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Total No. of Pages: 01

Total No. of Questions: 06

## M.Pharmacy(Pharmaceutical Analysis) (2017 Batch) (Sem.-2) ADVANCED INSTRUMENTAL ANALYSIS

Subject Code: MPA-201T M.Code: 74925

Time: 3 Hrs. Max. Marks: 75

## **INSTRUCTIONS TO CANDIDATES:**

- 1. Attempt any FIVE questions out of SIX questions.
- 2. Each question carries FIFTEEN marks.

O1.	Write a note or	1
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	A. Ion exchange chromatography.	5
	B. HPLC in chiral analysis of pharmaceuticals.	5
	C. Capillary Electrophoresis. http://www.punjabpapers.com	5
Q2.	A. Discuss principle, instrumentation and solvent requirement in NMR.	8
	B. Discuss briefly about FAB and chemical ionization mass spectrometry.	7
Q3.	A. Write about general principles of affinity chromatography. Write a note on station and mobile phases used in affinity chromatography.	ary 8
	B. Write a note on detectors used in HPLC.	7
Q4.	A. Elaborate on different mass analyzers.	8
	B. Write briefly about principle of FT-NMR with reference to <sup>13</sup> C-NMR.	7
Q5.	Write a note on following: http://www.punjabpapers.com	
	A. Coupling constant.	5
	B. Matrix Assisted Laser Desorption (MALD)	5
	C. Applications of NMR spectroscopy.	5
Q6.	A. Write a note on CE-MS hypenation.	8
	B. Discuss principle and application of super critical fluid chromatography.	7

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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