PAPER ID-410906

Subject Code: RPH737

Roll No: | | | | | | | | | | | | | |

B PHARM

(SEM-VII) THEORY EXAMINATION 2021-22

PHARMACEUTICAL ANALYSIS-III (PHARMACEUTICAL ANALYSIS & QUALITY ASSURANCE)

Time: 3 Hours ***Total Marks: 70***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 7 = 14

a.	What do you understand by chromophores? Give examples.
b.	How hydrogen bond affects the vibration pattern in IR spectroscopy?
c.	Write a note on J-value.
d.	What is chemical ionization technique?
e.	Define quenching. Explain the factors for quenching.
f.	What do you mean by agarose gel electrophoresis?
g.	Write a note on ISO 9000 series.

SECTION B

2. Attempt any *three* of the following: 7 x 3 = 21

a.	Discuss the FT-IR instrumentation and interferogram with a neat sketch.
b.	What is chemical shift? Explain shielding and deshielding phenomena.
c.	Discuss the molecular fragmentation pattern of molecule by mass spectrometry
d.	Describe the principle and instrumentation of Atomic absorption spectrometry
e.	Describe the types of validation with their salient features.

SECTION C

3. Attempt any *one* part of the following: 7 x 1 = 7

(a)	What is woodward-fieser rule? Give suitable example to explain the same.
(b)	Define and derive Beer lambert's law. What is molar absorptivity?

4. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Discuss the spin-spin coupling with example for any splitting of compound.
(b)	Write the principle of NMR. Enumerate the solvents and standards in NMR.

5. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Describe the instrumentation of mass spectrometer with neat sketch.
(b)	Demonstrate MALDI technique with matrix preparation in detail.

6. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Write the principle of fluorescence with Jablonski energy diagram.
(b)	Elaborate the principle of scanning electron microscopy with its working.

7. Attempt any *one* part of the following: 7 x 1 = 7

(a)	What is quality audit? Explain the types of Quality audits.
(b)	Write a detailed note on master formula record. What is TQM?