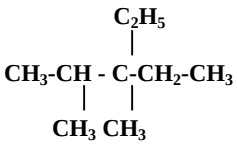
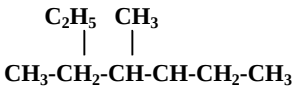
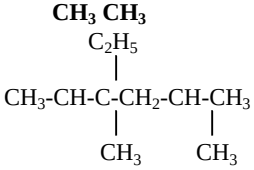
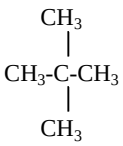
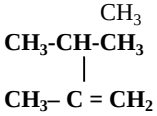
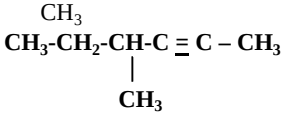
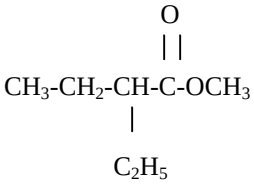
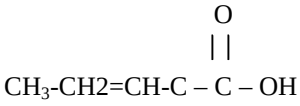
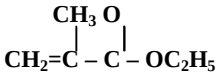
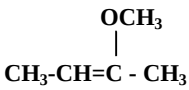
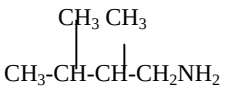
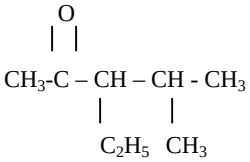
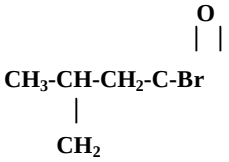
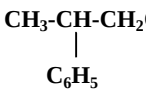
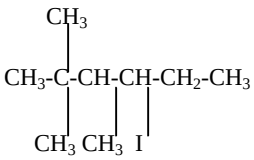
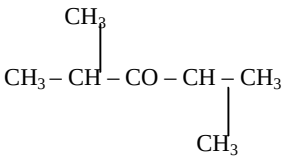
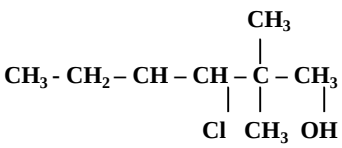
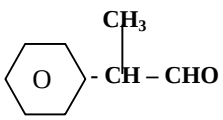
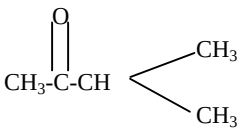
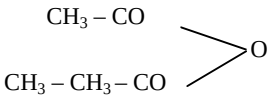
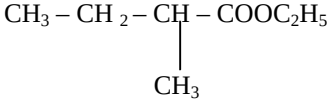
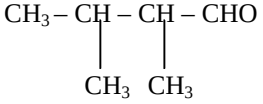
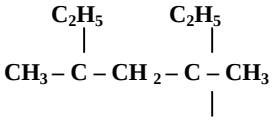
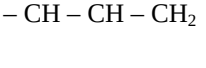
CLASS – XI CHEMISTRY ORGANIC CHEMISTRY

ASSIGNMENT NO. 8

Q1. Give IUPAC name of the followings:-

1. $CH_3CH_2CH = CH_2$
2. $CH_3C \equiv C - CH_3$
3. $CH_3 - \underset{\displaystyle I}{\underset{|}{CH}} - CH_3$
4. CH_3CH_2-O-CH_2-CH_3
5. CH_3-CH_2-CH_2-COOH
6. CH_3-CH_2-CH_2-CHO
7. CH_3COCH_2-CH_2-CH_3
8. $CH_3CH_2CH_2COCL$
9. $CH_3 - CONH_2$
10. $CH_3COOC_2H_5$
11. CH_3CH_2-NO_2
12. $CH_3CH_2CH_2CN$
13. 
14. 
15. 
16. 
17. 
18. 
19. 
20. 
21. 
22. 
23. 
24. 
25. 
26. 
27. $(CH_3CH_2)_3COH$
28. 
29. 
30. 
31. 
32. 
33. 
34. 
35. 
36. 
37. CH_3-C$\equiv$C – CO – CH_2 – CH_3
38. 

| | |
OH OH OH

Br

39. **$CH_3 – CH – CH – CH_2OH$**
OH C_2H_5

40. $CH_3 – C – C – CH_3$
O O

41. CH_2=CH-CH=CH_3

42. $CH_2 – CH_2 – CH_2$ – CN
COOH COOH
– CN

43. CH_2-CH=CH-CHO
CHO

44. CH_2
CH_2

45. **$CH_2 – CH – CH_2 – CH_2$**
NH_2 CH_3 NH_2

46. $CH_2 – CH – CH_2$
Cl Cl

47. CH_3
$CH_3 – CH – CH – CH – C – CH_3$
OH CH_3 OH
CH_3

48. HOOC – CH = CH – COOH

49. COOH
HOOC – CH_2 – CH – CH_2 – CH – CH_2COOH

50. **CH_3**
CH_3 – C – C – CH_3
OH O

51. COOH COOH
HOOC – CH_2 – CH – CH_2 – CH – CH_2COOH

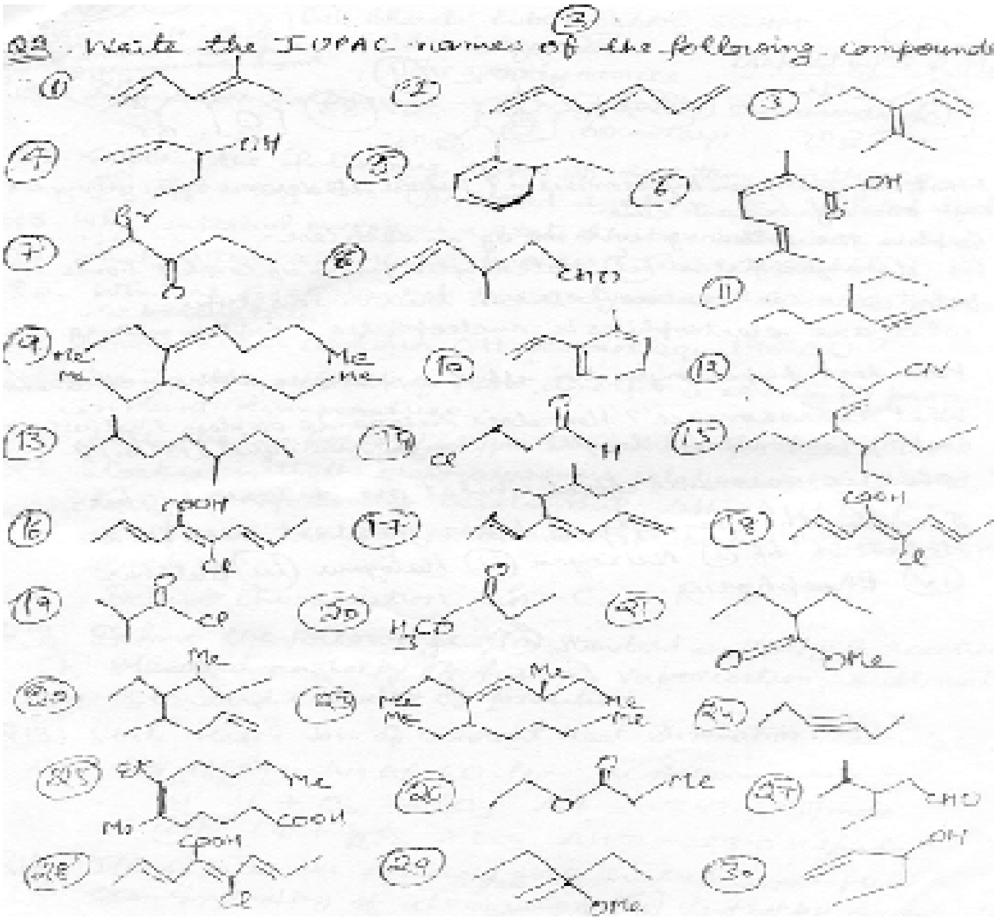
52. Br-CH_2-CH_2-CH_2-CH_2-CH_2-I

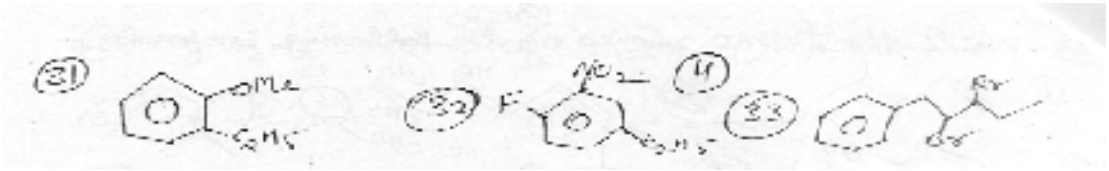
53. OCH_3
CH_3 – CH – CHO

54. CH_3
CH_2 = C – $COOCH_3$

55. HO – CH – COOH
HO – CH – COOH

56. OH
CH_3 – CH – COOH





Q3. What do you mean by isomerism? Discuss its various types giving at least one e.g. in each case.
Q4. Explain the following with one e.g. in each case: - (i) Hemolytic Fission (ii) Heterolytic fission of covalent bonds
Q5. What are carbocations? Discuss their various types.
Q6. What are electrophiles & nucleophiles? Explain with e.g.
Q7. How does hyper conjugation effect explain the stability of alkenes?
Q8. What is resonance? How does resonance explain that all carbon-carbon bond lengths in benzene are equal (139 pm)?
Q9. What is resonance effect? What are its various types?
Q10. Describe chemistry of Lassaigne's test used for the detection of (i) Nitrogen (ii) Halogens (iii) Sulphur (iv) Phosphorus.