

NURSB - 1677 - PHYSIOLOGY & BIO CHEMISTRY - TP1 (AUGUST-2009)_AUGUST-09 (OCT-09).doc

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. (Nursing - Basic) Degree Examination - Aug / Sept 2009

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)

 $1 \times 10 = 10 \text{ Marks}$

- Classify body fluid compartments. Give normal values. How is total body water determined?
- 2. Define blood pressure. How is it measured? List the factors affecting blood pressure

SHORT ESSAYS (Answer any Four)

 $4 \times 5 = 20 \text{ Marks}$

- 3 Describe the functions of blood
- 4. Draw and label spirogram
- 5. Describe the stages of spermatogenesis
- Describe the movements of small intestines 6
- 7. Classify muscles. List the differences between them

Yel colu 5 x 2 = 10 Marks **SHORT ANSWERS**

- 8. State landsteiner's law
- Name the muscles of respiration
- 10. List four functions of saliva
- 11. What is the normal serum calcium level? Name the hormones regulating it
- What are the functions of counter current mechanism in the kidney?

Q.P. Code: 1678 - Section B - BIOCHEMISTRY (40 Marks) Use separate answer book

LONG ESSAYS (Answer any One)

 $1 \times 10 = 10 \text{ Marks}$

- 1. Discuss the causes, synthesis and utilization of ketone bodies
- Describe the sources, provitamin form, functions & deficiency manifestations of Vitamin D

SHORT ESSAYS (Answer any Four)

 $4 \times 5 = 20 \text{ Marks}$

- 3. Useful compounds synthesized from aminoacid tyrosine
- 4. Hormonal regulation of blood sugar level
- 5. Structure and function of cholesterol
- What is BMR (Basal metabolic rate)? Discuss the factors that affects BMR 6.
- 7. Role of kidney in acid-base balance

SHORT ANSWERS $5 \times 2 = 10 \text{ Marks}$

- 8 Rothera's test
- 9. Causes for metabolic acidosis
- 10. Night blindness
- 11. Glycosuria
- Differences between starch and glycogen