

BACHELOR OF PHARMACY EXAMINATION, 2019**B. Pharmacy - Third Year - First Semester****Pharmaceutical Chemistry – VIII**

Time: Three hours.

Full Marks: 100

Answer any **five** questions taking at least two from each group**GROUP – A**

1. a) Explain different features of HPLC for sample application, development and detection in analysis of drugs and pharmaceuticals with examples.
- b) Describe the therapeutic uses, analytical methods, detectors used for the analysis of the following, as mentioned in IP: 10+10 = 20
- | | |
|---------------------|---------------|
| i) Paracetamol | ii) Atenolol |
| iii) Levo-cetirizin | iv) Metformin |
| v) Aceclofenac | |
2. a) Explain different adsorbents used in TLC with the merits and demerits. What is a mobile phase? Explain their characteristics and how they are chosen for TLC of a drug sample.
- b) Why silica gel is used mostly in TLC? Explain its characteristic features, different grades, uses in different chromatographic methods. 10+10 = 20
3. a) Differentiate between the following with their applications and methodology in analysis of drugs and pharmaceuticals:
- | | |
|------------------|----------------|
| i) TLC and HPTLC | ii) CC and VLC |
| iii) HPLC and GC | |
- b) Explain the analysis of the following drugs through HPTLC as mentioned in IP
- | | |
|-----------------|------------------|
| i) Cocaine | ii) Griseofulvin |
| iii) Ergotamine | iv) Digoxin |
- 10+10 = 20
4. Describe the working principle, characteristic features and uses of the following in Drug analysis: 4×5=20
- | | |
|--------------------------|---------------------------------|
| i) LC-MS analysis | ii) Ion exchange chromatography |
| iii) Fraction collectors | iv) IR Spectroscopy |
| v) Rheometer | |

B. Pharm. 3rd Year 1st Semester Examination 2019

Pharmaceutical Chemistry VIII

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Group 'B'

Answer at least two questions

5. Discuss raw material quality assurance monograph with an example. 10 + 10 = 20
6. What are the ten commandments of GMP? Write notes on validation and stability studies. 10 + 6 + 4 = 20
7. What are '5M of total quality management'? Discuss question inventories of '5M of total quality management' 5 + 15 = 20