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SB-02-2022

FACULTY OF SCIENCE

B.Sc. (Third Year) (Sixth Semester) EXAMINATION MAY/JUNE, 2022

(CBCS/New Pattern)

CHEMISTRY

Paper-XIV

(Organic + Inorganic Chemistry)

(Thursday, 02-06-2022)

Time: 10.00 a.m. to 12.30 p.m.

Time— 2½ Hours

Maximum Marks—40

N.B. : Attempt all questions

1. Solve any *three* of the following:

 $3 \times 5 = 15$

- (i) What are the bi-products of alcohol industry?
- (ii) Give the classification of polymers on the basis of its composition.
- (iii) Write the preparation and properties of fluorocarbons.
- (iv) Define nanotechnology. Give the properties of nanoparticles.
- (v) What are the applications of nanoparticles?
- 2. Solve any three of the following:

 $3\times5=15$

- (i) How will you manufacture ethyl alcohol from molasses?
- (ii) Give a brief account on rectified spirit and denatured spirit.
- (iii) Write the classification of fibre.
- (iv) Give the synthesis and uses of the following compounds.
 - (a) Ethophan
 - (b) Indol-3-acetic acid.
- (v) Write a note on biocatalytic reactions.

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3. Solve any two of the following:

 $2 \times 5 = 10$

- (i) Define dye. Give brief account on reactive and dispersed dye.
- (ii) Write the advantages of phosphatic fertilizers.
- (iii) Give the twelve principles of green chemistry.
- (iv) How will you convert benzene to phenol & benzoquinone.