Total No. of printed pages = 7

RETEST EXAMINATION – 2019

Semester : 2nd (Old & New)

Subject Code : Sc - 203

CHEMISTRY – II

Full Marks – 70

Time – Three hours

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

PART – A

Marks – 25

All the questions are compulsory.

1. Fill in the blanks : 1×10=10

   (a) Carboxyhaemoglobin is caused due to inhalation of ———.

   (b) Ozone layer protects the earth from ——— radiation.

   (c) To remove acidic gangue, ——— flux is used.

[Turn over

(d) Froth floatation method is useful for ——— ore concentration.

(e) Gasoline contains ——— hydrocarbon than those of kerosene.

(f) For manufacturing of Portland cement ——— kiln is used.

(g) A high aniline point indicates the presence of high amount ——— hydrocarbons.

(h) Linear polymers are formed by ——— polymerisation.

(i) Urea was first synthesized in laboratory by ———.

(j) In I.U.P.A.C system alcohols are named as ———.

2. Write true or false of the following : 1×10=10

(a) Determination of C.O.D takes more time than that of B.O.D.

(b) Hydrocarbons are greenhouse gases.

(c) Coal is a primary but coke is secondary fuel.

(d) White cement contains no calcium.

(e) A lubricant can also act as a cooling agent.

(f) Polystyrene is a thermosetting resin.

(g) There is no compound named as pentene-3.

(h) Carboxylic acid and aldehydes are isomeric.

(i) Halogenations of alkanes are substitions reactions.

(j) Calcination is used in case of carbonate ores.

3. Choose the correct answer of the following : 1×5=5

(a) Carbondioxide is

(i) the chief component of air

(ii) a greenhouse gas

(iii) an elementary gas

(iv) a poisonous gas

(b) SiO_2 is

(i) acidic flux

(ii) basic flux

(iii) reducing agent

(iv) organic compound

(c) Octane No. is used to determine the quality of

(i) kerosene (ii) diesel

(iii) petrol (iv) naphtha

(d) Polythene is

(i) an addition polymer

(ii) a condensation polymer

(iii) a branched polymer

(iv) a thermosetting polymer

(e) The first member of alkenes homologous series is

(i) methene (ii) ethene

(iii) acetylene (iv) methanal

PART – B

Marks – 45

Answer any *five* questions.

4. (a) What are primary and secondary pollutants ? Give examples. 3

(b) Mention the ill effects of acid rain. 3

(c) Suggest few ways to control soil pollution. 3

5. (a) Give the principle of Froth floatation method of concentration. 2

(b) Differentiate Roasting and Calcination. 3

(c) Write the chemical reactions involved in the manufacturing of cast iron in blast furnace. 4

6. (a) Give the difference between Ore and Mineral of metals. 2

(b) What are fluxes ? Give examples of acidic and basic fluxes. 3

(c) Mention the advantages of Open hearth process over Bessemer process. 4

7. (a) Give the average composition of Portland cement. 3

(b) What is special cement ? 2

(c) How is Portland cement manufactured in Wet process ? Give your answer with flow chart. 4

8. (a) What is lubricant ? 2

(b) Mention the various functions of lubricant. 3

(c) What are the properties of lubricant that should be taken into consideration for selecting a lubricant ? 4

9. (a) Define metallic corrosion. 2

(b) Explain the mechanism of Rusting. 3

(c) How metallic corrosion can be controlled ? 4

10. (a) What is Polymerization ? Give the classification of polymerization. 1+2=3

(b) Name the monomers of natural rubber and PVC. 2

(c) Write the differences of thermoplastic and thermosetting plastic(resin). 4

11. (a) What are hydrocarbons ? Classify hydrocarbons with examples. 2+2=4

(b) Write the structure and names of the isomers of C_5H_{10}. 3

(c) How is methane prepared in laboratory ? 2

12. (a) Give one example of each of Addition, Elimination and Substitution reaction. 3

(b) What happens when alkyl halides are treated with aqueous KOH and alcoholic KOH ? 2+2=4

(c) What are aromatic hydrocarbons ? 2