

Total No. of printed pages = 5

Sc-203/Chem-II/2nd Sem/Common/2017/N

CHEMISTRY - II

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks for the questions.

PART – A

1. Fill in the blanks : 1×5=5

(i) Producer gas is a mixture of CO and

(ii) Bakelite is a resin.

(iii) Monohydric alcohols and are functional isomers.

(iv) The I.U.P.A.C name of acetic acid is

(v) The parameter B.O.D stands for Biological Oxygen

2. Choose the correct answer : 1×5=5

(i) Magnetite is an ore of

Manganese / magnesium / iron / aluminum.

[Turn over

- (ii) Flux combines with gangue to form
Precipitate/amalgam/anode mud/slag
- (iii) Gypsum is added with cement to
Increase setting time/decrease setting time/
impart mechanical strength/decrease cost of
production.
- (iv) Nylon 6.6 is a
Poly acid/poly amide/polyester/poly alcohol
- (v) Total number of sigma bonds present in ethene
molecule is

2/4/5/6

3. Give short answer in one word/sentence :

1×5=5

- (a) What are Green House gases ?
- (b) Why net calorific value is less than gross
calorific value ?
- (c) For what type of ore, froth floatation method
of concentration is used ?
- (d) Why is gypsum added with cement ?
- (e) Name a dehydrating agent.

4. Match the following :

1×5=5

(a) Flux	(i) water pollution
(b) B.O.D	(ii) metallic corrosion
(c) Polymerisation	(iii) smelting
(d) Rusting	(iv) monomer
(e) Toluene	(v) aromatic hydrocarbon

5. State true or false for the following statements :

1×5=5

- (i) Polyethene is a linear polymer.
- (ii) Lactic acid possesses one chiral carbon.
- (iii) Calorific value of L.P.G is less than that of water gas.
- (iv) Carbon monoxide is a green house gas.
- (v) Benzene molecule has six pi electrons.

PART-B

Answer any *five* questions.

6. (a) What is pollutant ? Give one example of each of primary and secondary pollutant. 3
- (b) Mention different sources of water pollution. 3

- (c) Suggest few measures to control air pollution. 3
7. (a) Distinguish between Roasting and Calcination. 2
- (b) What is Flux ? What are different types of fluxes ? 3
- (c) How is steel manufactured by Bessemer process ? 4
8. (a) With suitable flow chart describe the wet process of manufacturing Portland cement. 4
- (b) How is water gas manufactured ? 3
- (c) What is Octane number ? 2
9. (a) What are the measures that can be taken for controlling of metallic corrosion ? 5
- (b) What is Lubricant ? Mention the important functions of lubricant. 4
10. (a) What are hydrocarbons ? How are they classified ? 3
- (b) Write the possible isomers with molecular formula C_5H_{10} . 3
- (c) Differentiate between thermoplastic and thermosetting resins. 3

11. (a) How is Ethene prepared from bromoethane ?
3
- (b) What happens when methane reacts with chlorine gas in presence of diffused sun light ?
3
- (c) Write a short note on Polymerisation. 3