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Sum - 2023

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Seat Number

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CJ-34

BP-403 T

Physical Pharmaceutics-II
(724403)

Total Pages : 2]

Time : 3 Hours

Max. Marks : 75

- Note : (1) Do not write anything on question paper except Seat No.
(2) Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
(3) Students should note, no supplement will be provided.
(4) Draw well labelled diagrams wherever necessary.
(5) All questions are compulsory.

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1. Attempt the following :

- (a) What do you mean by plastic and pseudoplastic flow ?
- (b) Define micromeritics. Write its application.
- (c) Differentiate between flocculated and deflocculated suspension.
- (d) Define porosity and Carr's index.
- (e) Define CMS. Give its significance.
- (f) What is accelerated stability testing ? Give its limitations.
- (g) Define zeta potential and Nernst potential.
- (h) Enlist various types of Viscometer.
- (i) Define craft point and cloud point.
- (j) Give merits and demerits of sieving method.

P.T.O.

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2. Solve any *two* of the following :
- (a) What are Newtonian and non-Newtonian system. Explain Dilatant flow.
 - (b) Define Micromeritics. Enlist various methods to determine particle size. Explain coulter counter method in detail.
 - (c) Explain in detail DLVO theory along with its significance.
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3. Solve any *seven* of the following :
- (a) Define order of reaction and explain graphical method to determine it.
 - (b) Classify Viscometer. Explain in detail falling sphere viscometer.
 - (c) Write a note on causes and remedies of cracking and creaming.
 - (d) Write a note on Catalysis.
 - (e) Write a note on optical microscopy.
 - (f) Define Angle of Repose. Explain method to determine it.
 - (g) Explain in detail formulation of suspension.
 - (h) Discuss method to determine HLB.
 - (i) Give pharmaceutical applications of colloids.