



Mavin

Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test - I August 2024 III Semester

Class: II UG

Course: Biochemistry and Biotechnology

Time: 2 Hours

Max. Marks: 60

23BBTC03 Mammalian Physiology

Course Outcome:

- CO1 The various physiological systems in the human body.
- CO2 The functional anatomy of different organs in each system.
- CO3 The complex mechanisms of the processes of digestion, absorption, excretion, gas exchange, reproduction and neuromuscular coordination.
- CO4 Integrated System physiology that will enable understanding of the biochemical basis of disease.
- CO5 Qualitative and quantitative analysis of Biochemical parameters

Part A

6 x 1 = 6

Answer the following

1. Digestion of fats begins in _____
a) Mouth b) Esophagus c) Stomach d) Duodenum CO1 K1
2. The band of muscles guarding the two openings of the stomach towards the esophageal and intestinal sides is called as _____
a) pyloric sphincter and pyruvic sphincter b) diaphragm and pyloric sphincter
c) cardiac sphincter and lower sphincter d) cardiac sphincter and pyloric sphincter CO 1 K3
3. Which of the following hormones stimulates the production of pancreatic juice and bicarbonate?
(a) Insulin and glucagon (b) Cholecystokinin and secretin
(c) Gastrin and insulin (d) Angiotensin and epinephrine CO 1 K2
4. This is the similarity between pulmonary and systemic circulation
(a) total capacity (b) pulse pressure
(c) peripheral vascular resistance (d) volume of the circulation per minute CO 2 K2
5. Ventricular muscle depolarization is indicated by
(a) PR interval (b) P wave (c) U wave (d) The QRS complex CO 1 K3
6. The ventricular muscles accepts impulses directly from
(a) AV node (b) Bundle of His (c) Right and left bundle branches (d) Purkinje system CO 1 K3

Part B

3x6=18

Answer any two out of 4 questions

Each answer should not exceed 400 words or one page

7. a. What are the functions of the gastric juice? CO 1 K3
Or
b. Enlist the different types of digestive enzymes based on their location and their roles in digestion CO 2 K3
8. a. Explain the process of double circulation. With a neat diagram CO 2 K3
Or
b. What is haematopoiesis? Explain the different types of blood cells CO2 K3
9. a. Describe the events of cardiac cycle CO 2 K3
Or
b. What are the factors affecting blood pressure? CO 1 K3

Part - C

3X12=36

Answer any one question

10. a. Explain the anatomy of digestion starting from the mouth with a neat diagram. CO2 K3
Or
b. Discuss the role of stomach, liver and pancreas in the process of digestion. CO1 K3
11. a. Discuss the mechanism of digestion and absorption of lipids CO 1K3
Or
b. Describe the role of kidneys in maintaining the acid base balance of the body. CO 2 K3
12. a. Explain the process systemic and pulmonary circulation with a neat diagram. CO 2 K3
Or
b. Describe the steps involved in the process of excretion. What is micturition. CO 1K3