

School of Medical and Allied Sciences

Bachelor of Pharmacy

Semester End Examination - May 2024

Duration : 180 Minutes

Max Marks : 75

Sem VIII - BPQC8017 - Analyst Chemist-Quality Control: HPLC and UV

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

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| 1) | Illustrate the parameters to be considered while selection of HPLC analytical method. | K1 (2) |
| 2) | Explain the handling of quality impacting incident. | K2 (2) |
| 3) | Interpret Column used in HPLC. | K1 (2) |
| 4) | Explain in detailed procedure for calibrating a UV-visible spectroscopy machine. | K2 (2) |
| 5) | Define the term "Pump" used in HPLC. | K1 (2) |
| 6) | Explain the types of cuvettes with their wavelength range for UV measurements. | K2 (2) |
| 7) | Define the term "Injectors". | K1 (2) |
| 8) | Explain the various reagents used for HPLC. | K2 (2) |
| 9) | What are the role of Detector in HPLC. | K1 (2) |
| 10) | Explain the importance of proper sample preparation procedures in ensuring accurate UV-visible spectroscopy analysis. | K2 (2) |
| 11) | Organize & construct a flow chart on " Life science sector" & also explain it. | K3 (5) |

OR

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| | Organize & construct a flow chart with the term" Sub-Sectors in life science industry". | K3 (5) |
| 12) | Contrast the various guidelines for weighing & measuring samples. | K4 (5) |
| 13) | Identify the different types of breaches in environmental, health, safety, and security standards. | K3 (5) |

- 14) Compare and contrast the properties of different standards, solvents, and reagents used in laboratory settings. K4 (5)
- 15) Build a note on the role & types of detector. K3 (5)
- 16) Simplify & Construct schematic diagram of single and double beam spectrophotometer. K4 (5)

OR

- Simplify the methods of recording test results using UV. K4 (5)
- 17) Analyze the different methods of calibrating UV-visible spectroscopy machines. K4 (5)
- 18) Estimate the properties of chemicals, reagents and standard solutions. K6 (10)
- 19) Explain the significance of SOP, GMP, GLP, 21CFR, and ALCOA Plus guidelines in Quality Control. K5 (10)

OR

- Explain the rules laid by the Sexual Harassment of Women at Workplace Act with other workplace regulations. K5 (10)