

2010

M.Sc.

1st Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—101 (UNIT—1)

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.

Answer all questions.

Module—I

(Basic Human Physiology and Anatomy)

[Marks : 20]

1. Answer any five of the followings : 1×5
- (a) Write the full forms of S.G.P.T. & S.G.O.T.
 - (b) Name the two markers of Cancer cells.
 - (c) What do you mean by Glucose-Homeostasis ?
 - (d) What are the parasympathetic nerves connecting with salivary gland ?
 - (e) What is ROS ?
 - (f) What do you know about apoplectic proteins ?

(Turn Over)

(g) Write the functions of gastric HCl.

(h) What is Thalassemia ?

2. (a) Name the hormones regulatory^{ing} blood glucose level.
- (b) What are the roles of insulin to regulate hyperglycaemia ?
- (c) What are the causes of IDDM ? 2+4+2

Or

(a) What is Oxidative stress ?

(b) What are the antioxidant molecules present in our cell ?

(c) Write the harmful effects of free radicals ? 2+3+3

3. (a) What are the nerve supply of Stellate ganglia ?

(b) What are the symptoms of CVD ?

(c) What is mitral stenosis ? 2+3+2

Or

(a) Write the anatomical position of heart.

(b) State the anatomical features of kidney.

(c) State the anatomical features of respiratory tract. 2+3+2

Module--II

(Physiological aspect of Biomedical Laboratory Science)

[Marks : 20]

- 1. Answer any five of the following :** **1×5**
- (a) Define pH.
 - (b) What is buffer ?
 - (c) Define Lambert's law.
 - (d) What is allosteric enzyme ?
 - (e) What are minor plasma proteins ?
 - (f) What is Geiger-Muller counter ?
 - (g) What is exciter filter inflorescence microscope ?
 - (h) What is NA of microscope ?
- 2. (a) Distinguish between competitive & non-competitive enzymatic inhibition.**
- (b) What is the principle of spectrophotometer ?
- (c) What are different types of E.M. ? **2+4+2**
- Or**
- (a) State the role of bicarbonate buffers for pH maintenance of blood.
- (b) Distinguish between isoenzyme and co-enzyme.
- (c) Name two vitamins related with specific enzymatic action. **2+3+3**

3. (a) What are the radiation hazards in human system?
(b) Distinguish between filtration and ultrafiltration.
(c) Name two end point reaction methods. 2+3+2

Or

- (a) Write the principle of fluorescence microscope.
(b) State the functions of different parts of fluorescence microscope with diagram. 2+(3+2)
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