M.Sc.

2014

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 : 

   (a) Write the full form of CASA.
   
   (b) Write any one application of Lyoptilizer.
   
   (c) What do you mean by fluorescence?
   
   (d) Write any two examples of Scintillator.

(Turn Over)
(e) Write the wave length range of visible light.

(f) Mention one example of Sonicator.

(g) State the mathematical expression of Beer-Lambert's Law.

(h) What do you mean by 'Lead' in electrocardiography?

2. (a) Write the basic principle of Spectrofluorometer.

(b) State the working procedure of Spectrofluorometer with its different components with line diagram.

\[ 2+(3+2+1) \]

*Or*

(a) State basic working principle of MRI.

(b) Write any two applications of NMR and MRI for each in the field of Bio-Medical Lab. Science.

\[ 3+(2\frac{1}{2}+2\frac{1}{2}) \]

3. (a) Why Scintillation counter is known as transducer?

(b) Write the principle of Scintillation counter.

(c) Describe the working procedure of Scintillation counter with its different components.

\[ 1\frac{1}{2}+1\frac{1}{2}+(2+2) \]

*Or*

(a) Write the Principle of endoscopy.

(b) State the application of endoscopy in clinical field.

(c) State principle of CAT scanning. \[ 2+3+2 \]
4. Answer any five questions of the following: 1x5

(a) What do you mean by depression?
(b) What do you mean by temporary amenorrhea?
(c) Write the name of any one muscle of Penis.
(d) Mention any one inhibitory neuro-transmitter for signal transduction in myo-neural junction.
(e) What do you mean by 'Grandmal epilepsy'?
(f) What do you mean by hypothalamic Peptidergic neurons?
(g) What do you mean by angiography?

5. (a) State the occurrence of stress induced amenorrhea with its hormonal mechanism.
(b) Write the condition of ovary in amenorrhic stage. 5+3

Or

(a) What do you mean by 'rage' behaviour?
(b) What are the causes of 'sleep disorder'?
(c) State in brief the mechanism of hallucination. 3+2+3
6. (a) State the neural cause of ED.
(b) Why excessive stress results ED?
(c) Why sodium restricted diet is provided to the manic patient under the treatment of lithium? 3+2+2

Or
(a) Compare REM and N-REM sleep briefly.
(b) What is Sleep-apnea?
(c) State the internal and external symptoms of Schizophrenia. 2+2+3