## **NEET UG-2013**

**8.** Structure of the compound whose IUPAC name is 3-Ethyl-2-hydroxy-4-methylhex-3-en-5-ynoic acid is:

### **AIPMT-2014**

- **9.** Which of the following organic compounds has same hybridization as its combustion product CO<sub>2</sub>?
  - (1) Ethane
- (2) Ethyne
- (3) Ethene
- (4) Ethanol

#### **AIPMT-2015**

**10.** The total number of  $\pi$ -bond electrons in the following structure is :-

$$H_3C$$
 $H_3C$ 
 $H_2C$ 
 $H$ 
 $CH_3$ 

- (1) 8
- (2) 12
- (3) 16
- (4) 4
- 11. The enolic form of ethyl acetoacetate as below

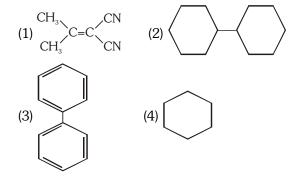
- (1) 16 sigma bonds and 1 pi bond
- (2) 9 sigma bonds and 2 pi bonds
- (3) 9 sigma bonds and 1 pi bond
- (4) 18 sigma bonds and 2 pi bonds

#### **NEET-I 2016**

- **12.** The pair of electron in the given carbanion,  $CH_3C\equiv C^{\Theta}$ , is present in which of the following orbitals?
  - (1) 2p
- (2)  $sp^3$
- (3)  $sp^2$
- (4) sp

#### **NEET-II 2016**

**13.** In which of the following molecules, all atoms are coplanar?



## **NEET(UG) 2017**

**14.** The IUPAC name of the compound

- (1) 5-formylhex-2-en-3-one
- (2) 5-methyl-4-oxohex-2-en-5-al
- (3) 3-keto-2-methylhex-5-enal
- (4) 3-keto-2-methylhex-4-enal

## **NEET(UG) 2018**

- **15.** Which of the following molecules represents the order of hybridisation sp<sup>2</sup>, sp<sup>2</sup>, sp, sp from left to right atoms?
  - (1)  $HC \equiv C C \equiv CH$
  - (2)  $CH_2 = CH C \equiv CH$
  - (3)  $CH_2 = CH CH = CH_2$
  - (4)  $CH_3 CH = CH CH_3$

# **NEET(UG) 2019**

- The number of sigma ( $\sigma$ ) and pi ( $\pi$ ) bonds in **16**. pent-2-en-4-yne is :-
  - (1)  $10 \sigma$  bonds and  $3\pi$  bonds
  - (2)  $8 \sigma$  bonds and  $5\pi$  bonds
  - (3)  $11 \sigma$  bonds and  $2\pi$  bonds
  - (4)  $13 \sigma$  bonds and no  $\pi$  bond

# NEET(UG) 2020 (COVID-19)

17. How many (i) sp² hybridised carbon atoms and (ii)  $\pi$  bonds are present in the following compound?

(1) 7, 5

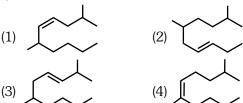
(2) 8, 6

(3) 7, 6

(4) 8, 5

# **NEET(UG) 2021**

The correct structure of 2,6-Dimethyl-dec-4-ene **18**. is:



| Que. | 1  | 2  | 3  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|------|----|----|----|---|---|---|---|---|---|----|----|----|----|----|----|
| Ans. | 4  | 4  | 4  | 1 | 1 | 1 | 3 | 3 | 2 | 1  | 4  | 4  | 3  | 4  | 2  |
| Que. | 16 | 17 | 18 |   |   |   |   |   |   |    |    |    |    |    |    |
| Ans. | 1  | 3  | 1  |   |   |   |   |   |   |    |    |    |    |    |    |