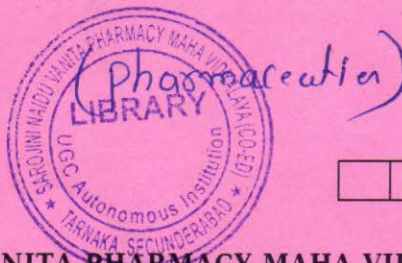


QP Code:42101/43101/45101



Hall Ticket Number

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
M.Pharmacy (PCI) SEMESTER I (Main) Examination, APRIL-2026

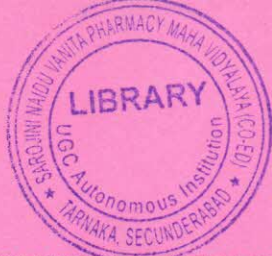
Course:Modern Pharmaceutical Analytical Techniques

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	Explain in detail the principle and instrumentation of a double beam spectrophotometer with a neat labelled diagram.	I	2
2	Justify the role of quantum numbers in NMR spectroscopy and explain the principle and instrumentation of NMR spectrometer	II	5
3	Write the principle, theory, and instrumentation of Mass Spectrometry with suitable explanations and diagrams.	III	1
4	Classify the various chromatographic techniques and discuss the factors affecting resolution and the isolation of drugs in column chromatography with suitable explanations.	IV	2
5	Illustrate the principle, instrumentation, factors affecting separation, and applications of gel electrophoresis with suitable diagrams	V	2
6	Compare the instrumentation and applications of Differential Thermal Analysis (DTA) and Thermogravimetric Analysis (TGA).	VI	4
7	Organize the information on quenchers, instrumentation, and applications of a fluorescence spectrophotometer, highlighting their principles and significance in analysis	I	3
8	Explain High Performance Liquid Chromatography (HPLC), with neat and well-labeled diagrams, explaining their principles and working mechanisms	IV	2

QP Code:41102



Hall Ticket Number

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
M.Pharmacy (PCI) SEMESTER I (Main) Examination, APRIL-2026

Course:Drug Delivery System

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	Explain indetail about Sustained Release (SR) and Controlled Release (CR) formulations with advantages and disadvantages.	I	2
2	Explain physicochemical factors for Sustained Release (SR) and Controlled Release (CR) formulations	I	2
3	Explain Feedback-Regulated Drug Delivery Systems (DDS): Principles, Fundamentals & Applications	II	2
4	Define gastro-retentive drug delivery systems (GRDDS). Explain their principles, concepts, advantages & disadvantages.	III	1
5	Discuss indetails about formulation approaches, formulation and evaluation tests of in situ gels for ocular drug delivery systems. Justify their advantages over conventional dosage forms.	IV	5
6	Discuss about concepts, formulation methods, evaluation parameters, and recent advances in transdermal patches.	V	5
7	Discuss the barriers associated with protein and peptide drug delivery and their impact on drug absorption.	VI	5
8	Define transdermal delivery of vaccines. Enumerate different approaches used along with their advantages, applications and limitations.	VII	1

QP Code:41103



Hall Ticket Number

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
M.Pharmacy (PCI) SEMESTER I (Main) Examination, APRIL-2026

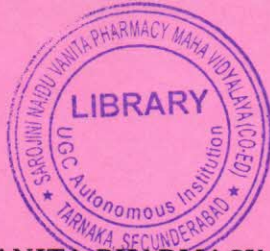
Course:Modern Pharmaceutics

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	1. Discuss about Drug Excipient Compatability studies for Solid dosage forms?	<i>I</i>	2
2	Describe URS, DQ, IQ, OQ and PQ of equipment & facilities and mention their importance.	<i>II</i>	5
3	Write about cGMP requirements for layouts of buildings and equipments?	<i>III</i>	6
4	Explain the role of Heckel plots in compaction of tablets	<i>IV</i>	4
5	Discuss students t-test and Chi square test and its applications.	<i>V</i>	5
6	Discuss about optimization in experimental design for Pharmaceutical Products?	<i>I</i>	4
7	Explain the phases of compaction profile with a suitable example?	<i>IV</i>	4
8	Write in detail about dissolution parameters and diffusion parameters	<i>V</i>	2

QP Code:41104



Hall Ticket Number

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.) (Autonomous)
M.Pharmacy (PCI) SEMESTER I (Main) Examination, APRIL-2026

Course:Regulatory Affairs

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	What are the differences between CTD and eCTD formats. Describe the contents of each CTD module. 15 M	<i>I</i>	2
2	Discuss Hatch-Waxman Act 1984, impact Generic Drug Approval and discuss in detail about Para IV filing- 15 Marks	<i>II</i>	6
3	Explain Significance & role of Clinical Research Phases in drug delopment process-15 Marks	<i>III</i>	2
4	Describe in detail the regulatory requirements governing approval of medical devices in major markets-15 Marks	<i>IV</i>	2
5	A. Describe the contents and purpose of the Investigator's Brochure in clinical trials.- 5 Marks B. Write a detailed note on the Mutual Recognition Procedure in European regulations. 10 Marks	<i>V</i>	2
6	Explain the contents of IND and describe the IND approval process with regulatory requirements-15 Marks	<i>V</i>	4
7	Discuss the role and responsibilities of sponsors in the quality assurance and management of clinical trials. -15 Marks	<i>VI</i>	6
8	Elaborate elements and steps involved in informed consent process as per ICH GCP.-15 Marks	<i>VI</i>	6
