

H.3
1739

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. Nursing (PC) Degree Examination – Aug / Sept 2009

Time: Three Hours

Max. Marks: 75 Marks

BIOCHEMISTRY & BIOPHYSICS (RS - 3)

Q.P. CODE: 1739& 1740

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: 1739 – Section A – BIOCHEMISTRY (38 Marks)

LONG ESSAYS (Answer any One)

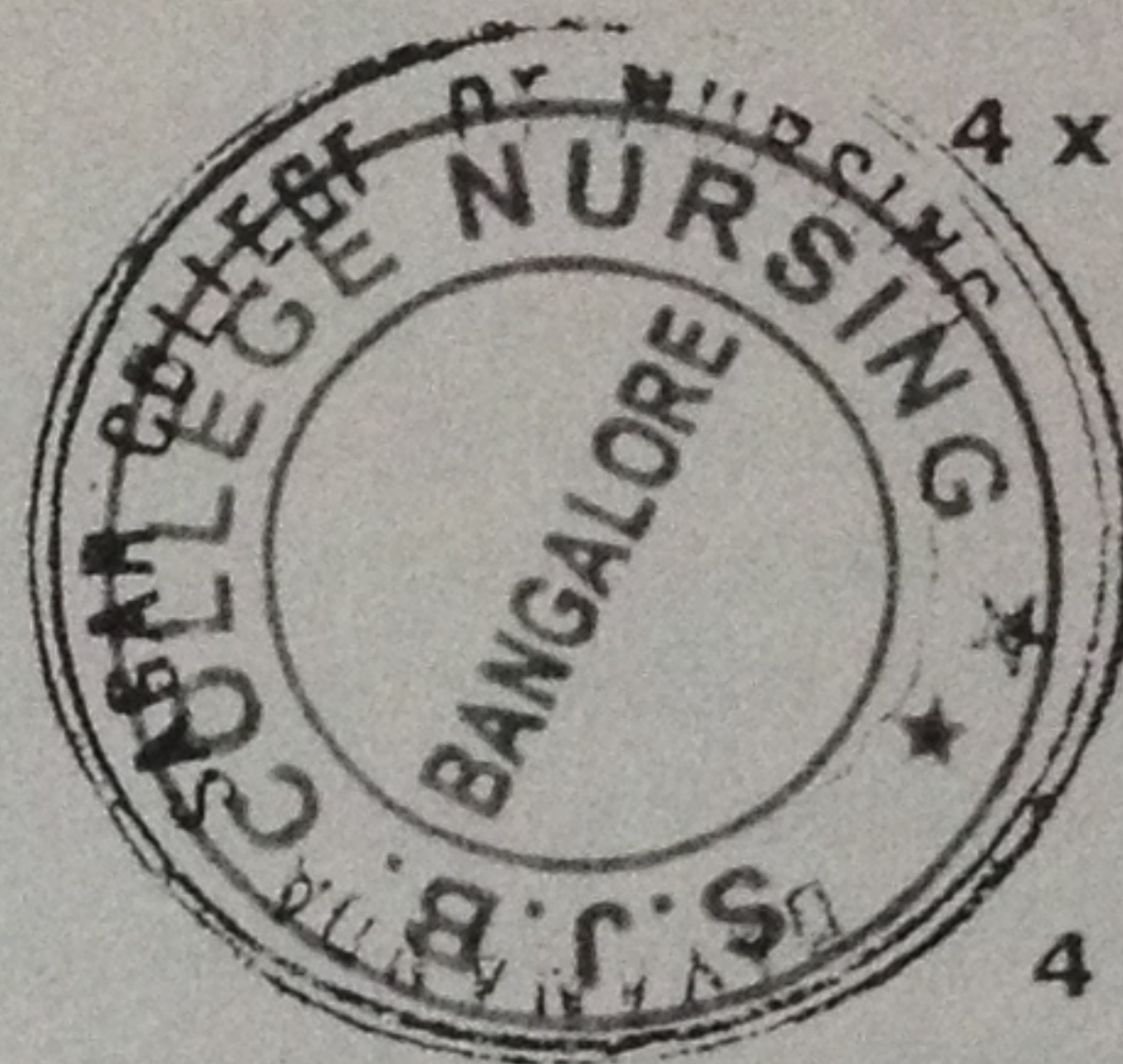
1 x 10 = 10 Marks

1. Describe the regulatory mechanism of water balance and abnormalities associated with it
2. Describe the classification of carbohydrates with examples

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Differences between glycogen and starch
4. Post translational modifications in proteins
5. Gluconeogenesis and its regulation
6. Structure and functions of t-RNA
7. Diagnostically important enzymes



SHORT ANSWERS

4 x 2 = 8 Marks

8. Components of the fatty acid synthase complex
9. Essential aminoacids
10. Two functions of lipoproteins
11. Normal levels of a) Uric acid and b) Calcium in blood

Q.P. Code: 1740 – Section B – BIOPHYSICS (37 Marks)

Use separate answer book

LONG ESSAYS (Answer any One)

1 x 9 = 9 Marks

1. State Coulomb's inverse square law. What is meant by electric potential and potential difference? Write a note on resting potential and action potential
2. What is meant by resistance, effort and efficiency of a machine? Explain the different kinds of simple machine

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Explain duality of light. Define frequency, amplitude, velocity and wave length of a light wave
4. Explain the terms velocity and acceleration
5. Write a note on astigmatism and cataract
6. What is relative humidity? Explain regulation of body temperature
7. Write a note tomography

SHORT ANSWERS

4 x 2 = 8 Marks

8. Write the different isotopes of uranium and hydrogen
9. Define commercial unit of electrical energy
10. Give one example for potential energy and kinetic energy
11. Define Work

REFERENCE ONLY