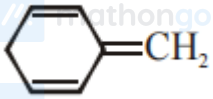
Q1: 16 March (Shift 1) - Single Correct

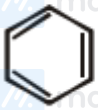
Among the following, the aromatic compounds

are :

(A)



(B)



(C)

(D)

Choose the correct answer from the following options :

(1) (A) and (B) only

(2) (B) and (C) only

(3) (B), (C) and (D) only

(4) (A), (B) and (C) only

Q2: 16 March (Shift 1) - Single Correct

In chromotography technique, the purification of compound is independent of :

(1) Mobility or flow of solvent system

(2) Solubility of the compound

(3) Length of the column or TLC Plate

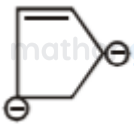
(4) Physical state of the pure compound Official

Q3: 17 March (Shift 1) - Single Correct

Which of the following is an aromatic compound?

(1) 

(2) 

(3) 

(4) 

Q4: 17 March (Shift 1) - Single Correct

Mesityl oxide is a common name of :

(1) 2,4 -Dimethyl pentan- 3 -one

(2) 3-Methyl cyclohexane carbaldehyde

(3) 2 -Methyl cyclohexanone

(4) 4-Methyl pent-3-en-2-one

Q5: 17 March (Shift 2) - Single Correct

The correct pair(s) of the ambident nucleophiles is (are):

(A) $AgCN/KCN$

(B) $RCOOAg/RCOOK$

(C) $AgNO_2/KNO_2$

(D) AgI/KI

(1) (B) and (C) only

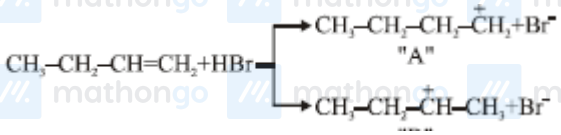
(2) (A) only

(3) (A) and (C) only

(4) (B) only

Q6: 17 March (Shift 2) - Single Correct

Choose the correct statement regarding the formation of carbocations A and B given :-



(1) Carbocation B is more stable and formed relatively at faster rate

(2) Carbocation A is more stable and formed relatively at slow rate

(3) Carbocation B is more stable and formed relatively at slow rate

(4) Carbocation A is more stable and formed relatively at faster rate

Q7: 18 March (Shift 1) - Single Correct

Match List-I with List-II :

List-I
(Chemicals)

(a) Alcoholic potassium hydroxide
(b) Pd/ $BaSO_4$
(c) BHC (Benzene hexachloride)
(d) Polyacctylcnc

List-II
(Use / Preparation / Constituent)

(i) Electrodes in batteries
(ii) Obtained by addition reaction
(iii) Used for β - elimination reaction
(iv) Lindlar's catalyst

Choose the most appropriate match :

(1) a – ii, b – i, c – iv, d – iii
(2) a – iii, b – iv, c – ii, d – i
(3) a – iii, b – i, c – iv, d – ii
(4) a – ii, b – iv, c – i, d – iii

Q8: 18 March (Shift 1) - Single Correct

Compound with molecular formula C_3H_6O can show :

(1) Positional isomerism
(2) Both positional isomerism and metamerism
(3) Metamerism
(4) Functional group isomerism

Q9: 18 March (Shift 2) - Single Correct

Given below are two statements :

Statement **I** : C_2H_5OH and $AgCN$ both can generate nucleophile.

Statement II : KCN and $AgCN$ both will generate nitrile nucleophile with all reaction conditions.

(1) Statement I is true but statement II is false

(2) Both statement I and statement II are true

(3) Statement I is false but statement II is true

(4) Both statement I and statement II are false

Answer Key

Q1 (2) **Q2** (4) **Q3** (1) **Q4** (4)

Q5 (3) **Q6** (1) **Q7** (2) **Q8** (4)

Q9 (1)