



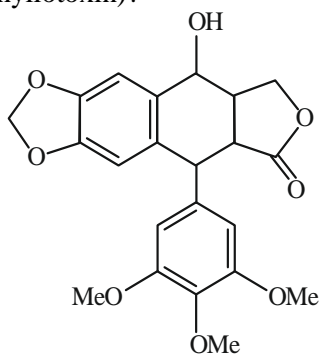
NSEC 11th 2026

ORGANIC CHEMISTRY

DPP-03

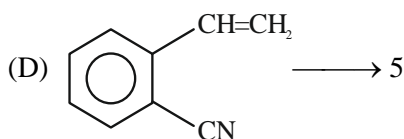
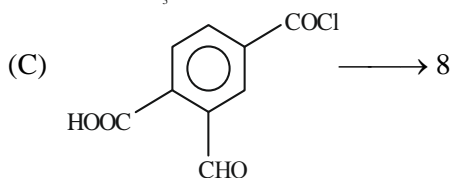
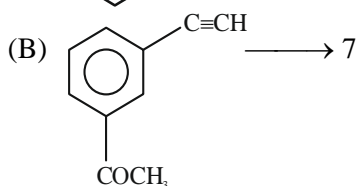
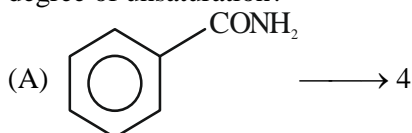
IUPAC Nomenclature

1. How many sp^3 hybridised carbon atoms are there in the given anti-cancer compound (podophyllotoxin)?



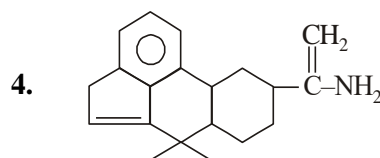
The anti-cancer compound podophyllotoxin.

2. Which of the following is correctly matched with degree of unsaturation?



3. Degree of unsaturation in is:

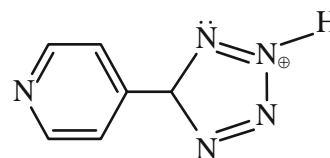
- (A) 6
(B) 8
(C) 7
(D) 10



Degree of unsaturation in the above compound is

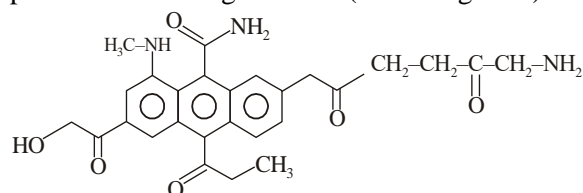
- (A) 7
(B) 8
(C) 9
(D) 10

5. How many N atoms are sp^2 hybridised in the given cation?



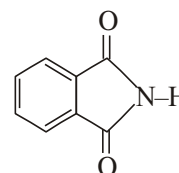
- (A) 3
(B) 4
(C) 5
(D) 6

6. How many different type of functional groups are present in following structure (Excluding C=C)



- (A) 4
(B) 5
(C) 6
(D) 7

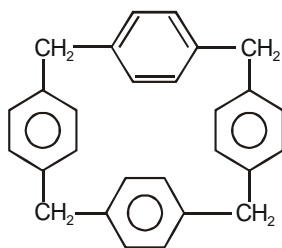
7. The sum of number of σ bond + number of π bond + degree of unsaturation for the compound.



- (A) 29
(B) 30
(C) 28
(D) 25

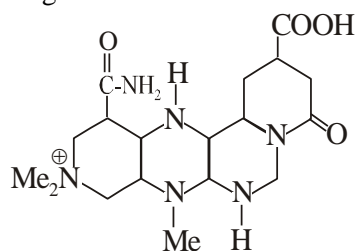


8. Find - D.B.E. of the following



- (A) 22
(B) 17
(C) 15
(D) 20

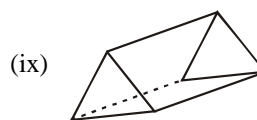
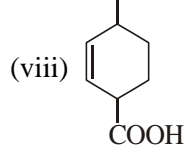
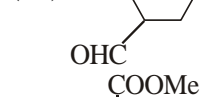
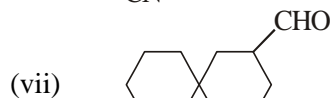
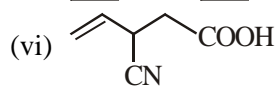
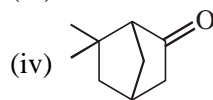
9. Degree of unsaturation of this compound is



- (A) 10
(B) 9
(C) 8
(D) 7

10. How many compounds have double bond equivalent = 4?

- (i) Benzene
(ii) Acetic acid
(iii) Ph - Ph





Answer Key

- | | | | |
|----|-----|-----|-----|
| 1. | (C) | 6. | (B) |
| 2. | (B) | 7. | (A) |
| 3. | (B) | 8. | (B) |
| 4. | (C) | 9. | (D) |
| 5. | (C) | 10. | (5) |

