

M. Sc.

2018

4th Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-403

Subject Code—22

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Q. No. 1 and any three from the rest.

1. Answer any five questions :

10×1

(a) Write any two application of ELSIA.

(b) Why Taq polymerase is used in PSR ?

(Turn Over)

- (c) Which is the driving force for differential migration of protein in gel column in electrophoresis ?
 - (d) What is polygraph ?
 - (e) How does soft tissue prepared for flow cytometric study ?
 - (f) What is the stain used to identify the protein band in gel ?
 - (g) Write the principle of paper chromatography.
 - (h) Why is metabolomics preferred than proteomics for diagnostic purpose ?
2. (a) Write the cyclical phases of events noted per cycle of PCR.
- (b) State the applied value of PCR in clinical diagnosis. 6+4
3. (a) Describe the use of FACS in the field of Biomedical Lab. Science.
- (b) Write the applied value of sonicator. 6+4

4. (a) How impulse is propagated from pacemaker throughout the heart ?
- (b) Write the name of different leads of ECG. Briefly state the positions of chest leads.
- (c) Why do skin preparation is necessary before ECG ?
- 3+(2+3)+2
5. (a) Write the working principles of DNA gel electrophoresis.
- (b) State the applied value of DNA gel electrophoresis.
- 6+4
6. (a) State the differential pattern of electrical waves of brain during arousal and different sleeping states.
- (b) How do you perform EEG recording of a patient with precautionary measurement ?
- (c) Diagrammatically show the position of different leads (unipolar or bipolar) on the surface of the skull.
- (d) What is the utility of a sleep laboratory ?
- 3+2+3+2