

08/05/2015

[Additional Exam]

FYBSc
Biochemistry

VCD / / - BIOCHEMISTRY- II- F.Y.B.S.c- SEM II -75 MARKS - 2 1/2 HRS 25

- Note:** 1. Figures to right indicate marks.
2. All questions are compulsory.
3. Draw appropriately labeled diagrams wherever necessary.

Q I) A. Define : (any Four)

[8]

- i. G2 phase.
- ii. Non sister chromatids.
- iii. Porin protein.
- iv. Homologous chromosome
- v. Anaphasic movement.
- vi. Centromere.
- vii. Chiasmata.
- viii. Euchromatin.

B. Explain the following terms: (any Two)

[6]

- i. Write a short note on nuclear pore complex.
- ii. State briefly about the controlling of cell cycle.
- iii. What is the significance of mitosis in cell division?
- iv. How many types of microtubules are found during cell division?

C. Write short note on : (any One)

[6]

- i. Reductional phase of meiosis in cell division.
- ii. Inter phase of cell cycle.

Q II) A. Answer the following: (Any Four)

[8]

- i. Define renal threshold.
- vi. Define GFR
- ii. Define exopeptidase.
- vii. Define cortical nephron
- iii. Which molecule help in trypsin activation?
- viii. Define zymogen
- iv. What is the unique nature of glomerular capillaries?
- v. What do you mean by "secretion" during urine formation?

B. Explain the following: (Any Three)

[6]

- i. Write a short note on emulsification of lipid.
- ii. How does absorption of intact protein and polypeptide take place?
- iii. What are the compositions of glomerular filtrate?
- iv. What are the factors effecting GFR?

C. Describe in brief : (Any One)

[6]

- i. Carbohydrate digestion in mouth and small intestine.
- ii. Structure and function of glomerulus and Bowman's capsule.

Q III] A. Answer the following questions: (Any Four)

[8]

- i. Give two examples of autotrophs.
- ii. What is the physical phenomenon of staining?
- iii. Draw structure of Picric acid.
- iv. How do prokaryotic microbes divide?
- v. Give any 4 functions of microbes in pharmaceutical industry.
- vi. Explain the term "strain"
- vii. Why is Bergery's Manual used ?
- viii. What is a phylogenetic tree ?

B. Explain the following questions in brief: (Any Two)

[6]

- i. Division of spherical bacteria.
- iii. Factors that affect lag phase.
- ii. Differential stains
- iv. Function of flagella.

C. Answer in brief : (Any One)

[6]