

**322306****Jan. 2022****B.Sc. (Chemistry) 3rd Semester  
Green Chemistry (SECC-02)**

Time : 90 Minutes]

[Max. Marks : 25

*Instructions :*

- 1. It is compulsory to answer all the questions (1 mark each) of Part-A in short.*
- 2. Answer any three questions from Part-B in detail.*
- 3. Different sub-parts of a question are to be attempted adjacent to each other.*

**PART-A**

1. (a) Define Green Chemistry. (1)  
(b) Give examples of some ozone depleting solvents. (1)  
(c) Atom economy is a measure of ..... of a reaction. (1)  
(d) What is surfactant in chemistry? (1)  
(e) What do you mean by marine Antifoulant? (1)  
(f) Give the structure of D-limonene. (1)  
(g) What is mechanochemical method? (1)  
(h) What is a byproduct of producing biodiesel? (1)

- (i) Who is the Father of Green Chemistry? (1)  
(j) What is an azo pigment? (1)

### PART-B

2. (a) Give the synthesis of poly lactic acid from corn. (3)  
(b) "Green chemistry is sustainable chemistry". Explain the statement. (2)
3. (a) How can you improve Atom Economy of a reaction? (2)  
(b) Define Rightfit pigment. Give the difference between organic and inorganic pigments. (3)
4. Briefly discuss the twelve principles of Green chemistry. (5)
5. (a) Write a note on Green solvents. Give some examples also. (3)  
(b) What are the advantages of synthesis of copper phthalocyanine complex by microwave? (2)
6. (a) Why surfactants are required while dry cleaning with supercritical CO<sub>2</sub>? (2)  
(b) Discuss the characteristics of biodiesel. (3)
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