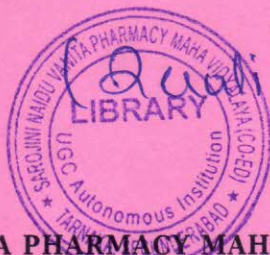


QP Code:42101/43101/45101



Quality Assurance

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

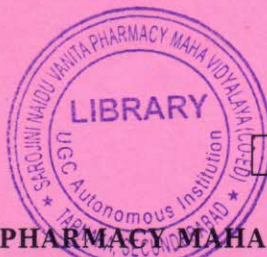
Course:Modern Pharmaceutical Analytical Techniques

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:43103



Hall Ticket Number

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
M.Pharmacy (PCI) SEMESTER 1 (Main) Examination, APRIL-2026

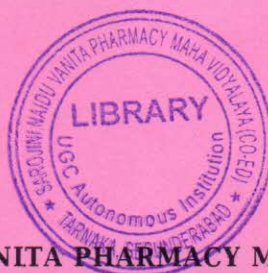
Course:Quality Control and Quality Assurance

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	List the objectives and scope of Quality Assurance in the pharmaceutical industries.	<i>I</i>	<i>1</i>
2	Define cGMP and explain its objectives in pharmaceutical manufacturing	<i>II</i>	<i>1</i>
3	Explain procedures for analysis of raw materials	<i>III</i>	<i>2</i>
4	Explain Batch Manufacturing Record (BMR) in detail with its format, contents, and significance	<i>IV</i>	<i>2</i>
5	Explain sterile products and aseptic process control in detail	<i>V</i>	<i>4</i>
6	Create a GLP-compliant laboratory setup for pharmaceutical testing	<i>I</i>	<i>6</i>
7	Explain In-Process Quality Control (IPQC) tests for tablets	<i>III</i>	<i>2</i>
8	Explain Intellectual Property Rights (IPR) and discuss patents, trademarks, and copyrights.	<i>V</i>	<i>2</i>

QP Code:43102



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: Quality Management System

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	a. Classify customers. (5M) b. Explain the importance of customer focus in Quality Management Systems. (10M)	I	2
2	What is cost of quality? Classify the components of cost of quality with relevant example.	I	4
3	Compare ISO 9001: 2008 and ISO 9001:2015 standards. Illustrate its importance in Pharma QA.	II	4
4	Explain the concept of Self inspection and its role in GMP Compliance. Design a self inspection schedule covering six systems.	III	6
5	Explain IPQC for Solid dosage forms with acceptance criteria.	III	1
6	a. Describe elements of ICHQ8 Quality by Design guidelines. (7M) b. Develop a Quality by Design approach for tablet formulation. (8M)	IV	6
7	Describe how the pursuit of decreased process variability is supported by Statistical Process Control techniques	V	2
8	Compare and contrast advantages and limitations of benchmarking.	VI	2

QP Code:43104



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:Product Development and Technology Transfer

Time: 3 Hours Max.

Marks: 75

Question No.	Question	CO	BL
PART-A	Answer any 5 questions.	5 × 15 = 75	
1	Write a note on the scope and purpose of the IND application and discuss the stages of the IND application process in India.	<i>I</i>	<i>2</i>
2	What do you understand by the term BACPAC? Discuss the guidelines for bulk APIs (10 m)	<i>I</i>	<i>1</i>
3	Discuss the concept of Co-solvency for improving the solubility. List out various cosolvents and explain how to select a cosolvent.	<i>II</i>	<i>2</i>
4	Define polymorphism and explain its impact on drug properties and formulation	<i>II</i>	<i>2</i>
5	Explain the concept and significance of pilot plant Scale up in pharmaceutical manufacturing	<i>III</i>	<i>2</i>
6	A)Enlist the various quality control tests for pharmaceutical containers and closures (7M) B). Discuss the tests generally conducted on plastic containers and metal containers .(8M)	<i>IV</i>	<i>2</i>
7	Summarize the packaging requirements for Pharmaceutical Dosage Forms (7M)	<i>IV</i>	<i>2</i>
8	Discuss the Qualitative and quantitative technology models	<i>V</i>	<i>1</i>
