

M.Phil Science Examination
Paper-II : Forensic Science
May-2017

Time : 3 Hours]

[Max. Marks : 70]

Instructions: Figures to the right indicate marks.

- Q1. Give principle, instrumentation and forensic application of FTIR. (15Marks)
OR
- Q1. Describe principle, types and application of electrophoresis.
- Q2. Draw schematic diagram of UV/vis spectroscopy, explaining its principle and instrumentation. (15Marks)
OR
- Q2. (a) Define and explain Beer- Lambert Law.
(b) Application of Fluorescence spectroscopy in forensic science.
- Q3. Explain working principle of polygraph and procedure. (15Marks)
OR
- Q3. How brain mapping is different from other psychological interrogation techniques. Explain
- Q4. Give applications of stereo and comparison microscope in forensic ballistics and physics. (15Marks)
OR
- Q4. Describe working principle, procedure and application of electrostatic detection apparatus in forensic document examination.
- Q5. Write short note on **any two** of the following: (15Marks)
(a) BDAS
(b) VSC
(c) Currency Note examination in VSC
(d) Gel electrophoresis
(c) PCR
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