\}$.

11. ℓ_1, ℓ_2 and ℓ_3 are three distinct lines and $\ell_1 \cap \ell_2 \cap \ell_3 = \{O\}$.

12. B$\notin \overrightarrow{PQ}$ but A$\in \overrightarrow{BQ}$.

13. A,B and C are non-collinear points and ℓ is a line, A$\in \ell$, B$\in \ell$ and C$\notin \ell$.

14. $\overrightarrow{PQ} \subset \ell_1$ and R$\in \ell_1$, R-P-Q.

15. $\overrightarrow{AB} \cap \ell_1 \cap \ell_2 = \{A\}$; B $\notin \ell_1$, B $\notin \ell_2$.