

Topic : Hydrocarbon
Type of Questions

Single choice Objective ('-1' negative marking) Q.1 to Q.6

(3 marks 3 min.)

M.M., Min.

Comprehension ('-1' negative marking) Q.7 to Q.9

(3 marks 3 min.)

[18, 18]

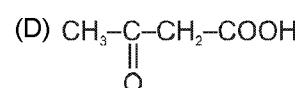
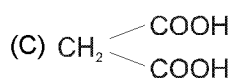
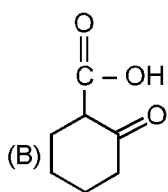
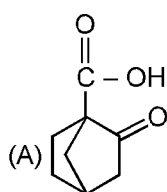
Match the Following (no negative marking) Q. 10

(8 marks 10 min.)

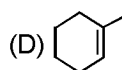
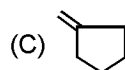
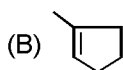
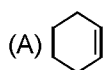
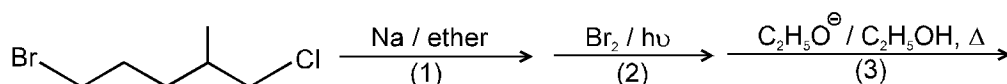
[9, 9]

[8, 10]

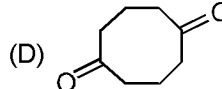
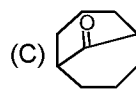
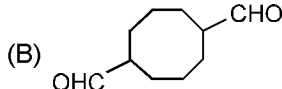
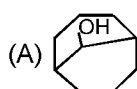
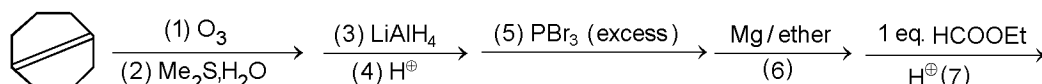
1. Which acid will not decarboxylate on heating.



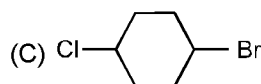
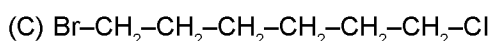
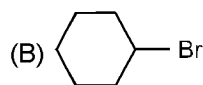
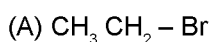
2. The major product of the following reaction is :



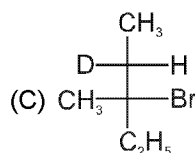
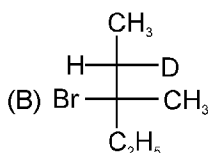
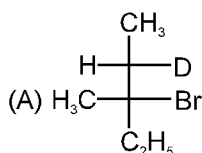
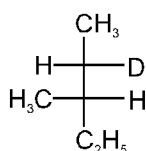
3. The end product of following reaction is



4. Which of the following will form cyclohexane on reaction with two moles of Na in ether.

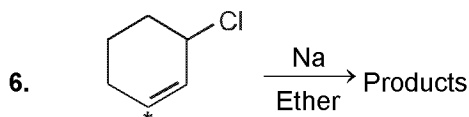


- 5.
-
- $\xrightarrow{\text{Br}_2 / h\nu}$
- Products, products may be

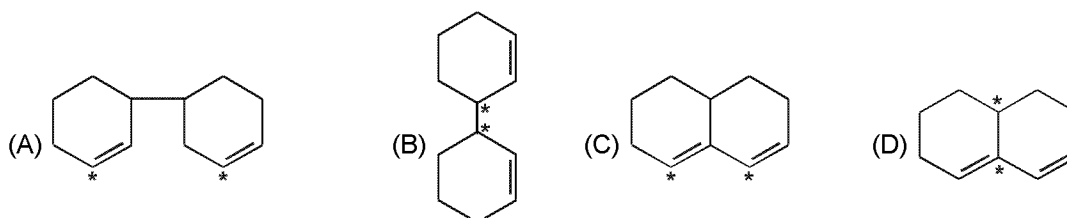


(D) Both A and B



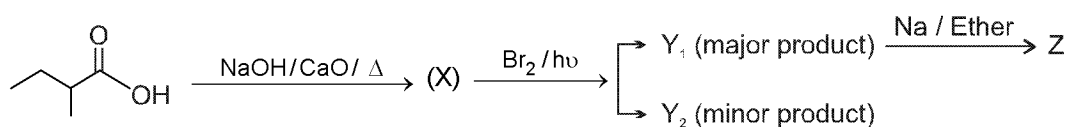


Which of the following is / are the possible product/s

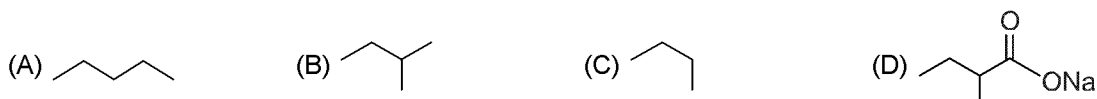


Comprehension # (Q. No. 7 to 9)

Observe the following sequence of reactions.



7. Identify 'X'



8. The no. of major product/s (Y_1) and number of minor product/s (Y_2) will be respectively (include stereoisomers)

- (A) 2, 2 (B) 2, 1 (C) 1, 3 (D) 1, 2

9. The structure of Z (obtained from major product Y_1) will be



10.

- Column-I**
- (A) Bakelite
(B) Dacron
(C) Nylon-66
(D) Buna-S

- Column-II**
- (p) Butadiene and styrene
(q) Phenol and methanal
(r) 1,2-dihydroxyethane and dimethyl terephthalate
(s) 1,6-hexanedioic acid and 1,6-diamine hexane



Answer Key

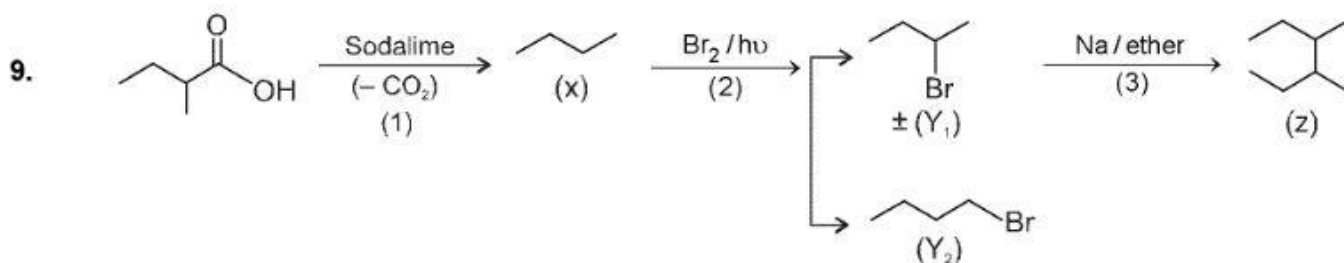
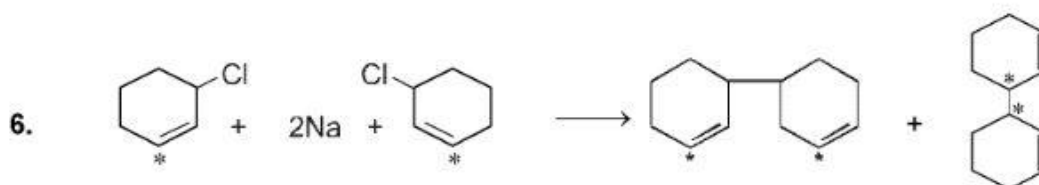
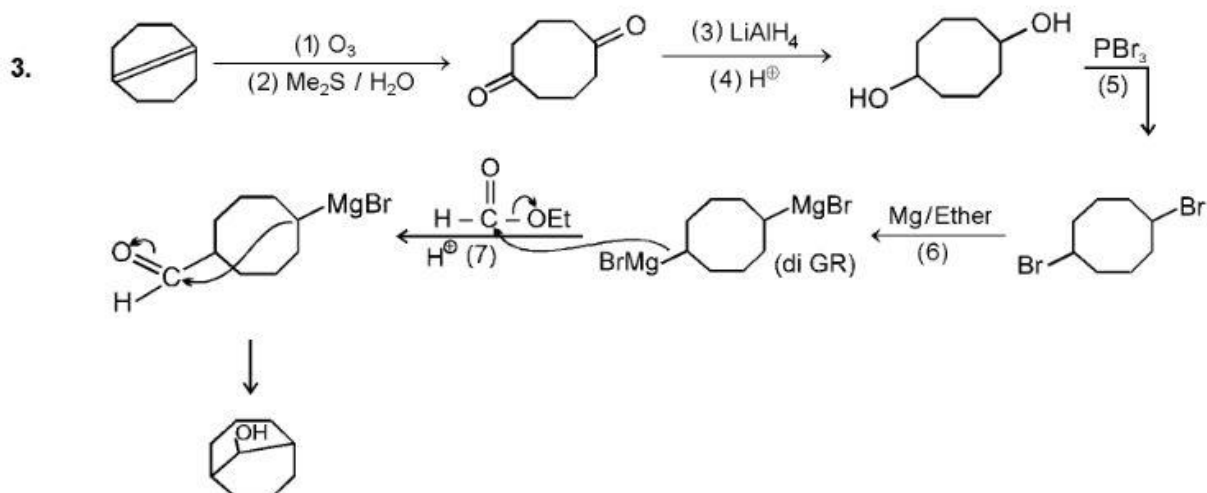
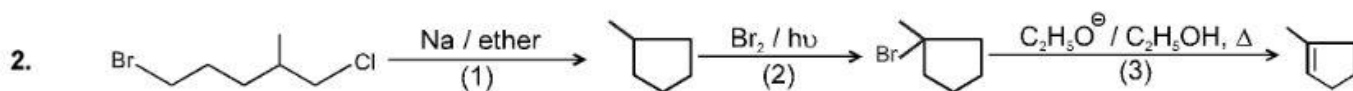
DPP No. # 31

1. (A) 2. (B) 3. (A) 4. (C) 5. (D)
 6.* (AB) 7. (C) 8. (B) 9. (A)
 10. (A - q) ; (B - r) ; (C - s) ; (D - p)

Hints & Solutions

DPP No. # 31

1. Bridge has carbon sp^2 .



10. (A) Bakelite is made from phenol and methanal.
(B) Dacron is obtained by the condensation of ester of terephthalic acid and ethylene glycol.
(C) Nylon-66 is obtained by the condensation of 1,6-hexanedioic acid and 1,6-diamino hexane.
(D) Buna-S is an addition polymer of butadiene, styrene.

