KD EDUCATION ACADEMY (9582701166)

Time : 5 Hour STD 11 Science chemistry Total Marks : 800 kd 700+ neet ch-8 organic chemistry nomenclature of organic compound part-1

* Chemistry [800]

1. Match List-II with List-II.

List- <i>I</i> (Molecule)	List- II . (Number and types of bond/s between two carbon atoms)
A. ethane	$I.$ one σ -bond and two π -bonds
	$II.$ two π -bonds
C . carbon molecule, C_2	III . one σ -bond
D. ethyne	IV . one σ -bond and one π -bond

Choose the correct answer from the options given below:

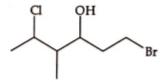
(A)
$$A - IV, B - III, C - II, D - I$$

(B)
$$A - III, B - IV, C - II, D - I$$

(C)
$$A-III, B-IV, C-I, D-II$$

(D)
$$A-I, B-IV, C-II, D-III$$

2. The correct *IUPAC* name of the following compound is



- (A) 6-bromo-2-chloro-4-methylhexan-4-ol
- (B) 1-bromo-4-methyl-5-chlorohexan-3-ol
- (C) 6-bromo-4-methyl-2-chlorohexan-4-ol
- (D) 1-bromo-5-chloro-4-methylhexan-3-ol
- 3. How many (i) sp^2 hybridised carbon atoms and (ii) π bonds are present in the following compound?

(A) 8,5

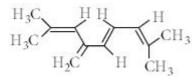
(B) 7,5

(C) 8,6

- (D) 7,6
- 4. Which of the following molecules represents the order of hybridisation sp^2, sp^2, sp, sp from left to right atoms ?

(A)
$$HC \equiv C - C \equiv CH$$

- (B) $CH_2 = CH C \equiv CH$
- (C) $CH_2 = CH CH = CH_2$
- (D) $CH_3 CH = CH CH_3$
- 5. The total number of π bond electrons in the following structure is



(A) 12

(B) 16

(C) 4

- (D) 8
- 6. Structure of the compound whose IUPAC name is 3-Ethyl-2-hydroxy -4-methylhex-3-en-5-ynoic acid is
 - (A)
 - ОН
- (B)
- СООН
- (C)
- ОН
- (D) OH COOH

7. The radical, (image) is aromatic because it has

$$\sim$$
 CH₂

- (A) 7p-orbitals and 7 unpaired electrons
- (B) 6p-orbitals and 7 unpaired electrons
- (C) 6p-orbitals and 6 unpaired electrons
- (D) 7p-orbitals and 6 unpaired electrons.
- 8. The *IUPAC* name of (figure) is



- (A) 1,3- Dimethyl phenol
- (B) 1- Hydroxy -2-6- dimethyl benzene
- (C) 2,6- Dimethyl benzenol
- (D) 2- Hydroxy -1-3- dimethyl benzene
- 9. The IUPAC name of (figure) is

- (A) 2— Carboxyphenol
- (B) 2- Hydroxybenzoic acid

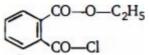
- (C) 1- Carboxy -2- hydroxybenzene
- (D) 2- Carboxy -1- hydroxybenzene
- 10. The *IUPAC* name of (figure) is



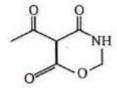
- (A) 2— Phenyl ethanone
- (B) 1 Phenyl ethanone
- (C) 1- (Oxoethyl)benzene
- (D) 1- (Ethyaloxo)-benzene
- 11. The *IUPAC* name of (figure) is

- (A) Ethanoic propanoic anhydride
- (B) Propanoic ethanoic anhydride
- (C) 1 Ethanoyloxypropanone
- (D) 3- Ethanoyloxypropan -3- one
- 12. The IUPAC name of the compound is

- (A) trans 2- chloro -3- iodo -2- pentene
- (B) cis-2- chloro -3- iodo -2- pentene
- (C) trans 3 iodo 4 chloro 3 pentene
- (D) cis-3- iodo -4- chloro -3- pentene
- 13. Write the IUPAC name of the following compound

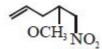


- (A) ethyl -2- (chlorocarbonyl) benzoate
- (B) ethyl -2 (chloro carbonyl) hexanoate
- (C) 2- (thoxycarbonyl) benzoyl chloride
- (D) None of these
- 14. Identify which functional group is Not present in the given following compound ?



- (A) Ketone
- (B) Ester
- (C) Amide
- (D) Ether

15. has correct *IUPAC* name



- (A) 5 -Nitro- 4 -Methoxy- 1 -Pentene
- (B) 1 -Nitro- 2 -Methoxy- 4 -Pentene
- (C) 4 -Methoxy- 5 -Nitro- 1 -Pentene
- (D) 2 -Methoxy- 1 -Nitro- 4 -Pentene
- 16. According to CIP rule, the correct arrangement in order of decreasing priority is

(A)
$$-OH > -CH_2OH > -CHO > -COOH$$

(B)
$$-OH > -COOH > -CHO > -CH_2OH$$

(C)
$$-COOH > -OH - CHO > CH_2OH$$

(D)
$$-COOH > -CHO > -CH_2OH > -OH$$

- 17. *IUPAC* name of succinic acid is
 - (A) Butane -1, 4 dioic acid

(B) Propane -1, 3- dioic acid

(C) Ethane -1, 2- dioic acid

- (D) Pentane -1, 5- dioic acid
- 18. According to *CIP* sequence rule, the correct arrangement in order of decreasing priority is :-

(A)
$$-OH > -CH_2 - OH > -CHO > -COOH$$

(B)
$$-OH > -COOH > -CHO > -CH_2 - OH$$

(C)
$$-COOH > -OH > -CHO > -CH_2 - OH$$

(D)
$$-COOH > -CHO > -CH_2 - OH > -OH$$

19. The *IUPAC* name of given is :

$$CH_3(CH_2)_4$$
 $C=C$
 H
 $C=C$
 CH_2
 $C=C$
 H

- (A) cis-cis-9,12- octadecandienoic acid
- (B) cis-trans-9,12- octadecan dienoic acid
- (C) $9{,}10-$ octa decadienoic acid
- (D) 9,14- octa decadienoic acid

- 20. A substance containing an equal number of primary, secondary and tertiary carbon atoms is:
 - (A) Mesityl Oxide
- (B) Mesitylene
- (C) Maleic acid
- (D) Malonic acid

21. The IUPAC name of the following structure is

 $[CH_3CH(CH_3)]_2 C(CH_2CH_3)C(CH_3)C(CH_2CH_3)_2$

- (A) 3.5- diethyl-4.6-dimethyl-5-[1-methylethyl]-3- heptene
- (B) 3.5- diethyl-5-isopropyl-4.6- dimethyl-2- heptene
- (C) 3.5- diethyl -5- propyl -4.6- dimethyl -3- heptene
- (D) None of these
- 22. The IUPAC name of the compound $Br(Cl)CI \cdot CF_3$ is :
 - (A) 2-bromo-2-chloro-2-iodo 1,1,1- trifluoroethane
 - (B) 1,1,1- trifluoro -2- bromo -2- chloro -2- iodo ethane
 - (C) 2- bromo -2- chloro -1,1,1- trifluoro -2- iodo ethane
 - (D) 1-bromo-1-chloro-1-iodo-2, 2, 2-trifloro ethane
- 23. The *IUPAC* name of the given compound is :

- (A) 1,1- dimethyl -3- hydroxy cyclohexane
- (B) 3,3- dimethyl -1- hydroxy cyclohexane
- (C) 3,3- dimethyl -1- cyclohexanol
- (D) 1,1- dimethyl -3- cyclohexanol
- 24. The correct IUPAC name of 2-ethyl-3-pentyne is :
 - (A) 3-methyl hexyne-4

(B) 4-ethyl pentyne-2

(C) 4-methyl hexyne-2

- (D) None of these
- 25. Which of the following is the first member of ester homologous series?
 - (A) Ethyl ethanoate

(B) Methyl ethanoate

(C) Methyl methanoate

- (D) Ethyl methanoate
- 26. IUPAC name of $CH_3 CH = CH C \equiv CH$ is
 - (A) Pent -2 en -4 yne
 - (B) Pent -3– en -1– yne
 - (C) Pent -3- yne -1- en
 - (D) Pent -2 yne -1 en
- 27. The IUPAC name of crotonaldehyde is
 - (A) Prop -2- ene -1- al

(B) Propenal

- (D) Butenal
- 28. The IUPAC name of the compound having the formula $Cl_3C.CH_2CHO$ is
 - (A) 3,3,3- trichloropropanal
 - (B) 1,1,1- trichloropropanal
 - (C) 2,2,2- trichloropropanal
 - (D) Chloral
- 29. The *IUPAC* name of is

$$CH_{3}-C=C-CH-CH_{2}-C\equiv CH$$

- (A) 6- chloro -4- ethyl -5- methyl-hept -5- en -1- yne
- (B) 6- chloro -4- ethyl -5- methyl-hept -1- yn -5- ene
- (C) 2- chloro -4- ethyl -3- methyl-hept -2- en -6- yne
- (D) 2- chloro -4- ethyl -3- methyl-hept -6- yn -2- ene
- 30. Which is the correct structure of the compound 3- hexyn -1- oic acid

(A)
$$CH_3 - CH_2 - CH_2 - C \equiv C - COOH$$

(B)
$$CH_3 - CH_2 - C \equiv C - CH_2 - COOH$$

(C)
$$CH_3 - C \equiv C - CH_2 - CH_2 - COOH$$

(D)
$$CH_3 - CH_2 - CH = CH - CH_2 - COOH$$

- 31. The IUPAC name of CH_3CH_2COCl is
 - (A) Propanoyl chloride

(B) Ethanoyl chloride

(C) Acetyl chloride

- (D) Chloroethane
- 32. The IUPAC name of $CH_2 = CH CH_2Cl$ is
 - (A) Allyl chloride

(B) 1- chloro -3- propene

(C) Vinyl chloride

- (D) 3- chloro -1- propene
- 33. The IUPAC name of $CH_3-CH_2CH=CCH_2OH$ will be CH_3
 - (A) 2- methyl pentyl alcohol
 - (B) 4- methyl -3- pentene-ol
 - (C) 2- methyl pent -2- ene -1- ol
 - (D) 4- methyl pentyl alcohol
- 34.

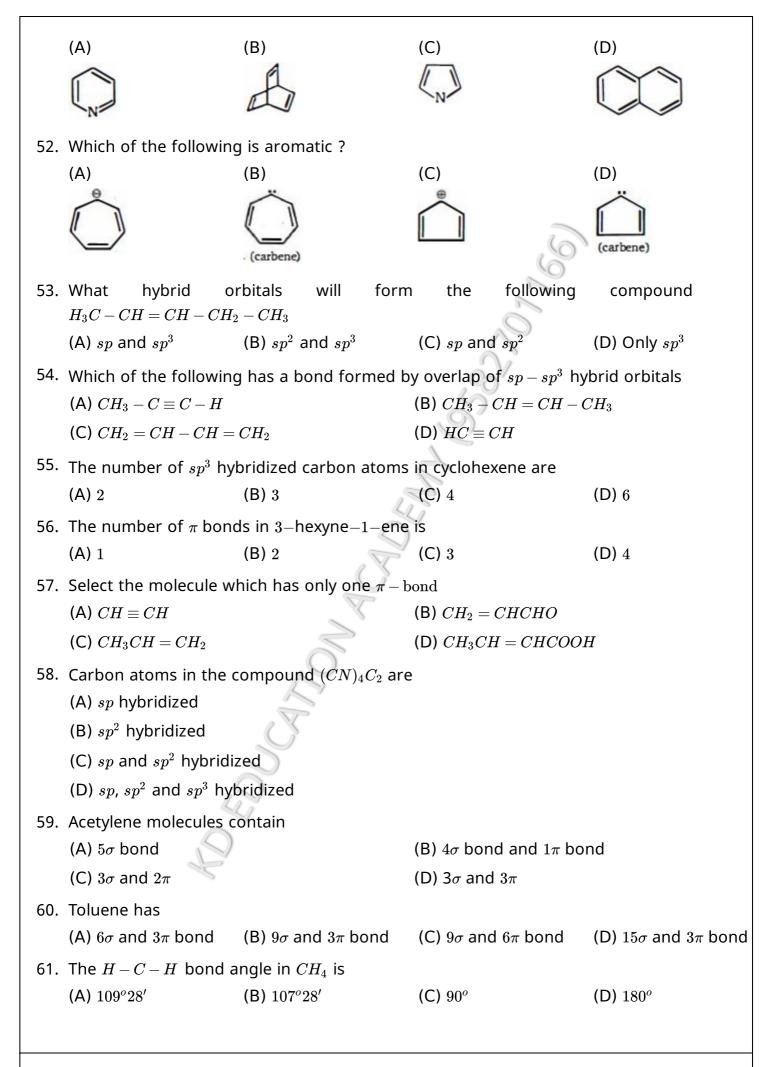
What is the correct IUPAC name for $CH_3-\stackrel{H}{\stackrel{|}{C}}-CH=CH-CH_2-\stackrel{O}{\stackrel{|}{C}}-OH$

(A) 5- methyl -3- hexenoic acid

(B) 5- carboxyl -2- methylpentene (C) 4- isopropyl -3- butenoic acid (D) None of above 35. *IUPAC* name of tertiary butyl alcohol is (A) Butan -1 ol (B) Butan -2- ol (C) 2- methyl propan -1- ol (D) 2- methyl propan -2- ol 36. The IUPAC name of $(C_2H_5)_2CHCH_2OH$ is (A) 2- ethyl butanol -1(B) 2- methyl pentanol -1(C) 2- ethyl pentanol -1(D) 3- ethyl butanol -137. The IUPAC name of the compound having structure $C_2H_5-C-CH-CH_3$ is CH_2 CH_3 (A) 3- methyl -2- ethyl butene -1(B) 2- ethyl -3- methyl butene -1(D) Ethyl isopropyl ethene (C) 3- ethyl -3- methyl butene -138. The IUPAC name of $CH_3C \equiv CCH(CH_3)_2$ is (A) 4- methyl -2- pentyne (B) 4,4- dimethyl -2- butyne (C) Methyl isopropyl acetylene (D) 2- methyl -4- pentyne 39. IUPAC name of $CH_3 - CH_2 - CH - NH_2$ is (A) 1- methyl -1- aminopropane (B) 2— aminobutane (C) 2- methyl -3- aminopropane (D) None of the above 40. IUPAC name of $(CH_3)_2CH - CH = CH - CH_3$ is (A) 2- methyl -3- pentene (B) 4- methyl -2- pentene (C) 1,2- isopropyl -1- propene (D) 3- isopropyl -2- propene 41. IUPAC name of the compound is $CH_3 - CH = C - CH_3$ CH_2 - CH_2 (A) 2- ethyl -2- butene (B) 3- ethyl -2- butene (C) 3- Methyl -3- pentene (D) 3- methyl -2- pentene

42. IUPAC name of the compound is $CH_3 - CH - CH_2 - CH(OH) - CH_3$ is CH_2 CH_{2} (A) 4- ethyl -2- pentanol (B) 4- methyl -2- hexanol (C) 2- ethyl -2- pentanol (D) 3- methyl -2- hexanol 43. IUPAC name of $CH_3CH(OH)CH_2CH_2COOH$ is (A) 4- hydroxy pentanoic acid (B) 1- carboxy -3- butanoic acid (C) 1- carboxy -4- butanol (D) 4- carboxy -2- butanol 44. IUPAC name of acetyl salicylic acid is (A) m-benzoic acid (B) 2- acetoxy benzoic acid (C) p-benzoic acid (D) p-acetyl benzoic acid 45. Alicyclic compounds are (C) Heterocyclic (A) Aromatic (B) Aliphatic (D) Aliphatic cyclic 46. The structure of di-chloromethane is (C) Linear (A) Tetrahedral (B) Trigonal (D) Hexagonal 47. The C-H bond distance is longest in (A) C_2H_2 (B) C_2H_4 (C) C_2H_6 (D) C_6H_6 48. Which of the following pairs have absence of carbocyclic ring in both compounds? (A) Pyridine, Benzene (B) Benzene, Cyclohexane (C) Cyclohexane, Furane (D) Furane, Pyridine 49. The group of hetrocylic compounds is: (A) Phenol, Furane (B) Furane, Thiophene (C) Thiophene, Phenol (D) Furane, Aniline 50. Which of the following is not an aromatic compound? (C) (D)

51. Which of the following compounds would not be considered aromatic in its behaviour?



62.	Hybridization of 1 and	l 2 carbon atoms in \mathop{CH}^1	$C_{\bullet} = C - CH_{\bullet}$	
	(A) sp, sp	(B) sp^2, sp^2	$_2=\bigcirc=\bigcirc H_2$ (C) sp^2,sp	(D) sp^3, sp^2
63	Allyl cyanide contain σ		(c) of yor	
03.	(A) 9σ , 3π	(B) 9σ , 9π	(C) 3σ , 4π	(D) 5σ , 7π
64.	Number of σ bonds in CH_3	ı		
	0			
	(A) 6	(B) 15	(C) 10	(D) 12
65.	Number of bonds in b	enzene		
	(A) 6σ and 3π	(B) 12σ and 3π	(C) 3π and 12π	(D) 6σ and 6π
66.	The enolic form of acceptance (A) 8σ bonds, 2π -bonds			
	(B) 9σ - bonds, 1π -bond	d and 2 lone pairs		
	(C) 9σ - bonds, 2π - bon	ids and 1 lone pairs		
	(D) 10σ - bonds, 1π - bo	nds and 1 lone pairs		
67.	How many secondary	carbon atoms does me	ethyl cyclopropane hav	e ?
	(A) None	(B) 1	(C) 2	(D) 3
68.	The number of prin molecular fomula C_3E_3	nary, secondary and I_9N is :	tertiary amines poss	ible with the
	(A) 1,2,2	(B) 1,2,1	(C) 2,1,1	(D) 3,0,1
69.	Identify the no. of α –	Hydrogen in the giver	n compound?	
	(A) 2	(B) 3	(C) 4	(D) 6
70.	The number of $sp^2 - s$	p^2 sigma bonds in the	compound given belov	v is
	(A) 1	(B) 3	(C) 4	(D) 5
71.	The number of sigma	and pi-bonds in 1– bu	tene 3– yne are	
	(A) 5 sigma and 5 pi	(B) $7 \text{ sigma and } 3 \text{ pi}$	(C) 8 sigma and 2 pi	(D) 6 sigma and 4 pi
72.	The compound buta -	-1,2- diene has		

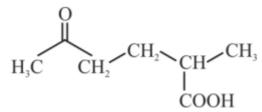
	(A) only $\mathit{sp}-$ hybridized carbon atom								
	(B) only sp^2- hybridized carbon atom								
	(C) both $sp-$ and sp^2- hybridized carbon atoms								
	(D) sp, sp^2- and sp^3- hybridized carbon atoms								
73.	Number of sp hyb $CH_2=CH-C\equiv C-C$		carbon	atom	in	the	given	compound	is
	(A) 1	(B) 2		(C) 3			(D) 4	
74.	Number of σ and π bo	Number of σ and π bonds in propane $-1,2,3-$ tricarboxylic acid are							
	(A) $16\sigma, 6\pi$			(B)	19σ	$,3\pi$			
	(C) $21\sigma, 6\pi$			(D)	18σ	$7,4\pi$			
75.	5. Number of sp hybridised carbon atom in the given compound is : $CH_2 = CH - C \equiv C - CH_2 - CN$								
	(A) 1	(B) 2		(C) 3			(D) 4	
76.	From left to right, sp^2 ,	sp^2, sp, sp	p hybridi	sation is	pre	esent	in		
	(A) $CH_2=CH-C\equiv N$			(B) $CH_2=C=CH-CH_3$					
	(C) $HC \equiv C - C \equiv CH$			(D)) CH	$T\equiv C$ -	-CH = 0	CH_2	
77.	Functional group pres	ent in su	lphonic a	cid is:					
	(A) SO_4H	(B) SO_3E	I	(C				(D) $-\mathrm{SO}_2$	
			V	× -	S – ()	OΗ			
78.	Number of σ and π bo	nds pres	ent in eth	nylene m	nole	cule is	respec	tively:	
	(A) 3 and 1	(B) 5 and	d 2	(C) 4 a	nd 1		(D) 5 and	1
79.	. IUPAC name of following compound is CH ₃ —CH—CH ₂ —CN NH ₂								
	(A) 2-Aminopentanenitrile		(B)	(B) 2-Aminobutanenitrile					
	(C) 3-Aminobutanenitr	ile		(D)	3-A	mino	oropane	enitrile	
80.	Cylohexene <i>image</i> istype of an organic compound.								
	(A) Benzenoid aromatic								
	(B) Benzenoid non-ar								
	(C) Acyclic								
	(D) Alicyclic								
	· /								

- 81. The total number of 'Sigma' and Pi bonds in 2-formylhex-4-enoic acid
 - (A) 33

(B) 22

(C) 44

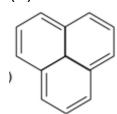
- (D) 65
- 82. The correct IUPAC nomenclature for the following compound is



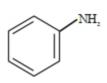
- (A) 5-Formyl-2-methylhexanoic acid
- (B) 2-Methyl-5-oxohexanoic acid
- (C) 2-Formyl-5-methylhexan-6-oic acid
- (D) 5-Methyl-2-oxohexan-6-oic acid
- 83. Correct structure of γ -methylcyclohexane carbaldehyde is
 - (A)

(D)

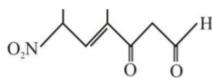
- 84. Which of the following is not an example of benzenoid compound?
 - (A)



- (B)
- (C)
- (D)



- 85. The correct decreasing order of priority of functional groups in naming an organic compound as per *IUPAC* system of nomenclature is.
 - (A) $-COOH > -CONH_2 > -COCl > -CHO$
 - (B) $-SO_3H > -COCl > -CONH_2 > -CN$
 - (C) $-COOR > -COCl > -NH_2 > C = O$
 - (D) $-COOH > -COOR > -CONH_2 > -COCl$
- 86. The correct IUPAC name of the following compound is



- (A) 4-methyl-2-nitro-5-oxohept-3-enal
- (B) 4-methyl-5-oxo-2-nitrohept-3-enal

- (C) 4-methyl-6-nitro-3-oxohept-4-enal
- (D) 6-formyl-4-methyl-2-nitrohex-3-enal
- 87. In

$$CH_2 = C = CH - CH_3$$

1 2 3 4

molecule, the hybridization of carbon 1,2,3 and 4 respectively are:

- (A) sp^3, sp, sp^3, sp^3
- (B) sp^2, sp^2, sp^2, sp^3
- (C) sp^2, sp, sp^2, sp^3
- (D) sp^2, sp^3, sp^2, sp^3
- 88. Which of the following is correct structure of tyrosine?
 - (A)

(B)

(C)

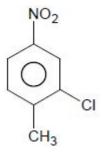
(D)

- H₂N H COOH H₂N H
- 89. The *IUPAC* name of the following compound is:

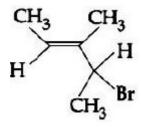
- (A) 4-Bromo-2-methylcyclopentane carboxylic acid
- (B) 5-Bromo-3-methylcyclopentanoic acid
- (C) 3-Bromo-5-methylcyclopentane carboxylic acid
- (D) 3-Bromo-5-methylcyclopentanoic acid
- 90. The IUPAC name for the following compound is:

- (A) 2.5- dimethyl-6-carboxy-hex-3-enal
- (B) 6-formyl-2-methyl-hex-3-enoic acid
- (C) 2,5-dimethyl-5-carboxy-hex-3-enal
- (D) 2.5-dimethyl-6-oxo-hex-3-enoic acid

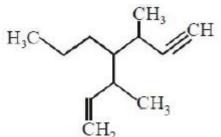
91. The correct IUPAC name of the following compound is



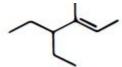
- (A) 5- chloro -4- methyl -1- nitrobenzene
- (B) 2- methyl -5- nitro -1- chlorobenzene
- (C) 3- chloro -4- methyl -1- nitrobenzene
- (D) 2- chloro -1- methyl -4- nitrobenzene
- 92. What is the *IUPAC* name of the following compound?



- (A) 3- Bromo -1,2- dimethylbut -1- ene
- (B) 3- Bromo -3- methyl -1,2- dimethylprop -1- ene
- (C) 2- Bromo -3- methylpent -3- ene
- (D) 4- Bromo -3- methylpent -2- ene
- 93. The *IUPAC* name of the following compound is



- (A) 3.5- dimethyl -4- propylhept -1- en -6- yne
- (B) 3- methyl -4- (1- methylprop -2- ynyl) -1- heptene
- (C) 3- methyl-4- (3- methylprop -1- enyl) -1- heptyne
- (D) 3.5- dimethyl -4- propylhept -6- en -1- yne
- 94. The IUPAC name of the following compound is

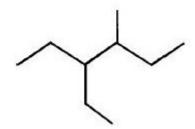


(A) 3- ethyl -4- methylhex -4- ene

- (B) 4,4- diethyl -3- methylbut -2- ene
- (C) 4- methyl -3- ethylhex -4- ene
- (D) 4- ethyl -3-methylhex -2- ene
- 95. The correct match between items of List -I and List -II is

List -I	List -II
(A) Phenelzine	(p) Pyrimidine
(B) Chloroxylenol	(q) Furan
(C) Uracil	(r) Hydrazine
(D) Ranitidine	(s) Phenol

- (A) (A) (s);(B) (r);(C) (q);(D) (p)
- (B) (A) (r); (B) (s); (C) (p); (D) (q)
- (C) (A) (r); (B) (s); (C) (q); (D) (p)
- (D) (A) (s); (B) (r); (C) (p); (D) (q)
- 96. The correct *IUPAC* name of the following compound is



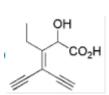
- (A) 4- methyl -3- ethylhexane
- (B) 3- ethyl -4- methylhexane

(C) 3,4- ethylmethylhexane

- (D) 4- ethyl -3- methylhexane
- 97. Which one of the following structures has the IUPAC name 3-ethynyl-2-hydroxy-4-methylhex-3-en-5-ynoic acid?

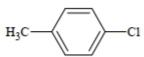


(C)





- 98. The *IUPAC* name(s) of the following compound is(are)
 - [A] 4-methylchlorobenzene [B] 4-chlorotoluene [C] 1-chloro-4-methylbenzene
 - [D] 1-methyl-4-chlorobenzene



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

- 99. Number of π electrons in cyclobutadienyl anion $(C_4H_4)^{-2}$ is
 - (A) 2

(B) 4

(C) 8

(D) 6

- 100. The compound which has one isopropyl group is
 - (A) 2,2,3,3- tetramethyl pentane
 - (B) 3,3- dimethyl pentane
 - (C) 2,2,3-trimethyl pentane
 - (D) 2-methyl pentane
- 101. IUPAC name of $CH_2 = CH CH(CH_3)_2$ is
 - (A) 1,1- dimethyl -2- propene
- (B) 3- methyl -1- butene

(C) 2- vinyl propane

- (D) 1- isopropyl ethylene
- 102. Which compound is 2,2,3- trimethylhexane

(A)
$$CH_3 - CH_3 - CH_3 - CH_3 - CH_3 - CH_3 - CH_3$$

(B)
$$CH_3 - \overset{CH_3}{\overset{|}{C}} - CH_2 - \overset{CH_3}{\overset{|}{C}} H - CH_3$$

(C)
$$CH_3 - CH_3 = CH_3 = CH_3 + CH_3 = CH_$$

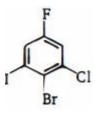
(D)
$$CH_3-CH-CH_2-CH_2-CH_2-CH_3$$

- 103. IUPAC name of $(CH_3)_3C CH = CH_2$ is
 - (A) 3,3,3—trimethyl-1—propene
- (B) 1,1,1-trimethyl-2-propene

(C) 3,3-dimethyl-1-butene

(D) 2,2-dimethyl-3-butene

104. The *IUPAC* name of is



- (A) 1- Bromo -2- chloro -3- fluoro -6- iodo benzene
- (B) 2- Bromo -1- chloro -5- fluoro -3- iodo benzene

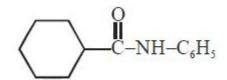
(C) 4- Bromo -2- chloro -5- iodo -1- fluoro benzene (D) 2- Bromo -3- chloro -1- iodo -5- fluoro benzene 105. Write the IUPAC name of CH_3CH_2COOH (A) Ethyl formic acid (B) Ethyl carboxylic acid (C) Ethane methanoic acid (D) Propanoic acid 106. IUPAC name of the compound $CH_3 - CH - CH_2 - CH - CH_3$ is..... OH(A) 4-methyl pentene-2-ol (B) 2-methyl pentanol-4(D) 4-methyl pentane-2-ol (C) 4,4- dimethyl butan-2-ol 107. The IUPAC name of n-butyl chloride is (A) 1-chlorobutane (B) n-chlorobutane (D) 2-methylbutane (C) ter-butylchloride 108. If CH_4 is known as methane, then C_9H_{20} is known as (A) Hexane (B) Nonane (C) Octane (D) Butane 109. IUPAC name of $CH_3 - CH = CH - COOH$ (A) 2— butenoic acid (B) 1- butenoic acid (D) 1- carboxy -1- propene (C) β - butenoic acid 110. IUPAC name of $H - \dot{C} - \dot{C} - Cl$ is (A) 1,2- dichloroethane (B) 2,2- dichloroethane (C) 1,1- dichloroethane (D) Dichloroethane 111. The IUPAC name of $CH_3CH_2COCH_2CH_3$ is (A) 3— pentanone (B) 2- pentanone (C) Diethyl ketone (D) All the above 112. The IUPAC name of $CH_3C \equiv N$ is (A) Acetonitrile (B) Ethanenitrile (C) Methyl cyanide (D) Cyanoethane 113. IUPAC name of the $(CH_3)_2CHCH(CH_3)_2$ is (A) 1,1,2,3- tetramethylethane (B) 1,2- di-isopropylethane (C) 2.3- dimethylbutane (D) 2,3,3- trimethylbutane 114. Which of the following compound has the functional group -OH(A) 1,2- ethandiol (B) 2- butanone (C) Nitrobenzene (D) Ethanal 115. IUPAC name of $CH_3 - O - C_2H_5$ is (A) Ethoxymethane (B) Methoxyethane (C) Methylethyl ether (D) Ethylmethyl ether

116. Who synthesised the first organic compound urea in the laboratory (D) Berzilius (A) Kolbe (B) Wohler (C) Fraizer 117. Number of π bonds in $CH_2 = CH - CH = CH - C \equiv CH$ is (B) 3 (A) 2 (C) 4 (D) 5 118. Number of π electrons present in naphthalene is (B) 6 (A) 4 (C) 10 (D) 14 119. The numbers of sigma (σ) bonds in 1-butene is (D) 12 (A) 8 (B) 10 (C) 11 120. The number of σ bonds in o-xylene is (A) 6 (B) 9 (C) 12 (D) 18 121. A carbon-carbon triple bond in ethyne $(-C \equiv C-)$ consists of (A) All σ bonds (B) Two σ bonds and one π -bond (C) One σ bond and two π bonds (D) All π bonds 122. How many σ and π bonds are present in CH_3COOH ? (B) 5,2(C) 7,1(D) 3,2123. Number of σ and π bonds present in $CH_3-CH=CH-C\equiv CH$ are (B) $10\sigma, 2\pi$ (A) $10\sigma, 3\pi$ (C) $9\sigma, 2\pi$ (D) $8\sigma, 3\pi$ 124. IUPAC name of the following compound will be (A) 3.4- Dimethyl octa -1.3.6- triene (B) 3.7 Dimethyl octa -1.3.6 triene (C) 2,6- Dimethyl octa -2,5,7- triene (D) 2,6- Dimethlyl octa -1,5,7- triene 125. The *IUPAC* name of (Figure) is CH,-CO CH, - CC (A) Ethane dioicanhydride (B) Butane dioicanhydride

(C) Butanoic anhydride

(D) Ethanoic anhydride

126. *IUPAC* name of the following compound is



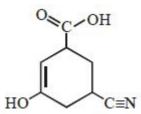
- (A) N- cyclo hexylbenzamide
- (B) N- phenyl -N- cyclohexylmethanamide
- (C) N- phenyl cyclohexane carboxamide
- (D) N- cyclohexyl -N- phenyl methyl amide

127. IUPAC name of the given compound is



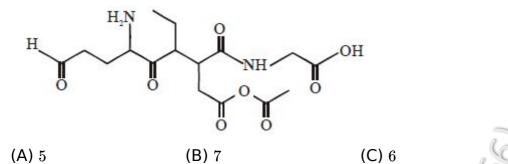
- (A) N- Ethyl -N- methyl ethanamine
- (B) Diethyl methylamine
- (C) Methyl diethylamine
- (D) N, N- Diethylmethanamine

128. The *IUPAC* name of following compound is

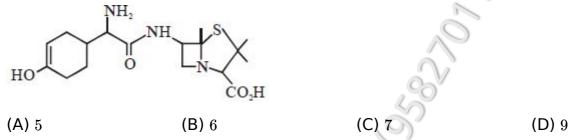


- (A) 3-cyano -5- hydroxy cyclohex -5- enoic acid
- (B) 3- cyano -5- hydroxy cyclohex -5- ene carboxylic acid
- (C) 3- hydroxy -5- cyano cyclohex -2- enoic acid
- (D) 5- cyano -3- hydroxy cyclohex -2- ene carboxylic acid
- 129. Select the correct statement
 - (A) C_4H_9- has four alkyl groups
 - (B) $C_5H_{11}-$ has eight alkyl groups
 - (C) C_3H_7 has two alkyl groups
 - (D) All of these
- 130. Which of the following is correct IUPAC name
 - (A) 4-(1,1- dimethyl ethyl) -2- methyl pentane
 - (B) 1- aminobutan -1- one
 - (C) 2- ethyl -3- methyl pentane

- (D) 3- ethyl -2- methyl pentane
- 131. Number of functional groups present in the following compound is



132. How many functional groups are in following molecule



133. Which of the following name is incorrect?

(A)

(B)

(C)

(D)

134. *IUPAC* name is

$$\bigcirc$$
 O H

- (A) Ethenyloxymethanal
- (C) Ethenylmethanoate

- (B) Ethenyl formate
- (D) Ethenyloxymethanoate

(D) 8

- 135. The IUPAC name of $CH_3CH_2OCH(CH_3)_2$ is
 - (A) Isopropoxyethane
 - (B) 2- Methoxy butane
 - (C) 1- Methyl -1- methoxy ethane
 - (D) 2- Ethoxypropane
- 136. Correct IUPAC name of is



(A) Ethenyloxymethanal

(B) Ethenyl formate

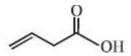
(C) Ethenylethanoate

- (D) Vinylmethaneoate
- 137. What is main functional group in compound



- (A) Amine
- (B) Aldehyde
- (C) Amide
- (D) Alcohol

138. IUPAC name of is



(A) But -3— enoic acid

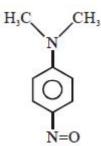
(B) But -1— enoic acid

(C) Pent -4- enoic acid

- (D) Prop -2- enoic acid
- 139. Which IUPAC name is correct for the given compound?

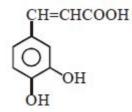


- (A) 3.7- dimethyloct -2.6- dienal
- (B) 2.6- dimethyloct -2.6- dienal -8
- (C) 7- formyl -2,6- dimethylhept -2,6- diene
- (D) 7- aldo -2,6- dimethylhept -2,6- diene
- 140. *IUPAC* name of the compound

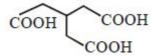


(A) 4- Nitro -N,N- dimethylaniline

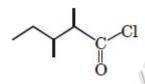
- (B) 4- Nitroso -N,N- dimethylbenzene
- (C) 4- Nitroso -N, N- dimethylaniline
- (D) m- Nitroso -N,N- diemthylaniline
- 141. Caffeic acid, found in coffee beans, *IUPAC* name is?



- (A) 3-(3,4- Dihydroxyphenyl) propenoic acid
- (B) 3 (3,4- Benzenediol) propanoic acid
- (C) 4- Propenoic benzene -1,2- diol
- (D) 2- Carboxypropenyl benzene -1,2- diol
- 142. The *IUPAC* name of following compound is



- (A) Propan-1,2,3 -Tri Carboxylic acid
- (B) 3 -Carboxymethylpentane-1,5 -dioicacid
- (C) 1,2,3 -Pentanetrioic acid
- (D) 1,2,3 -Tripropane carboxylic acid
- 143. The *IUPAC* name of Tartaric acid is
 - (A) 3- hydroxypropane -1,2,3- tricarboxylic acid
 - (B) 2,3- Dihydroxyethane -1,2- dicarboxylic acid
 - (C) But -2- enoic acid
 - (D) 2,3- Dihydroxybutane -1,4- dioic acid
- 144. The *IUPAC* name of (image) is

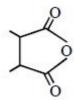


- (A) 2- Ethyl -3- methyl butanoyl chloride
- (B) 2,3- Dimethyl pentanoyl chloride
- (C) 3,4- Dimethyl pentanoyl chloride
- (D) 1- chloro -1- oxo -2,3- dimethyl pentane

145. The correct *IUPAC* name of given compound is

- (A) 3- Ethanoyloxycyclopent -4- ene carboxylic acid
- (B) 4- Ethanoyloxycyclopent -2- ene carboxylic acid
- (C) 4- Ethanoyloxycyclopent -3- ene carboxylic acid
- (D) 4- Ethanoyloxycyclopent -1- ene -5- carboxylic acid

146. *IUPAC* name of the given compound is



- (A) 2,3- Dimethyl cyclobutanoic anhydride
- (B) 2,3- Dimethyl -1,4- epoxy butanedione
- (C) 2,3- Dimethyl butanedioic anhydride
- (D) 2,3— Dimethyl pentanoic anhydride
- 147. Structure of the compound whose IUPAC name is 3- Ethyl -2- hydroxy -4- methylhex -3- en -5- ynoic acid is

(A)

(B)

(C)

(D)

ОН

ОН

148. Structure of 3,4- dimethyl pent -1- en -3- ol is

(A)

(B)

(C)

(D)

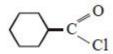
VOH

OH

HOH

149. The IUPAC name of is

- (A) 2,6- Dimethylhepta -2,5- dienoic acid
- (B) 3.7 Dimethylhepta -2.5 dienoic acid
- (C) 1— Hydroxy -2,6— dimethylhepta -2,5— dienome
- (D) None of these
- 150. The *IUPAC* name for the compound is



(A) Cyclohexanoyl chloride

(B) Cyclohexanecarbonyl chloride

(C) 1- Chlorocyclohexanal

- (D) Chlorocyclohexyl methanal
- 151. The correct *IUPAC* name of the compound is



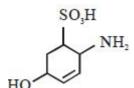
- (A) 1- Ethenylcyclohexa -2,4- diene
- (B) 5- Ethenylcyclohexa -1,3- diene
- (C) 6- Ethenylcyclohexa -1,3- diene
- (D) Cyclohexa -2,4- dienylethene
- 152. The correct structure of

6- amino -4- hydroxycyclohex -2- ene -1- sulphonic acid is

(A)

(B)

(C)



- 153. What will be IUPAC name of compound when allyl and neopentyl joined together
 - (A) 4,4- dimethyl pent -1- ene
- (B) 5.5- dimethyl hex -1- ene

(C) 6- methyl hept -1- ene

(D) 5- methyl hex -1- ene

154. Correct *IUPAC* name is :-



- (A) Trans-1,2-chloro bromocyclopropane
- (B) Trans-1, -bromo- 2-chloropropane
- (C) Trans-1-bromo- 2-chlorocyclopropane
- (D) cis-1-bromo-2-chlorocyclopropane
- 155. The *IUPAC* name of

- (A) 1 -methoxy- 4 -amino benzene
- (B) Amino phenylmethyl ether
- (C) 4 -Methoxy aniline
- (D) None of above
- 156. The IUPAC name for the compound :-

(A) Propylene oxide

(B) 1,2 -Oxopropane

(C) 1,2 -Epoxypropane

- (D) 1,2 -Propoxide
- 157. IUPAC name of following compound is :-



- (A) 1-Ethyl-2,2-dimethyl-6-cyclohexene
- (B) 2-Ethyl-1,1-dimethyl-2-cyclohexene
- (C) 1-Ethyl-6,6-dimethyl- 1-cyclohexene

158. What is correct *IUPAC* name of following radical?

$$-CH_2 - CH - CH_3$$

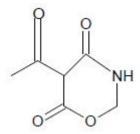
(A) 2 -Hydroxy propane

(B) 2 -Hydroxy propyl

(C) 2 -Propanol

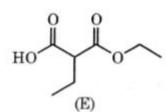
(D) 2 -Methyl ethanol

159. Identify which functional group is not present in following compound?



- (A) Ketone
- (B) Ester
- (C) Amide
- (D) Ether

160. Write the IUPAC name of the following structure (E)



- (A) 2- Ethyl -3- Ethoxy carbonyl propanoic acid
- (B) 2- Ethyl -2- Ethoxy carbonyl ethanoic acid
- (C) 2- Methoxy carbonyl butanoic acid
- (D) 2- Ethoxy carbonyl butanoic acid

161. Correct IUPAC name of



- (A) 1- Ethenyl -2- ethynylcyclopropanoic acid
- (B) 2- Ethenyl -3- ethynylcyclopropane carboxylic acid
- (C) 2- Ethynyl -3- ethenylcyclopropane carboxylic acid
- (D) 2- Ethenyl -3- ethynylcyclopropane -1- oic acid

162. The IUPAC name of given compound is:

- (A) 1-cyclohexyl-3-methyl-1- pentene
- (B) 3- methyl-5- cyclohexyl-pent-ene
- (C) 1-cyclohexyl-3- ethyl-but-1-ene
- (D) 1-cyclohexyl-3,4- dimethyl-but-1- ene
- 163. The *IUPAC* name of compound is



- (A) 3-Methyl cyclo -1- butene-2-ol
- (B) 4-Methyl cyclo -2- butene -1-ol
- (C) 4- Methyl cyclo -1- butene-3-ol
- (D) 2-Methyl cyclo-3-butene-1-ol
- 164. The IUPAC name of the compound :

- (A) Propylene Oxide
- (C) 1,2—Epoxy propane

- (B) 1,2-Oxo propane
- (D) 1,2-Propoxide
- 165. The *IUPAC* name of compound

$$\begin{array}{c} & \text{O} \\ \text{CH}_2\text{--C-OH} \\ \text{C} < \begin{array}{c} \text{OH} \\ \text{COOH} \end{array} \\ \text{CH}_2\text{--COOH} \end{array}$$

- (A) 1,2,3- tricarboxy -2- propanol
- (B) 2- hydroxy propane -1,2,3 tricarboxylic acid
- (C) 3- hydroxy -3- Carboxy -1,5- pentane dioic acid
- (D) None
- 166. Correct name of

- (A) 2- oxocyclopentanecarboxylate
- (B) 2- Formylcyclopentanecarboxylate
- (C) Ethyl -2- formylcyclopentanecarboxylate

	(D) Ethyl $-2-$ oxocyclopentanecarboxylate						
167.	Number of hybrid orbitals of C atoms in $C(CN)_4$ which have $33\%P$ character :-						
	(A) 4	(B) 1	(C) 0	(D) 2			
168.	In the given molec respectively are	ule $(NC)_3CCCCHCH$	Br number of σ .	and $\pi-$ bonds			
	(A) 13 and 9	(B) 12 and 8	(C) 7 and 3	(D) 10 and 5			
169.	Cyclohexadiene contain (A) 2 and 2 respective		allylic hydrogen a				
	(C) 2 and 4 respective	ly	(D) 4 and 2 respective	ely/			
170.	The number of $C-C$ (A) 16	sigma bonds in the co	ompound (C) 18	(D) 11			
171.	Which is correctly mate (A) (figure) - Heterocy OH (B) (figure) - only two (C) (figure) - Homocyo (D) (figure) - Equal nu	types of carbon and h	nydrogen present				
172.	Which of the following (A) $(CN)_2$	g species contains equ $ extstyle (B) \; CH_2(CN)_2$	al number of $\sigma-$ and (C) HCO_3^-	$\pi-$ bonds ? (D) XeO_4			

173. The correct *IUPAC* name for the below compound is

- (A) 4-ethyl-3-propylhex-1-ene
- (B) 3-ethyl-4-ethenylheptane
- (C) 3-ethyl-4-propylhex-5-ene
- (D) 3-(1-ethylpropyl)hex-1-ene.

174. The *IUPAC* name of is

- (A) 1-chloro-1-oxo-2,3-dimethylpentane
- (B) 2-ethyl-3-methylbutanoyl chloride
- (C) 2,3-dimethylpentanoyl chloride
- (D) 3,4- dimethylpentanoyl chloride.

175. The general molecular formula, which represents the homologous series of alkanols is

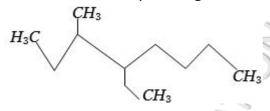
(A)
$$C_nH_{2n}O$$

(B)
$$C_nH_{2n}O_2$$

(C)
$$C_n H_{2n+2} O$$

(D)
$$C_n H_{2n+1} O$$

176. Name of the compound given below is



- (A) 5-ethyl-6-methyloctane
- (B) 4-ethyl-3-methyloctane

(C) 3-methyl-4-ethyloctane

(D) 2,3- diethylheptane

177. The UPAC name of the compound $CH_2=CH-CH_2-CH_2-C\equiv CH$ is

(A) 1,5-hexenyne

(B) 1-hexyne-5-ene

(C) 1,5—hexynene

(D) 1-hexene-5-yne

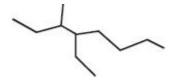
178. *IUPAC* name for the compound

$$CI$$
 $C = C$
 CH_2CH_3
 $C = C$
 I

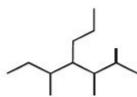
- (A) trans 3 iodo, 4-chloro, 3-pentene
- (B) cis 3 chloro, 3-iodo, 2-pentene

- (C) trans 2 chloro, 3-iodo, 2-pentene
- (D) cis 3 iodo, 4-chloro, 3-pentene
- 179. The *IUPAC* name of the following compound is

- (A) trans-2-chloro-3-iodo-2-pentene
- (B) cis-3-iodo-4-chloro-3-pentane
- (C) trans-3-iodo-4-chloro-3-pentene
- (D) cis-2-chloro-3-iodo-2-pentene.
- 180. The IUPAC name for $CH_3CH = CHCH_2 \ CHCH_2 \ COOH$ is
 - (A) 5- aminohex -2- ene carboxylic acid
 - (B) 5- amino -2- heptenoic acid
 - (C) 3- amino -5- heptenoic acid
 - (D) β amino- δ -heptenoic acid
- 181. Name of the compound given below is



- (A) 3- methyl -4- ethyloctane
- (B) 2,3- diethylheptane
- (C) 5- ethyl -6- methyloctane
- (D) 4- ethyl -3- methyloctane
- 182. The correct *IUPAC* name for



- (A) 5- methyl -4- (1'-2'- demethylpropyl) heptane
- (B) 3- methyl -4- (1',2'- dimethylpropyl) heptane
- (C) 2,3,5- trimethyl -4- propylheptane
- (D) 4- propyl -2,3,5- trimethylpeptane
- 183. The correct structure of 4- bromo -3- methylbut -1- ene is

(A)
$$Br - CH = C(CH_3)_2$$

(B)
$$CH_2=CH-CH(CH_3)-CH_2Br$$

(C)
$$CH_2 = C(CH_3)CH_2CH_2Br$$

(D)
$$CH_3 - C(CH_3) = CHCH_2 - Br$$

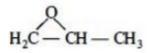
184. IUPAC name of the following compound is



- (A) 3-methyl cyclohexene
- (B) 1-methyl cyclohex-2-ene
- (C) 6-methyl cyclohexene
- (D) 1-methyl cyclohex-5-ene
- 185. The number of σ and π bonds present in pent–4–ene, 1–yne is
 - (A) 10, 3
- (B) 3, 10
- (C) 4, 9

(D) 9, 4

186. The IUPAC name of the compound [Figure] is

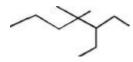


- (A) 1,2- Propoxide
- (C) 1,2- Oxo propane

- (B) Propylene oxide
- (D) 1,2- Epoxy propane
- 187. The IUPAC name of neopentane is
 - (A) 2,2 dimethylpropane
 - (C) 2,2 dimethylbutane

- (B) 2- methyl propane
- (D) 2-methylbutane

188. The IUPAC name of

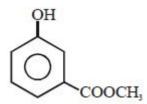


- (A) 3-ethyl-4-4-dimethylheptane
- (B) 1,1-diethyl-2,2-dimethylpentane
- (C) 4,4- dimethyl-5,5- diethylpentane
- (D) 5.5-diethyl-4.4-dimethylpentane.
- 189. The IUPAC name of the compound is

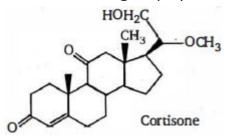


- (A) 1,1-dimethyl-3-hydroxy cyclohexane
- (B) 3,3- dimethyl-1-cyclohexanol
- (C) 3,3-dimethyl-1-hydroxy cyclohexane

190. The *IUPAC* name of (Image) is

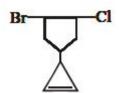


- (A) 2- hydroxymethyle benzoate
- (B) 2- hydroxyethyl benzoate
- (C) Methyl 3- hydroxy benzoate
- (D) 1- hydroxymethyl benzoate
- 191. The functional groups present in Cortisone are

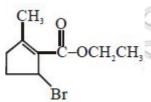


- (A) ether, alkene, alcohol
- (C) alcohol, ketone, amine

- (B) alcohol, ketone, alkene, ether
- (D) ether, amine, ketone
- 192. Give the IUPAC name of this compound



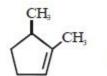
- (A) 3-(3- Bromo -4- chlorocyclopentyl)cyclopropene
- (B) 3 (3 chloro -4 bromocyclopentyl) cyclopropene
- (C) 2-(3- bromo -4- chlorocyclopentyl) cyclopropene
- (D) 2 (3 chloro -4 bromocyclopentyl) cyclopropene
- 193. *IUPAC* name of the compound (figure)



- (A) Ethyl -2- bromo -5- methylcyclopent -1- ene carboxylate
- (B) 5- Bromoethyl -2- methylcyclopentenecarboxylate
- (C) Ethyl -5- bromo -2- methylcyclopentenecarboxylate

- (D) Ethyl -5- bromo -2- methylcyclopent -2- enecarboxylate
- 194. Which of the following *IUPAC* name is incorrect

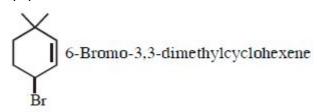
(A)



1,5-Dimethylcyclopentene

(B)

(C)



(D)

195. The *IUPAC* name of the compound is

- (A) 2- methyl -6- oxohex -3- enamide
- (B) 6- keto -2 methyl hexanamide
- (C) 2- carbamoylhexanal
- (D) 2- carbamoylhex -3- enal

196. The *IUPAC* name of the compound is



- (A) Cyclobutanedioic anhydride
- (C) Cyclobutanedicarboxylic anhydride
- (B) Butanedicarboxylic anhydride
- (D) Butanedioic anhydride

197. The correct *IUPAC* name of following compound is :

- (A) Methyl-5-bromo-2-ethyl cyclohexane carboxylate
- (B) 5-bromo-2-ethyl methyl cyclohexane carboxylate
- (C) Methyl-3-bromo-5-ethyl cyclohexane carboxylate
- (D) None of these

198. *IUPAC* name of

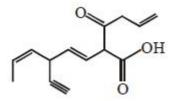


- (A) 2,6,6- Trimethylbicyclo[1.1.3]hept -2- ene
- (B) 2,2,6- Trimethylbicyclo[3.1.1]hept -5- ene
- (C) 2,6,6- Trimethylbicyclo[3.1.1]hept -2- ene
- (D) 2,7,7- Trimethylbicyclo[3.1.1]hept -2- ene

199. According to *IUPAC* system is named as

- (A) 4-(3- carboxy -2- methyl propyl)cyclohex -2- en -1- ol
- (B) 4 (4' hydroxy cyclohex -2' enyl) -3 methyl butanoic acid
- (C) 4- hydroxy cyclohexenyl -3- methyl butanoic acid
- (D) 4 (4' hydroxy cyclo hex -2' ynyl) -3 methyl butanoic acid

200. Hybridization of C_3 and C_6 carbon atoms respectively



(A)
$$sp^2$$
, sp^2

(B)
$$sp^2$$
, sp

(C)
$$sp^3, sp^2$$

(D)
$$sp^2, sp^3$$

----- Watch your thoughts, they turn into words. Watch your words, they turn into actions. Watch your actions, they turn into habits. Watch your habits, they turn into character. Watch your character, it turns into your destiny.' It all begins with a thought. -----