

Seat No. : _____

AJ-122

April-2016

B.Sc., Sem.-IV

CC-204 : Biochemistry

Time : 3 Hours]

[Max. Marks : 70

1. (a) Explain different types of lens system of microscope and its types. **7**

OR

Explain working and principle involved in electron microscope.

- (b) Difference between bright and dark field microscope. **7**

OR

Explain types of electron microscope.

2. (a) Explain the Principle and working of centrifuge machine. **7**

OR

Rotors used in centrifugation techniques. – Explain.

- (b) Sedimentation, factors affecting sedimentation. – Short note. **7**

OR

Differential centrifugation technique. – Explain in detail

3. (a) Explain – Measurement of radioactivity by different counters. **7**

OR

Explain in detailed biological uses of radioisotopes.

- (b) Write short note on :

(1) Radiation and radioisotopes **3**

(2) Autoradiography **4**

OR

What are harmful effects of radiations ?

4. (a) Explain terms (with example) : Sample size, histogram, SD. **6**

OR

Brief note on :

(1) Coefficient of variation

(2) Median

- (b) (1) Write a note on various methods of data representation. **5**

(2) Find mean and mode of the data : 4, 2, 8, 6, 0, 7, -4, 4, 9, 10, 4, 4. **3**

OR

Explain – Null hypothesis, Test of significance and its application in biological research. **8**

5. Explain the terms (with examples if needed) - NA, frequency polygons zonal rotors, Radioactive decay, standard error, pie chart. **14**
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