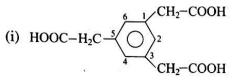
# Subjective Type

### 1. Give IUPAC name for each of the following:



(iii) 
$$\left(\begin{array}{c} \\ \\ \\ \end{array}\right)$$
  $\left(\begin{array}{c} \\ \\ \\ \end{array}\right)$   $\left(\begin{array}{c$ 

(iv) 
$$\langle CH \rangle = CHC$$

$$\begin{array}{c}
CH_2\\
CH_3-C-COOC_2H_5\\
\end{array}$$
(vi)

(vii) 
$$C-OC_2H_5$$
 COOH

 $C-C_2H_5$  (viii)  $C-C$ 

$$(ix) \bigcirc COOCH_3$$

$$(ix) \bigcirc COOCH_3$$

$$OH \bigcirc OCOCH_3$$

SO<sub>3</sub>H

(xi)

- 2. Draw the structures for each of the following:
  - (i) 1,2,4-trimethyl benzene
  - (ii) 1,3,5-triphenyl benzene
  - (iii) 2-phenyl butane
  - (iv) 5-chloro-3-ethyl-1,2-dimethyl naphthalene
  - (v) 2,3-dimethyl-5-phenyl-1,3,5-octatriene
  - (vi) 2,3-dichlorotoluene
  - (vii) 1,2-diethyl benzene
  - (viii) 2,7-dimethyl naphthalene
  - (ix) Styrene
  - (x) 1,2-dimethylbutyl benzene

# Single Correct Answer Type

#### 3. Which of the following is called picric acid?

(b) CCl<sub>3</sub>-COOH

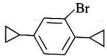
(c) 
$$O_2N$$
  $O_2$   $O_2N$   $O_2$ 

(d) None of these

4. Gammaxene is

(a) 
$$Cl$$
  $Cl$  (b) 666

- (c) Both (a) and (b)
- (d) None of these
- 5. IUPAC name of succinic acid is
  - (a) Butanedioic acid
- (b) Oxalic acid
- (c) Propanedioic
- (d) None of these
- 6. What is the correct IUPAC name of the following compound?



- (a) 1-bromo-5-cyclobutyl-2-cyclopropyl benzene
- (b) 2-bromo-4-cyclobutyl-1-cyclopropyl benzene
- (c) 3-bromo-1-cyclobutyl-4-cyclopropyl benzene
- (d) 1-bromo-2-cyclopropyl-5-cyclobutyl benzene

- 7. The formula of DDT is
  - (a) CI CI CI CI CI CI CI CI CI
  - (p) CI CI CH CI
  - (c) CCl<sub>3</sub>-CH-Cl
  - (d) CCl<sub>3</sub>-CH-Cl
- 8. OH is called OH
  - (a) Anthranilic acid
- (b) Sulphanilic acid
- (c) Both (a) and (b)
- (d) None of these
- 9. The correct name of I Cl is
  - (a) 1-Bromo-6-chloro-2-fluoro-4-iodobenzene
  - (b) 1-Bromo-2-chloro-6-fluoro-4-iodobenzene
  - (c) 2-Bromo-1-chloro-3-fluoro-5-iodobenzene
  - (d) 2-Bromo-3-chloro-1-fluoro-5-iodobenzene
- 10. The IUPAC name of the compound is

- (a) Ethyl 2-(chlorocarbonyl) benzoate
- (b) Ethyl 2-(chloromethanoyl) benzoate
- (c) Ethyl-2-(chloroformyl) benzoate
- (d) 2-(Ethoxycarbonyl) benzyl chloride
- 11. The IUPAC name of the compound

- (a) 4-(Benzoylamino)-6-nitrobenzoic acid
- (b) 4-Benzenecarboxamide-6-nitrobenzoic acid
- (c) 4-(Benzoylamino)-2-nitrobenzoic acid
- (d) 4-(Benzamido)-2-nitrobenzoic acid
- 12. What is the name of the following compound?

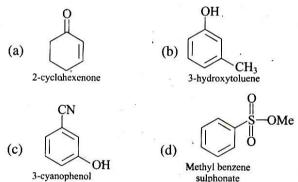
- (a) 3-(cyclohexanecarboxamido)-2 hydroxy-6-sulphobenzoic acid
- (b) 2-Carboxy-4 (cyclohexanecarboxamido)-3-hydroxybenzene sulphonic acid
- (c) 5-(cyclohexanecarboxamido)-6-hydroxy-2sulphobenzoic acid
- (d) None of the above
- 13. Write the IUPAC name of the following compound.

$$\bigcirc$$
 CO-NH- $\bigcirc$  SO<sub>3</sub>H

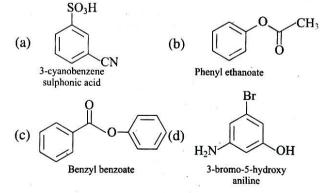
- (a) 4-(benzene carboxamide)-6-nitrobenzene sulphonic acid
- (b) 4-(benzoylamino)-6-nitrobenzene sulphonic acid
- (c) 4-(benzoylamino)-2-nitrobenzene sulphonic acid
- (d) 4-(benzamido)-6-nitrobenzene sulphonic acid

# Multiple Correct Answers Type

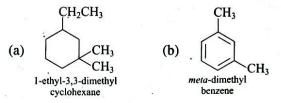
14. Which of the following compounds and their IUPAC names are correctly matched?



**15.** Which of the following compounds and their IUPAC name are wrongly matched?



**16.** Which of the following compound(s) and their IUPAC name is/are wrongly matched?



17. Which of the following compounds and their names are correctly matched?

- **18.** Which of the following names are incorrect according to IUPAC?
  - (a) Propadiene
- (b) Butadiene
- (c) Butanedione
- (d) Propanediol

### Matching Column Type

19. Match List I with List II and select the correct answer using code given below the lists.

List I (Name)	List II (Formula)
A. Pyrogallol	1. ОН
B. Phloroglucinol	2. ОН ОН
C. Catechol	3. OH OH OH
D. Resorcinol	4. OH OH

#### Codes:

	Α	В	C	D
(a)	1	2	3	4
(b)	3	1	2	4
(c)	3	2	. 1	4
(d)	1	2	. 3	4

20. Match the following compound with their IUPAC name:

Column I	Column II
р. СООН	w. 3[2-(2-Oxoethyl)phenyl] propanoic acid
q. CH <sub>2</sub> —COOH	x. 2-[2-(3-Oxopropyl) phenyl]ethanoic acid
r. CH <sub>2</sub> CH <sub>2</sub> COOH	y. 2-(2-Formylphenyl) ethanoic acid
s. CH <sub>2</sub> -COOH CH <sub>2</sub> CH <sub>2</sub> CHO	z. 2-Formylbenzenecar- boxylic acid

# Integer Type

- 21. How many different IUPAC names can be assigned to compound with molecular formula C<sub>7</sub>H<sub>8</sub>O with a phenyl ring along its compounds?
- 22. In 3-formyl-2-methyl benzoic acid, what is the maximum number of hydrogen atoms which may lies in one single plane?
- **23.** How many different IUPAC names can be assigned to a hydroxyl substituted benzene dicarbonitrile?

## Comprehension Type

An aromatic compound has one cyanide and two chloride groups on benzene ring. In IUPAC system, cyanide has higher priority than chloride group, therefore determine suffix of parent name of the compound.

- 24. How many different IUPAC names can be assigned to the above mentioned compound?
  - (a) 2
- (b) 3
- (c) 4
- (d) 6
- 25. What is IUPAC name of the compound above which is most polar?
  - (a) 2,3-dichlorobenzonitrile
  - (b) 2,4-dichlorobenzonitrile
  - (c) 2,6-dichlorobenzonitrile
  - (d) 3,4-dichlorobenzonitrile
- 26. Which IUPAC name of the compound above is least polar?
  - (a) 2,3-dichlorobenzonitrile
  - (b) 2,5-dichlorobenzonitrile
  - (c) 3,4-dichlorobenzonitrile
  - (d) 3,5-dichlorobenzonitrile

### Single Correct Answer Type

**3.** (c)

**4.** (c) **9.** (c)

5. (a) **10.** (a)

**6.** (b) 11. (c)

7. (d) **12.** (b)

**8.** (a)

**13.** (c)

Multiple Correct Answers Type

**14.** (a, d)

**15.** (c, d)

**16.** (a)

17. (c, d)

**18.** (b, d)

**Matching Column Type** 

**19.** (b)  $(A \to 3)$ ,  $(B \to 1)$ ,  $(C \to 2)$ ,  $(D \to 4)$ 

**20.**  $(p \rightarrow z)$ ,  $(q \rightarrow y)$ ,  $(r \rightarrow w)$ ,  $(s \rightarrow x)$ 

Integer Type

**21.** (5)

**22.** (4)

**23.** (6)

Comprehension Type

**24.** (d)

**25.** (c)

**26.** (d)