Graphic Era HILL UNIVERSITY
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University under section 2(f) of UGC Act, 1956

Sessional II (Even) Semester Examination May 2025

Roll no.....

Name of the Course: **B.PHARM**
Semester: **IV**
Name of the Paper: **PHYSICAL PHARMACEUTICS-II**
Paper Code: **BP403T**
Time: 1.5 hour **Maximum Marks: 30**

Note:
(i) This question paper contains three sections.
(ii) All the sections are compulsory.

Section-A

Multiple Choice Question **10 X 1 = 10 MARKS**

S.No.	CONTENTS	
1.	The sedimentation rate in coarse dispersions is best described by: a) Henderson-Hasselbalch equation b) Noyes–Whitney equation c) Stokes' law d) Raoult's law	CO 3
2.	Which of these is **NOT** a type of instability in emulsions? a) Cracking b) Creaming c) Caking d) Coalescence	
3.	A phase inversion in an emulsion system results in: a) Caking b) Change from o/w to w/o or vice versa c) Increase in particle size d) Zeta potential reversal	
4.	Which parameter increases flocculation tendency in suspensions? a) High zeta potential b) Low zeta potential c) High viscosity d) High density of medium	
5.	The function of a structured vehicle in suspension is to: a) Act as preservative b) Increase density c) Increase viscosity and stability d) Prevent emulsification	
6.	Porosity of a porous powder is defined as: a) Bulk volume/ void volume b) Void volume/ bulk volume c) Void volume/ true volume d) True volume/ bulk volume	

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7.	If Carr's Index value is above 25%, the powder is considered to have: a) Excellent flow b) Good compressibility c) Very poor flow d) Low bulk density	CO 4
8.	A powder is said to have good flow if the angle of repose is: a) > 45° b) Between 31°-35° c) Between 50–60° d) 90°	
9.	One micrometer is equal to: a) 10^{-6} centimeter b) 10^{-3} centimeter c) 10^{-6} meter d) 10^{-3} meter	
10.	The type of particle diameter that is obtained by microscopic method of evaluation is: a) Projected b) Stokes' c) Volume d) Volume surface	

Section-B

Short Questions: Attempt any two questions. **2X 5 = 10 MARKS**

S.No.	QUESTIONS	CO's
1.	Write a note on settling of suspensions.	CO 3
2.	Explain the formulation of emulsion by HLB method.	CO 3
3.	Enumerate different methods of determination of true density and explain any **one**.	CO 4

Section-C

Long Questions: Attempt any one question. **1 X 10 = 10 MARKS**

S.No.	QUESTIONS	CO's
1.	Discuss in detail the theories of emulsification.	CO 3
2.	Write the principle and method involved in the determination of particle size in a powder using Anderson apparatus.	CO 4