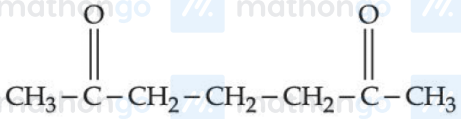
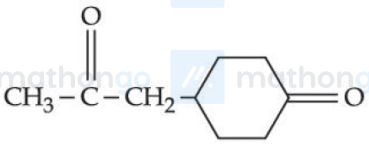
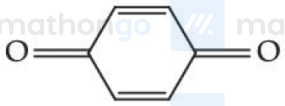
Q1 - 24 June - Shift 1

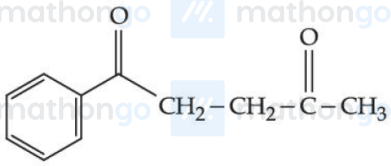
Which of the following is an example of conjugated diketone?

Space for your notes:

(A) 

(B) 

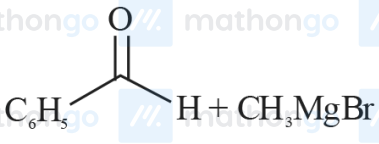
(C) 

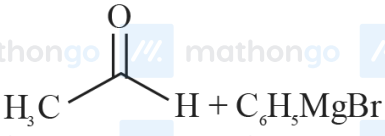
(D) 

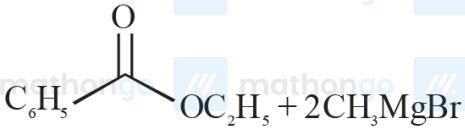
Q2 - 25 June - Shift 2

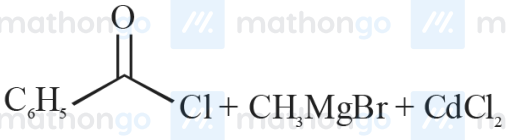
Which of the following conditions or reaction sequence will NOT give acetophenone as the major product ?

Space for your notes:

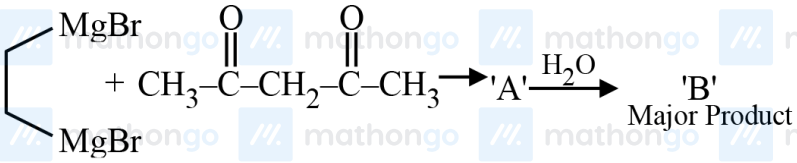
(A) (a)  (b) $Na_2Cr_2O_7$, H^+

(B) (a)  (b) PCC, DCM

(C) 

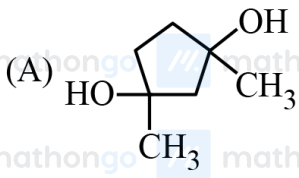
(D) 

Q3 - 26 June - Shit 1

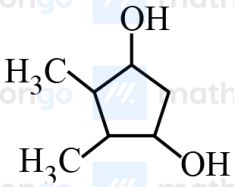


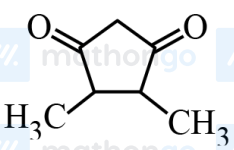
Consider the above reaction sequence and identify the product **B.**

Space for your notes:

(A) 

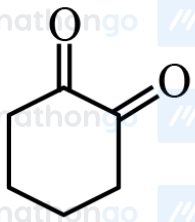
(B) 

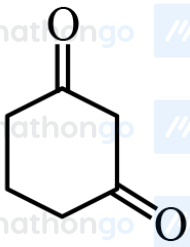
(C) 

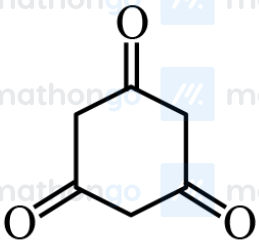
(D) 

Q4 - 26 June - Shift 1

Which will have the highest enol content ?

(A) 

(B) 

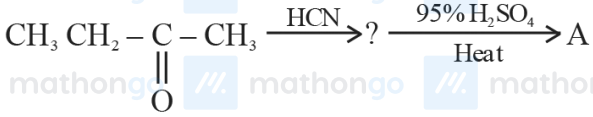
(C) 

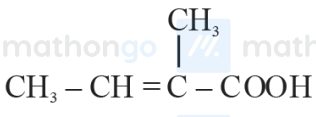
(D) 

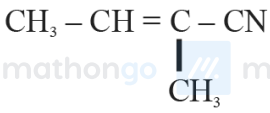
Space for your notes:

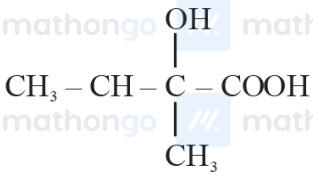
Q5 - 26 June - Shift 2

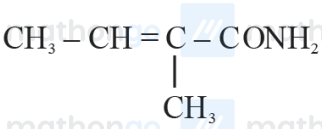
The final product 'A' in the following reaction sequence



(1) 

(2) 

(3) 

(4) 

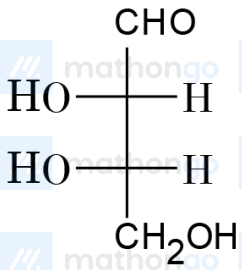
Space for your notes:

Q6 - 27 June - Shift 1

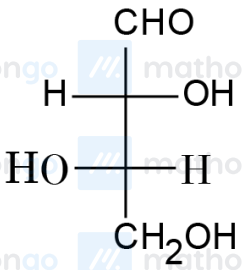
L-isomer of a compound 'A' ($C_4H_8O_4$) gives a positive test with $[Ag(NH_3)_2]^+$. Treatment of 'A' with acetic anhydride yield triacetate derivative. Compound 'A' produces an optically active compound (B) and an optically inactive compound (C) on treatment with bromine water and HNO_3 respectively, compound (A) is:

Space for your notes:

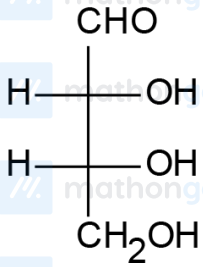
(A)



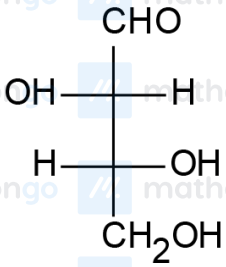
(B)



(C)

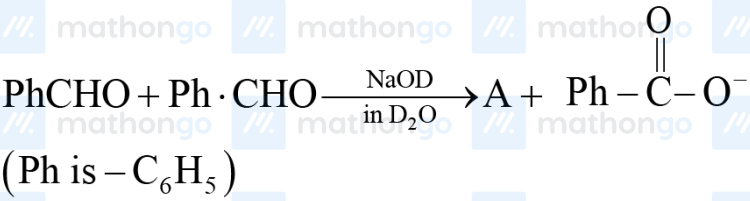


(D)



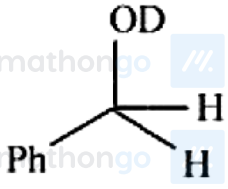
Q7 - 28 June - Shift 1

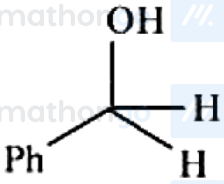
The correct structure of product 'A' formed in the following reaction.

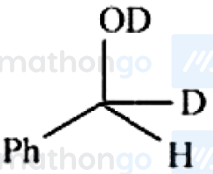


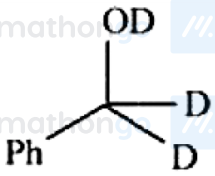
$$PhCHO + Ph\cdot CHO \xrightarrow[\text{in } D_2O]{NaOD} A + Ph-\overset{\overset{O}{\|}}{C}-O^-$$

$(Ph\ is - C_6H_5)$

(A) 

(B) 

(C) 

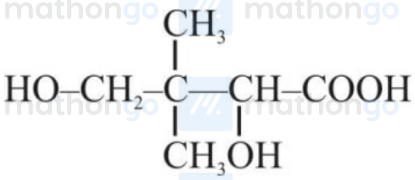
(D) 

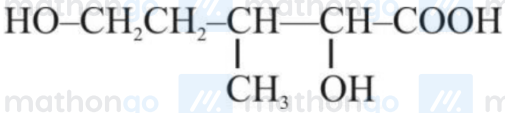
Space for your notes:

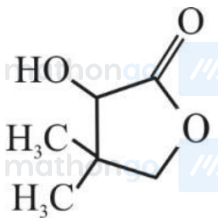
Q8 - 28 June - Shift 2

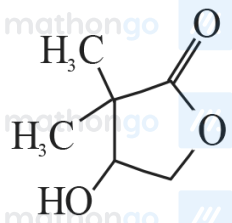
Isobutyraldehyde on reaction with formaldehyde and K_2CO_3 gives compound 'A'. Compound 'A' reacts with KCN and yields compound 'B', which on hydrolysis gives a stable compound 'C'. The compound 'C' is :

Space for your notes:

(A) 

(B) 

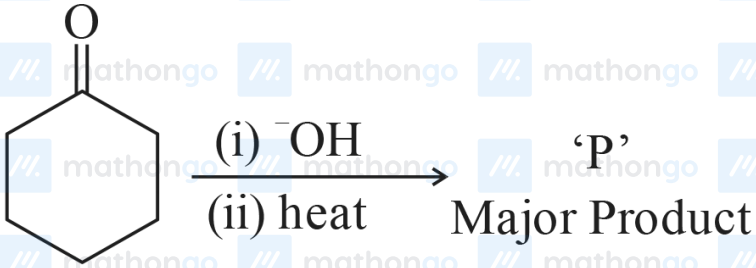
(C) 

(D) 

Q9 - 29 June - Shift 2

In the given reaction,

Space for your notes:



The number of π electrons present in the product 'P' is _____.

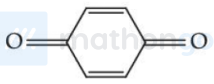
Answer Key

Q1 (C) **Q2** (C) **Q3** (A) **Q4** (C)

Q5 (A) **Q6** (A) **Q7** (A) **Q8** (C)

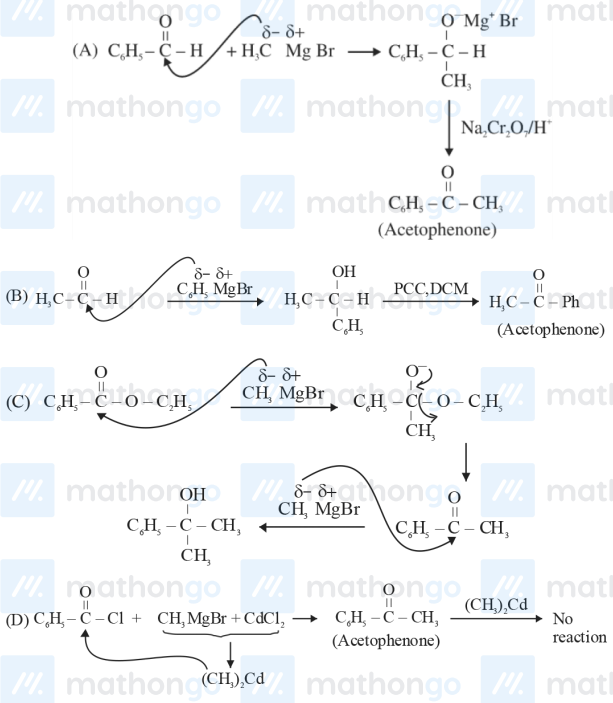
Q9 (4)

Q1 (C)



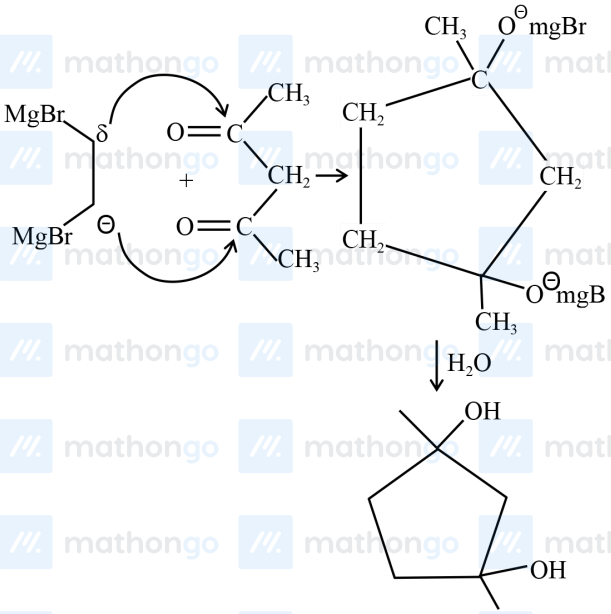
is a conjugated diketone

Q2 (C)

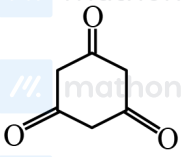


Q3 (A)

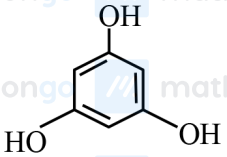
Although Acetyl Acetone predominantly gives Acid base reaction with G.R due to Active methylene group but according to given option ans should be based on nucleophilic addition reaction (NAR).



Q4 (C)

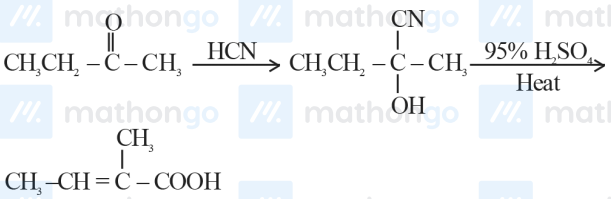


is tautomer of

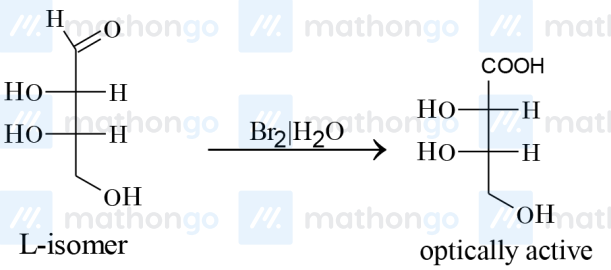


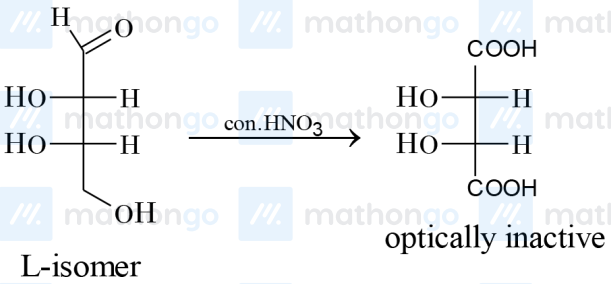
, Which is aromatic in nature.

Q5 (A)



Q6 (A)



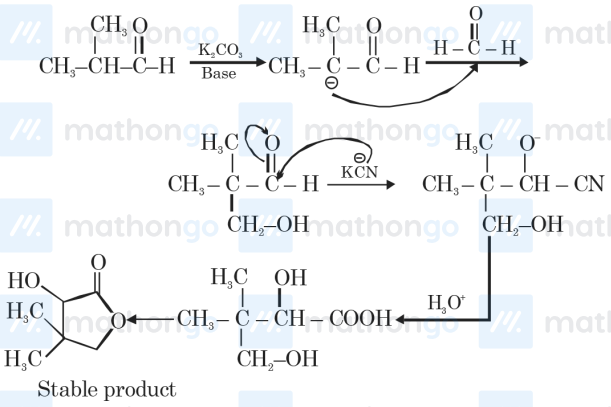


Q7 (A)

Allen Ans. (A)

$$PhCH = O + PhCH = O \xrightarrow{OD/D_2O} PhCH_2OD + PhCO_2^-$$

Q8 (C)



Q9 (4)