

SEMESTER EXAMINATION-2021

CLASS – B.SC. 3RD SEM

SUBJECT- CHEMISTRY

PAPER CODE: BCH-S301

PAPER TITLE: CHEMICAL TECHNOLOGY & SOCIETY

Time: 3 hour

Max. Marks: 70

Min. Pass: 40%

Note: Question Paper is divided into two sections: **A and B**. Attempt both the sections as per given instructions.

SECTION-A (SHORT ANSWER TYPE QUESTIONS)

Instructions: Answer any five questions in about 150 words each. Each question carries six marks. (5 X 6 = 30 Marks)

Question-1: What is percolation.

Question-2: What are the drawbacks of solvent extraction technique?

Question-3: What is the significance of tray designs in columns?

Question-4: What is the difference between adsorption and absorption?

Question-5: What is Nernst distribution law?

Question-6: Write a short note on Solar energy.

Question-7: Write a short note on fossil fuels.

Question-8: Write name of some of the polymers that you use everyday

Question-9: What are polysaccharides? Explain with an example?

Question-10: Define the material characteristic that should be taken in to the account for the milling process.

SECTION-B (LONG ANSWER TYPE QUESTIONS)

Instructions: Answer any FOUR questions in detail. Each question carries 10 marks. (4 X 10 = 40 Marks)

Question-11: Discuss the following-

(i) Stirred tank reactors

(ii) Tubular reactors

Question-12: Discuss the solvent extraction technique in detail.

Question-13: Discuss the solid-liquid leaching with appropriate examples.

Question-14: What do we understand by scale-up of a process? What are the steps to scale-up of a process, discuss in detail?

Question-15: Write a note on adsorption and its uses.

Question-16: Discuss distillation and its major components in detail.

Question-17: What is pollution? Discuss its types & effect on society.

Question-18: Write a note on the exploration of societal and technological issues from a chemical perspective.