

C.U.SHAH UNIVERSITY**Summer Examination-2022****Subject Name: Physical Pharmaceutics II - Theory****Subject Code: BP403T****Branch: B.Pharm****Semester: 4****Date: 05/05/2022****Time: 11:00 To 02:00****Marks: 75**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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Q-1 Attempt the following questions: (20)

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|----------|---|----------|
| A | What are colloids? | 2 |
| B | What is Gold number? | 2 |
| C | Give ideal properties of suspension. | 2 |
| D | Give types of emulsion. | 2 |
| E | Explain two identification test for emulsion. | 2 |
| F | Briefly explain Newtonian flow with its equation. | 2 |
| G | Briefly explain factors affecting viscosity. | 2 |
| H | Give different terminology of viscosity. | 2 |
| I | Define Half-life and Shelf-life. | 2 |
| J | What is pseudo first order reaction? | 2 |

Attempt the following questions:

Q-2 Attempt any two of following: (2*10 Marks = 20 Marks) (20)

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|----------|--|-----------|
| A | Explain Plastic flow, Pseudo plastic flow and Dilatant flow in detail. | 10 |
| B | Discuss the types of colloids in detail. | 10 |
| C | Write a detail note on Accelerated stability study with its limitations. | 10 |

Q-3 Attempt any Seven of following: (7*5 Marks = 35 Marks) (35)

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|----------|---|----------|
| A | Explain Stock's law for sedimentation. | 5 |
| B | Write a note on physical stability of emulsion. | 5 |
| C | Differentiate deflocculated and flocculated suspension. | 5 |
| D | Write a note on Thixotropy. | 5 |
| E | Classify various instruments for measurement of viscosity. Explain any one in detail. | 5 |
| F | What is zero order reaction? Derive an equation for the reaction rate constant, half-life and shelf life for zero order reaction. | 5 |
| G | Discuss Oxidation as chemical degradation of drugs with its preventive measures. | 5 |
| H | Explain Coulter counter method for determining particle volume. | 5 |
| I | Write a note on derived properties of powders. | 5 |

