



M.M.: 35 DPP # 02 TIME: 30 Min.

1. Statement 1: Urea is an organic compound.

[3]

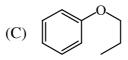
Statement 2: It can be synthesized only by living organism.

- (A) Statement-1 is true, statement-2 is true and statement-2 is correct explanation for statement-1.
- (B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
- (C) Statement-1 is true, statement-2 is false.
- (D) Statement-1 is false, statement-2 is true.
- 2. Compound which is not heterocyclic -

[3]









Paragraph for Q. 3 to 4

3. Heterocyclic compound is –

[3]

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

4. Compound which is not amine –

[3]

(A) I

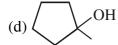
- (B) II
- (C) III
- (D) IV
- **5.** Classify the following alcohols as primary, secondary, or tertiary:

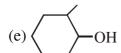
[3]

(a) (CH₃)₃CCH₂OH

(b) CH₃CH(OH)CH(CH₃)₂

(c) $(CH_3)_2C(OH)CH_2CH_3$





6. Classify the following amines as primary, secondary, or tertiary:

[3]

(a) CH₃NHCH(CH₃)₂

(b) CH₃CH₂CH(CH₃)CH₂NH₂

(c) $(CH_3CH_2)_3N$

(d) $(C_6H_5)_2$ CHCH $_2$ NHCH $_3$

(e) HN

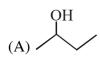
(f) N -





Which of the following have both 2° alcohol & 2° carbon only. 7.

[3]



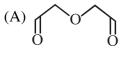
8. **Statement 1:** If number of π bonds in the compound is 3 then its degree of unsaturation must be 3

Because [3]

Statement 2 : For one π bond degree of unsaturation is equal to 1

- (A) Statement-1 is true, statement-2 is true and statement-2 is correct explanation for statement-1.
- (B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
- (C) Statement-1 is true, statement-2 is false.
- (D) Statement-1 is false, statement-2 is true.
- 9. Isooctane contains [3]
 - (A) five $(1^{\circ} C)$, one $(2^{\circ} C)$, two $(3^{\circ} C)$ atoms
 - (B) four $(1^{\circ} C)$, two $(2^{\circ} C)$, one $(3^{\circ} C)$ and one $(4^{\circ} C)$ atoms
 - (C) four $(1^{\circ} C)$, two $(2^{\circ} C)$ and one $(3^{\circ} C)$ atoms
 - (D) five $(1^{\circ} C)$, one $(2^{\circ} C)$, one $(3^{\circ} C)$ and one $(4^{\circ} C)$ atoms
- **10.** Compound having only three different functional group is:

[4]



$$(D)$$
 HO O

11. [4] Match the column

Column I Column II

(General formula)

(A)

- (P) Index of hydrogen deficiency is odd
- CO₂H (B)
- Index of hydrogen deficiency is Even (Q)
- (R) Even number of 2° Carbon (C) (D)
 - Even number of 3° Carbon **(S)**