

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS-2022

B.Tech-VI Semester (Open Elective)

COURSE CODE (CREDITS): 18B1WBT636

MAX. MARKS: 35

COURSE NAME: Industrial Chemistry

COURSE INSTRUCTORS: Dr. Poonam Sharma

MAX. TIME: 2 Hours

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*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

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- Q1(a). Explain the statement, "Battery acts as portable source of electrical energy." 2  
(b). How fuel cells are different from regular batteries? 2  
Q2(a). Detonation is considered an important property to rate an chemical explosive. Elucidate.3  
(b). Elaborate the basis of preformulation studies. 3  
Q3(a). pKa determines the solubility in pH-dependent environment and extent of ionization. Justify this statement. 3  
(b) Describe the characteristics of good battery. 3  
Q4(a). Illustrate the classification of catalysts. 3  
(b). Paint is a mechanical dispersion of various constituents. Explain. 3  
Q5(a). How Synthetic polymers are important for agricultural and medical applications? 3  
(b). Explain Alloy steels. 2  
Q6(a). Describe the correlation between solubility and permeability according to BCS class. 4  
(b).Elucidate the applications of catalysis. 4