

Topic : Reduction, Oxidation & Hydrolysis of Organic Compounds
Type of Questions

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

(3 marks, 3 min.)

M.M., Min.

[18, 18]

Multiple choice objective ('-1' negative marking) Q.7

(4 marks, 4 min.)

[4, 4]

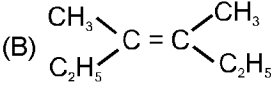
Subjective Questions ('-1' negative marking) Q.8

(4 marks, 5 min.)

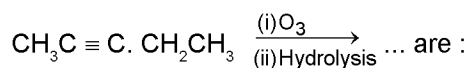
[4, 5]

1. Ozonolysis of a hydrocarbon gives one mole of acetone and one mole of formaldehyde. The hydrocarbon is
- (A) Propene (B) 2-Methylpropene
(C) 2-Methyl-2-butene (D) 2-Methyl-1-butene

2. An alkene with molecular formula C_8H_{16} on oxidation with hot $KMnO_4$ gives acetone and 3-pentanone. The structure of the alkene is

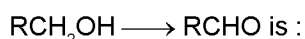
- (A) $(CH_3)_2C = C(C_2H_5)_2$ (B) 
- (C) $(C_2H_5)_2C = CHCH_2CH_3$ (D) $(CH_3)_2C = CH(CH_2)_3CH_3$

3. Products of the following reaction



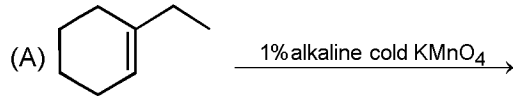
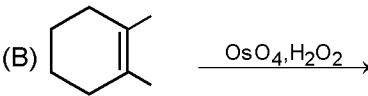
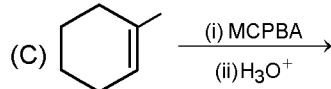
- (A) $CH_3CHO + CH_3CH_2CHO$ (B) $CH_3COOH + CH_3COCH_3$
(C) $CH_3COOH + HOOC \cdot CH_2CH_3$ (D) $CH_3COOH + CO_2$

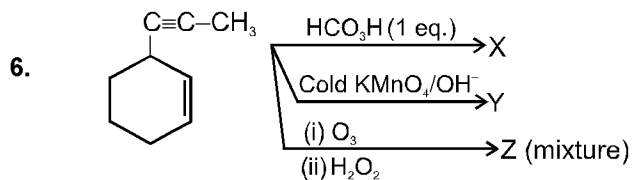
4. The most suitable reagent for the conversion of :



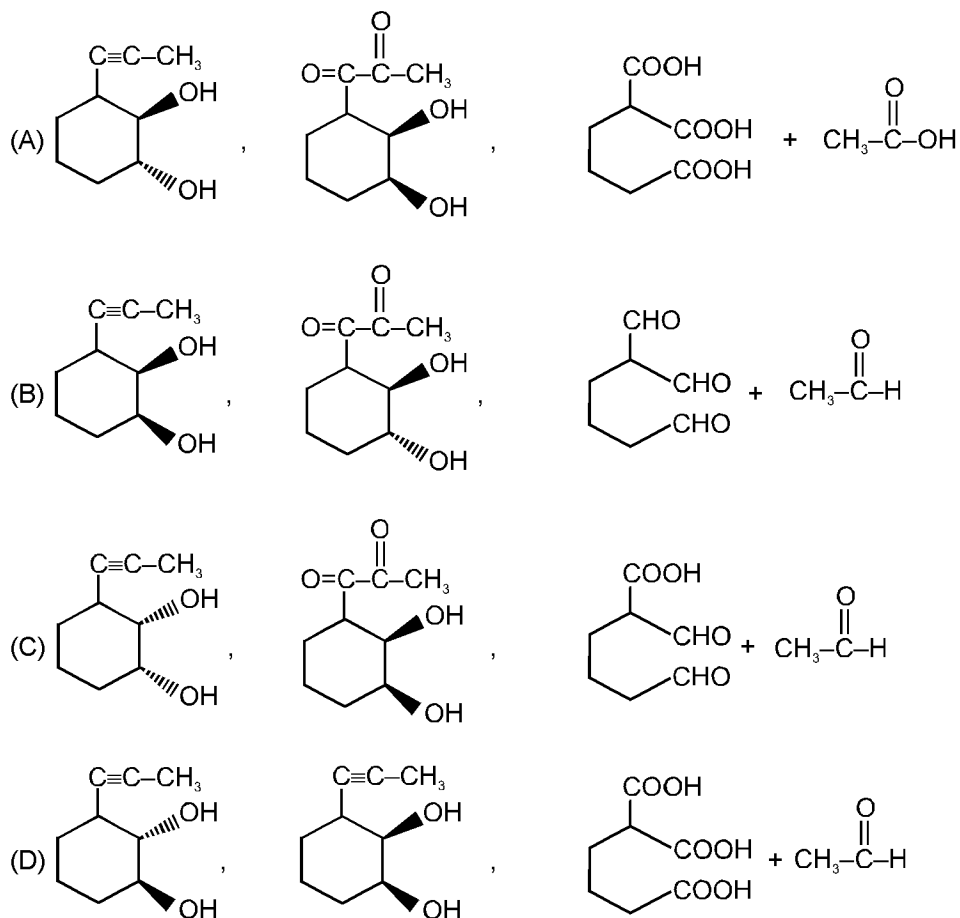
- (A) $KMnO_4$ (B) $K_2Cr_2O_7$
(C) CrO_3 (D) PCC (pyridine chloro chromate)

5. Which reaction gives the non-resolvable product :

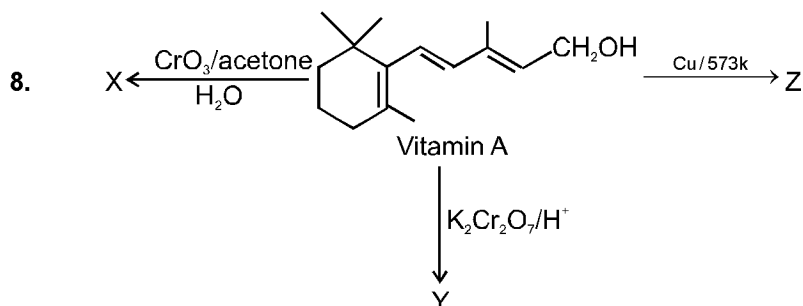
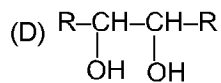
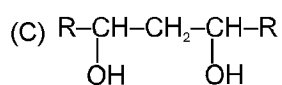
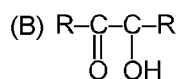
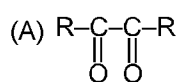
- (A)  (B) 
- (C)  (D) None of these



X, Y & Z are respectively



7.* Which of the following will be oxidised by HIO_4

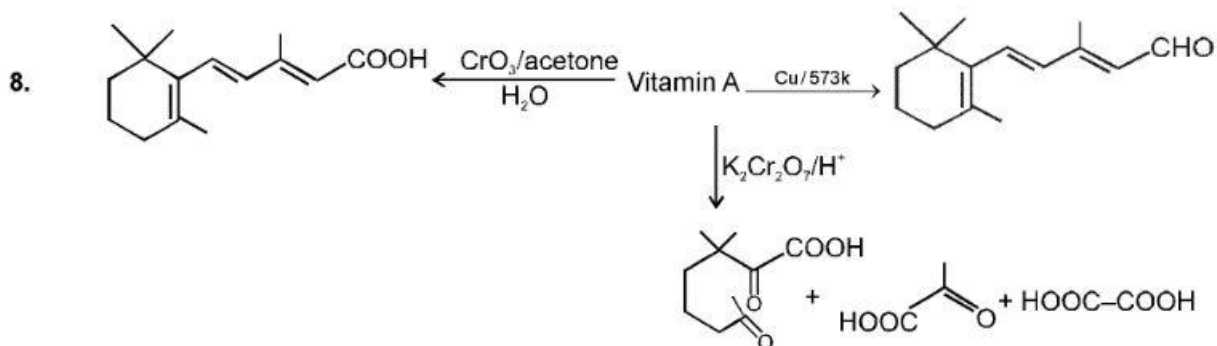


Identify the products.

Answer Key

DPP No. # 12

1. (B) 2. (A) 3. (C) 4. (D) 5. (B)
 6. (A) 7.* (A,B,D)



Hints & Solutions

DPP No. # 12

