

M.Sc.

2016

4th Semester Examination

BIOMEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-403

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 of the following : 5×2
 - (a) Why mineral oil based jelly is applied on the screen during ultrasonography ?
 - (b) Why 'g' is important than 'rpm' in centrifuge ?
 - (c) What is the application of ECG ?

(Turn Over)

- (d) Write any two application of FACS.
- (e) What do mean by polygraph test in sleep laboratory ?
- (f) What do you mean by electro zymogram ?
- (g) State the name of two instruments used in Genomic study.
- (h) Write the fundamental principle of 'Flame photometer'.
2. (a) How do you separate subcellular organales of Describe diagramatic representation ?
- (b) Why slow deceleration and slow acceleration is required very often in centrifugation ? 8+2
3. (a) How X-ray is produced in X-ray machine ?
- (b) Differentiate hard X-ray and soft X-ray. How X-ray is used to detect fracture in bone ? 5+(3+2)
4. (a) Discuss the basicprinciple of magnetic resonance imaging ?
- (b) How does ultrasonography helps in medical imaging ?
- (c) State the function of 'Transducer Probe' in an ultrasonography machine. 3+2+3

5. (a) What do you mean by Montage in EEG ? How will you place the leads in different segments of brain ?
- (b) State the different waves of brain with their characteristic features during awakefulness and sleep.
- 2+4+4
6. (a) State the working principle of Sonicator.
- (b) Discuss how gel documentation system helps in proteomic and genomic study.
- 4+6
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