Roll No

CY-110/CY-111-CBCS B.E. I & II Semester

Examination, June 2020

Choice Based Credit System (CBCS) Chemistry / Chemistry - I

Time: Three Hours

Maximum Marks: 60

- *Note:* i) Attempt any five questions.
 - ii) All questions carry equal marks.
- 1. a) Explain VSEPR Theory.
 - b) Draw the molecular orbital diagram-NO, CO.
- 2. Discuss molecular orbital theory giving examples of O_2 and N_2 molecules.
- 3. a) Draw only phase diagram of copper-silver system.
 - b) Explain corrosion with reference to Daniel cell.
- 4. What are polymers? Give classification of polymers with suitable example. Explain Thermosetting and Thermoplastic polymers with examples.
- 5. a) Define Kohlrausch's law and discuss its applications.
 - b) Differentiate between order and molecularity of reaction.
- 6. a) Discuss Arrhenius theory of electrolytic dissociation.
 - b) Write note on Redox reactions.

7. What is Vulcanisation? How does it improve the property of natural rubber?

OR

Write preparation and uses of

- i) Phenol-formaldehyde resin
- ii) PVC
- 8. Write brief notes on following (any two):
 - a) Corrosion of metals
 - b) VSEPR model
 - c) Vulcanisation of rubber
 - d) Electrochemical cell
