

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

T1 EXAMINATION- Sept. 2023

B.Tech III Semester (Civil)

COURSE CODE: 18B11CE311 (3)

MAX. MARKS:15

COURSE NAME: Chemistry

COURSE COORDINATOR: Dr. Poonam Sharma

MAX. TIME: 1 Hr

Note: All questions are compulsory.

- Q1 (a). Discuss in brief hydrogen bonds with suitable example. 2[COI]
- (b). Explain why NaCl is bad conductor of electricity. 1[COI]
- Q2(a). pH measurement is an potentiometric measurement. Explain. 2[COII]
- (b). Explain the buffer capacity of an acidic buffer. 2[COII]
- Q3. A metal crystallizes in a FCC lattice. The radius of the atom is 0.197nm. The density of the element is 1.54 g/cm^3 . What is this metal? 2[COI]
- Q4. Differentiate between. 6[COI,II]
- (i) Metallic Conduction and Electrolytic conduction
- (ii). Molecular crystals and Metallic crystals
- (ii) Ostwald dilution law and Kohlrausch law