

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. (Nursing - Basic) Degree Examination – Sept / Oct 2008

Time: Three Hours

Max. Marks: 80 Marks

PHYSIOLOGY & BIOCHEMISTRY - (Revised Scheme)

Q.P. CODE: 1677 & 1678

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary

Use separate answer books for section A and section B

Q.P. Code: 1677 – Section A – PHYSIOLOGY (40 Marks)

LONG ESSAYS (Answer any One)

1 x 10 = 10 Marks

1. What are the different types of blood groups present in the human beings? What is the basis of Blood grouping and what are the complications of mismatched blood transfusion and what are the precautions we must take before blood transfusion
2. Mention the different parts of Gastro intestinal tract with the help of a diagram and briefly explain its functions

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Mention any four hormones produced by the anterior pituitary gland and mention its actions
4. What are the different methods of artificial respiration, explain any one of them
5. What are the different parts of a neuron, show it by a neat diagram? What is meant by saltatory conduction of nerve impulse
6. Define blood pressure. What is the normal blood pressure? What is the danger of high blood pressure and low blood pressure?
7. Mention the different refractive errors of the eye and explain any one of them with a diagram

SHORT ANSWERS

5 x 2 = 10 Marks

8. What is cyanosis and jaundice?
9. What is the normal body temperature and mention any one condition that decreases body temperature
10. What is meant by active transport and passive transport across the cell membrane
11. Name the muscle proteins
12. What is meant by ovulation? Which is the hormone responsible for ovulation?

Q.P. Code: 1678 – Section B – BIOCHEMISTRY (40 Marks)

Use separate answer book

LONG ESSAYS (Answer any One)

1 x 10 = 10 Marks

1. Outline the important functions of vitamin B6. Give their clinical importance
2. What is β -oxidation? Describe the steps. Give the energetics for the oxidation of palmitic acid

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. What is phenylketonuria? Give its manifestations & tests for diagnosis
4. Outline the importance of the HMP shunt pathway
5. Give the degradation of glycogen and its regulation
6. Metabolic acidosis
7. Name the ketone bodies. Give their formation & fate

SHORT ANSWERS

5 x 2 = 10 Marks

8. Name the catecholamines, and the amino acid from which they are synthesized
9. Give two enzymes used clinically for hepatic disease
10. Beri-Beri is caused by what deficiency. Give its daily requirement
11. Name two basic amino acids and two unsaturated fatty acids
12. Tests for the detection of ketone bodies in urine
