## 2015

## M.Sc.

## 1st Semester Examination

## **BIO-MEDICAL LABORATORY SCIENCE & MANAGEMENT**

PAPER-BLM-101

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 questions of the following.

1. Answer any ten of the followings:

 $10 \times 1$ 

- (a) What is BMI?
- (b) Define Normality.
- (c) At which condition K = [S]?

(Turn Over)

- (d) Name the two drugs used for the treatment of gout.
- (e) What do you mean by hypertrophy?
- (f) What do you mean by active site of enzyme?
- (g) What do you mean by supine position?
- (h) What is apoptosis?
- (i) What is the anatomical position of heart?
- (j) Write H-H equation of pH determination.
- (k) Define Beer's law.
- (1) Name the two vitamins related with specific enzyme action.
- (m) What do you mean by prosthetic group?
- (n) What is the anatomical position of femoral artery?
- (o) What do you mean by morula?
- **2.** (a) What is pH?
  - (b) Write the different steps of measurement of pH in pH meter.

- (c) What do you mean by sagittal and midsagittal plane?
- (d) Write the function of endocrine and circulatory system.

1+3+(1+1)+(2+2)

- 3. (a) What is Obesity?
  - (b) Write the causes of Obesity.
  - (c) What are the role of leptin and grelin for the regulation of Obesity?

$$2+3+\left(2\frac{1}{2}+2\frac{1}{2}\right)$$

- 4. (a) What is homeostasis?
  - (b) What are the components of homeostatis?
  - (c) Write the role of hormones for the maintenance of blood glucose homeostatis?
  - (d) What are the necessary causes of gout?

2+2+3+3

- 5. (a) Write the role of CDK in cell cycle.
  - (b) State the salient features of apoptotic cell.
  - (c) Describe the mitochondria dependent pathway for the regulation of apoptosis.

3+2+5

- 6. (a) State the application of SEM and TEM.
  - (b) Make a comparative statement of SEM and TEM.

(2+2)+6