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# **CARBON AND ITS COMPOUND AND TYPES OF REACTION PYQs (2014-2024)**



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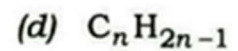
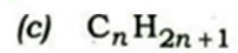
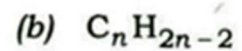
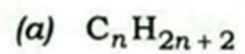
**36. Methanol is toxic because**

- (a) methanol coagulates the protoplasm
- (b) methanol gets oxidised to methanal in liver which coagulates the protoplasm
- (c) methanol gets oxidised to acetic acid in liver which coagulates the protoplasm
- (d) methanol gets oxidised to CO in liver which coagulates the protoplasm



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6. Which of the following is the general formula for saturated hydrocarbons?





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**5. The compound  $C_7H_7NO_2$  has**

- (a) 17 atoms in a molecule of the compound**
- (b) equal molecules of C and H by mass**
- (c) twice the mass of oxygen atoms compared to nitrogen atoms**
- (d) twice the mass of nitrogen atoms compared to hydrogen atoms**





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112. The number of saturated and unsaturated bonds in cyclohexane are :

- (a) 9 and 0 respectively.
- (b) 18 and 3 respectively.
- ☒ (c) 18 and 0 respectively.
- (d) 9 and 3 respectively.



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**34.** The correct order of octane number of butane, pentane, hexane and cyclohexane is

- (a) butane > pentane > hexane > cyclohexane
- (b) butane > pentane > cyclohexane > hexane
- (c) butane > cyclohexane > pentane > hexane
- (d) cyclohexane > butane > pentane > hexane



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**78.** Which of the following catalytic systems is used for the reduction of unsaturated hydrocarbon to saturated hydrocarbon?

- (a) Copper and  $H_2$
- (b) Iron and  $H_2$
- (c) Zinc and  $H_2$
- (d) Nickel and  $H_2$





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54. In which of the following, functional group isomerism is **not** possible?

- (a) Alcohols
- (b) Aldehydes
- (c) Alkyl halides
- (d) Cyanides



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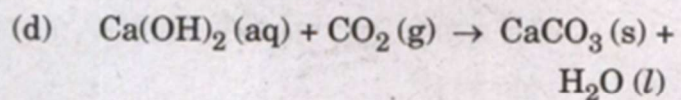
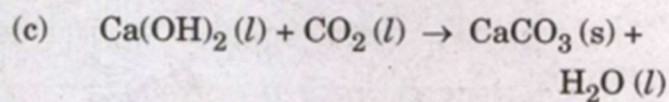
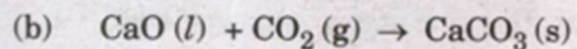
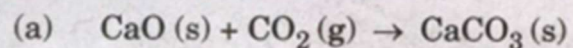
**113. In graphite, each carbon atom is bonded to three other carbon atoms**

- (a) forming a three-dimensional structure
- (b) in the same plane giving a hexagonal array
- (c) in the same plane giving a square array
- (d) in the same plane giving a pentagonal array



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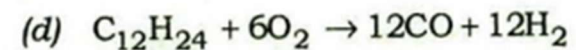
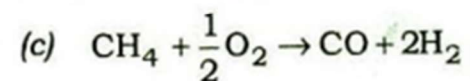
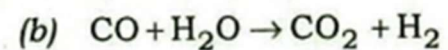
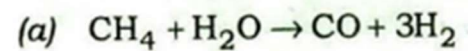
9. During white-washing of walls, slaked lime reacts slowly with carbon dioxide in air to form a thin layer of calcium carbonate on the walls. Which of the following reactions represents this correctly ?





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27. In which one of the following reactions, the maximum quantity of  $H_2$  gas is produced by the decomposition of 1 g of compound by  $H_2O/O_2$ ?







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