1 13

2202_2009_I_S107

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. Radiography Degree Examination – Feb - 2010

Time: Three Hours **Max. Marks: 80 Marks**

PHYSIOLOGY

Q.P. CODE: 2202

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Define clotting time. Explain with diagrams the intrinsic pathway of blood coagulation
2. Describe the different types of refractive errors in the eye. Explain with diagrams how each can be corrected
3. Describe the biosynthesis and functions of Thyroid hormone

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Describe the phases of deglutition
5. Compare juxta – medullary and cortical nephrons of the kidney
6. Describe the differences between upper motor neuron and lower motor neuron lesion
7. What is the role of skin body temperature regulation?
8. Explain excitation – contraction coupling in skeletal muscle
9. Define cardiac output. What are the factors regulating it?
10. Discuss oxygen-Hemoglobin Dissociation Curve and factors affecting it.
11. Oral contraceptives
12. Describe the clinical features of Acromegaly
13. Define receptors. Give its classification and properties

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Name four taste sensations in the tongue
15. Define rigor mortis
16. Name four function of blood
17. Name four functions of saliva
18. Name any four hormones of anterior pituitary gland
19. Draw the reflex arc
20. Define Frank Staling's law
21. Define cyanosis
22. Name four functions of kidney
23. Define menopause

*****

2 14

2203_2009_1_S48

Rajiv Gandhi University of Health Sciences, Karnataka

First year B.Sc. Radiography Degree Examination – Feb - 2010

Time: Three Hours **Max. Marks: 80 Marks**

RADIOLOGICAL PHYSICS

Q.P. CODE: 2203

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Write briefly on alternating current, the theory of A.C transformer, construction and types of transformers used in X ray equipments with a neat diagram
2. Write briefly on the interaction of radiation (X ray or Gamma rays) with matter
3. Write a neat diagram and explain briefly the construction and working of a X ray tube. Describe the various mechanism used for cooling the target

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Structure of atom
5. Radioactivity
6. Units of exposure and absorbed dose
7. Isotopes used in medicine
8. Inverse square law
9. Hardening of X rays
10. Ammeter and voltmeter
11. Artificial radioactivity
12. Types of transformers used in X ray equipment
13. Diagnostic X ray tube (inserts and shidds)

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Define volt
15. Convert Imev to Joule
16. Half life
17. Difference between exposure and absorbed dose
18. Ammeta and voltmeter
19. Thermionic emission
20. Ionization and excitation
21. Fluorescent effect of X ray
22. Ohm's law