ORGANIC CHEMISTRY

DPP

DAILY PRACTICE PROBLEMS

DPP No. 7

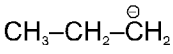
Total Marks : 32

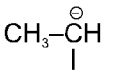
Max. Time : 35 min.

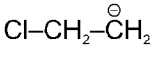
Topic : General Organic Chemistry

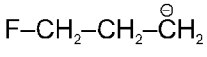
Type of Questions		M.M., Min.
Single choice Objective ('–1' negative marking) Q.1 to Q.4	(3 marks, 3 min.)	[12, 12]
Multiple choice objective ('–1' negative marking) Q.5 to Q.6	(4 marks, 4 min.)	[8, 8]
Subjective Questions ('–1' negative marking) Q.7	(4 marks 5 min.)	[4, 5]
Match the Following (no negative marking) Q.8	(8 marks, 10 min.)	[8, 10]

1. The correct stability order for the following is


I

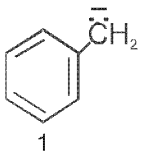

II

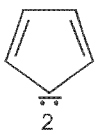

III

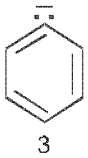

IV

(A) III > IV > I > II
(B) I > II > III > IV
(C) IV > III > I > II
(D) III > I > IV > II

2. The stability order of :

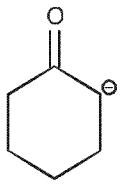

1

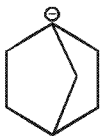

2

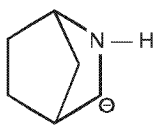

3

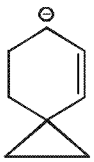
(A) 1 > 2 > 3
(B) 2 > 3 > 1
(C) 2 > 1 > 3
(D) 1 > 3 > 2

3. Which carbanion is not planer

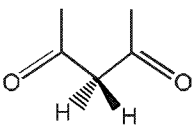
(A) 

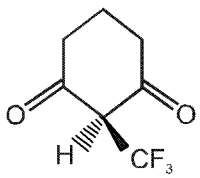
(B) 

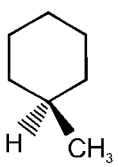
(C) 

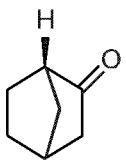
(D) 

4. Which of the following do not form planner carbanion on treatment with base.

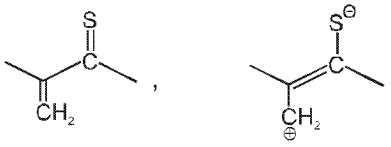
(A) 

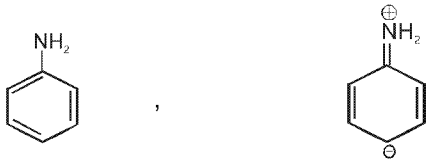
(B) 

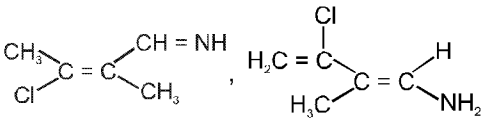
(C) 

(D) 

5.* Which of the following is/are correct relation between given pairs ?

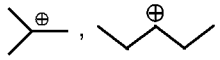
(A)  ⟶ Resonating structures

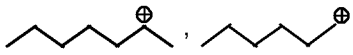
(B)  ⟶ Resonating structures

(C)  ⟶ Geometrical isomers

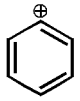
(D)  ⟶ Tautomer

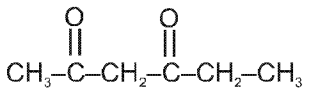
6*. In which of the following Ist is more stable than IInd :

(A) 

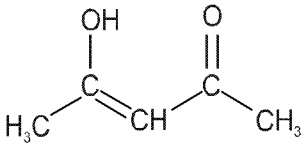
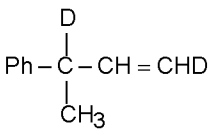
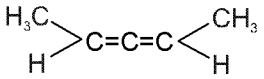
(B) 

(C) $CH_2=\overset{\oplus}{C}H$, $HC\equiv\overset{\oplus}{C}$

(D)  , $CH_2=\overset{\oplus}{C}H$

7. How many total enolic forms (including stereoisomers) are possible for  .

8. Match the compounds given in column-I with their electronic effect and stereoisomerism in column-II.

	Column-I		**Column-II**
(A)		(p)	Inductive effect
(B)		(q)	Resonance
(C)	$CH_3–CH=CH–CH=CH_2$	(r)	Geometrical isomerism
(D)		(s)	Optical isomerism
		(t)	Chiral carbon

Answer Key

DPP No. # 7

1.	(A)	**2.**	(C)	**3.**	(B)	**4.**	(C)	**5.***	(ABD)
6*.	(ABC)	**7.**	7	**8.**	(A) - (p, q, r) ; (B) - (p, q, r, s,t) ; (C) - (p, q, r) ; (D) - (p, s)				

Hints & Solutions

DPP No. # 7

1. Stability of carbon is increases by electron withdrawing group.

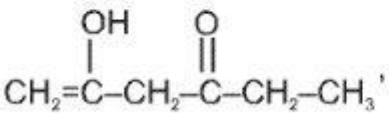
2. Stability of aromatic spicies is greatest.

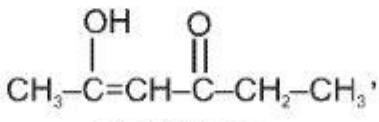
3. sp^3 hybridised carbanion is not planar specces.

5.* In option (A) Conjugation of π-bonds.
In option (B) +M effect of $-NH_2$ group
In option (C) Functional isomers.
In option (D) Tautomers.

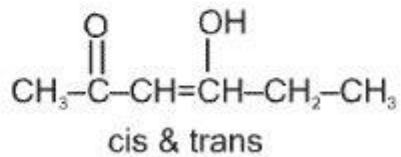
6. The charge on more electropositive element is more stable.

7.

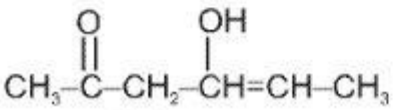




cis & trans



cis & trans



cis & trans