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BSCHE - MJ303

B.Sc. DEGREE EXAMINATION, NOV./DEC. - 2024

(THIRD SEMESTER)

CHEMISTRY (MAJOR)

Physical Chemistry - I

(Solutions and Electro Chemistry)

(w.e.f. 2023-2024 Admitted Batch)

Time : 3 Hours **Max. Marks : 75**

SECTION - A [5 × 5 = 25]

Answer any five of the following questions.

1. Explain Raoult's Law.

2. Write about Azeotropes.

3. Write about colligative properties.

4. Write about Flourescence and phosphorescence.

5. Explain Equivalent and specific conductance.

6. Explain transport number.

7. Explain Electrochemical cells.

8. Explain preparation in Freezing point determain by Beckmann method.

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SECTION - B [5 × 10 = 50]

Answer all the questions.

9. a) Explain critical solution temperature with examples.

OR

b) Explain Nernst distribution law.

10. a) Explain Berkley-Hartley's method.

OR

b) Explain Ostwald-walker's method.

11. a) Write about photosensitized reactions.

OR

b) Explain Jablonski diagram and chemiluminescence.

12. a) Explain Kohlrausch's law and its application.

OR

b) Explain Hittorf method.

13. a) Explain conductometric titrations.

OR

b) Explain potentiometric titrations.

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