

**M.Sc.**

**2015**

**4th Semester Examination**

**BIOMEDICAL LABORATORY SCIENCE AND MANAGEMENT**

**PAPER—BLM-402 (UNIT-27)**

*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 *all* questions.

**( Module — 1 )**

1. Answer any *five* questions of the following : 1×5

(a) Write the full forms of FACS and FACA.

(b) What do you mean by Scintillator?

(c) What do you mean by 'Lead' in ECG?

(d) Write one application of MRI.

*(Turn Over)*

- (e) What is the frequency range of USG ?
  - (f) Write the light source of UV Spectrophotometer.
  - (g) Define 'Einthovan Law'.
  - (h) Write the radiation range of a diagnostic x-ray unit.
2. (a) State the working principle of FACS mentioning its different components.
- (b) State the application of Sucrose density gradient centrifugation technique in Bio-Medical Laboratory Science. 5+3

*Or*

- (a) Write the principle of CAT Scanning.
  - (b) What is 'Montage' in EEG ? Which types of electrical discharge is analysed by EEG ? 3+(3+2)
3. (a) Describe the working principle of double beam spectrophotometer.
- (b) Write the galvanometric connection of augmented unipolar limbs lead. 4+3

*Or*

- (a) Define polysomnography.
- (b) Write the brief technique of Laproscopy and endoscopy with its application. 2+(3+2)

**( Module — 2 )**

4. Answer any *five* questions of the following : 1×5

- (a) What do you mean by aminenergic neuron ?
- (b) Write the name of the waves noted in arousal.
- (c) Define amenorrhoea.
- (d) Write the name of any hypercalcemic disorder.
- (e) What do you mean by Psychoneuro immunology ?
- (f) Write any one of the cause of 'Erectile dysfunction'.
- (g) Define angiography.
- (h) Define hyper polarisation.

5. (a) Describe the role of neural influence on immuno system in brief.
- (b) Discuss the role of neural influence on endocrine system from the view point of aminenergic peptidergic axis. 4+4

Or

- (a) Discuss briefly the stages of slow wave sleep along with REM sleep.
- (b) Discuss the sleep apnea and restless leg syndrome. 3+(3+2)

6. (a) Discuss the different phases of action potential with special reference to ionic regulation.
- (b) Write the monoamino concept of mania. 5+2

Or

- (a) What do you mean by evoked potential?
- (b) State the neural causes of epilepsy. 2+5
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