

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 : 1×5
- (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

(Module — 2)

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

- (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
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