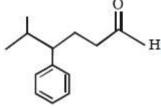
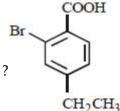
71. Identify the correct IUPAC name of the compound given below



- (1) 4 benzyl 5 methyl hexanal
- (2) 2 methyl 3 phenyl hexanal
- (3) 5 isopropyl 5 phenyl butanal
- (4) 5 methyl 4 phenyl hexanal
- 72. Which of the following is the IUPAC name of the compound



- (1) o bromo m Chlorobenzaldehyde
- (2) 2 bromo 5 Chlorobenzene carbaldehyde
- (3) 6 bromo 3 Chlorobenzaldehyde
- (4) 1 bromo 4 Chlorobenzaldehyde



- 73. What is the IUPAC name of the following compound?
 - (1) 6 bromo 4 ethylbenzene carboxylic acid
 - (2) 2 bromo 4 ethylbenzene carboxylic acid
 - (3) Ortho bromo paraethyl benzoic acid (4) 4 bromo 3 ethyl benzoic acid
- 74. The C-H bond length is minimum in the bond formed by
 - (1) *sp-s* overlapping (as in alkynes)
- (2) sp^2 -s overlapping (as in alkenes)
- (3) sp^3 -s overlapping (as in alkanes)
- (4) All are same
- 75. Which of the following has the shortest C C bond length?
 - $(1)C_2H_5OH$
- $(2) C_2 H_6$
- $(3) C_2 H_2$
- $(4) C_2 H_4$
- 76. In which of the compounds given below there is more than one kind of hybridization (sp, sp², sp³) for carbon ?
 - (i) CH₃CH₂CH₂CH₃

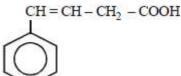
(ii) $CH_3CH = CHCH_3$

(iii) $CH_2 = CH - CH = CH_2$

(iv) $H - C \equiv C - H$

- (1) (ii)
- (2) (iii) and (iv)
- (3) (i) and (iv)
- (4) (ii) and (iii)

77. The type of hybridizations exhibited by carbons in



- (1) sp^3 and sp
- (2) sp^2 only
- (3) sp^3 and sp^2
- (4) sp^3 , sp^2 and sp

are

78. Which of the following carbon atoms is most electronegative?

$$III \quad II \quad CH_3 - CH_2 - C \equiv CH$$

(1) I

(2) II

(3) III

(4) All are equally electronegative



- 79. The compound in which $\stackrel{x}{C}$ uses its sp³ hybrid orbitals for bond formation is
 - (1) _HCOOH
- $(2) (H_2 N)_2 \overset{X}{C}O$
- $(3)(CH_3)_3COH$
- (4) CH₃CHO
- The correct IUPAC name of the following compound is $O=CH-CH_2-CH-CHO$ H-C=O
 - (1) 1,1-diformyl propanal

(2) 3-formyl butanedial

(3) 2-butanedial

(4) 1, 1,2-ethane tricarbaldehyde