Reg. No.									
----------	--	--	--	--	--	--	--	--	--



# **BSCBCCN 201**

# Second Semester B.Sc. Degree Examination, September 2022 (NEP – 2020) (2021 – 2022 Batch Onwards) BIOCHEMISTRY (Paper – II) Chemical Foundation of Biochemistry – 2 (DSCC)

Time: 2 Hours Max. Marks: 60

#### SECTION - A

## Answer any five of the following questions:

 $(5 \times 2 = 10)$ 

- 1. a) What is first order reaction? Give an example.
  - b) What are enantiomers? Give one example.
  - c) Differentiate between exergonic and endergonic reactions.
  - d) What is emulsion? Give one example.
  - e) Give the importance of Zn in biological system.
  - f) Define co-ordination number. What is the co-ordination number of  $[Co\ (NH_3)_3]Cl_3$ ?
  - g) What are ferrocenes?

### SECTION - B

## Answer any four of the following questions:

 $(4 \times 5 = 20)$ 

- 2. Explain Brownian movement.
- 3. Give the sources, signs and symptoms of mercury poisoning.
- 4. Explain the methods of resolution of recemic mixture.
- 5. Explain preparation and protonolysis of Grignard reagent.
- 6. Describe dialysis process.
- 7. Explain stereoisomerism in co-ordination compounds.



## SECTION - C

Answer any three of the following questions:

 $(3 \times 10 = 30)$ 

- 8. i) Give the classification of organic compounds with example.
  - ii) Explain geometrical isomerism.

(5+5)

- 9. i) Give an account on applications of colloids.
  - ii) Derive rate constant for zero order reaction.

(5+5)

- 10. i) What are free radicals? Explain the generation and scavengers systems of free radicals.
  - ii) Write a note on lead poisoning.

(6+4)

- 11. i) Give the various steps of metallurgical process in brief.
  - ii) What are metalloporphyrins? Explain their role in biological systems. (6+4)

\_\_\_\_\_