Rajiv Gandhi University of Health Sciences, Karnataka M.B.B.S. Phase I Degree Examination - August 2007

Time: 3 Hrs. [Max. Marks: 100]

PHYSIOLOGY - PAPER I (Revised Scheme 2)

QP Code: 1077

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

LONG ESSAY 2 X 10 = 20 Marks

- Draw the scheme of coagulation cascade and explain the salient features of this system. Add a note on commonly occurring bleeding disorders
- Explain the cardiovascular adjustments following
 - a) moderate exercise
 - b) Haemorrhage

Add a note on 'Irreversible shock'

SHORT ESSAY 10 X 5 = 50 Marks

- 3. Describe conducting system of the heart
- 4. Regulation of cerebral circulation
- 5. Functions of upper respiratory passage
- Factors affecting gaseous diffusion in lungs 6.
- Oxygen-dissociation curve 7.
- Functions of stomach 8.
- 9. Proteolytic enzymes of pancreas
- Functions of bile
- 11. Sodium reabsorption in renal tubules
 12. Determination of glomerular filtration rate (GFR)

SHORT ANSWERS 10 X 3 = 30 Marks

- What is 'Vagal tone'? What determines it? 13.
- What is 'Angina Pectoris'? Explain the basis.
- 15. Give the volume of carbondioxide transported in arterial and venous blood. What is the significance of arterial PCO₂?
- 16. Name the Agglutinogens and agglutinins present in blood in a person of O +ve group. What is "Bombay Blood Group"?
- Explain the steps in 'Phagocytosis'
- Give the source and actions of "Erythropoietin". How is its secretion regulated? 18.
- Write briefly on 'Erythrocyte Sedimentation Rate'
- 20. List the stimulants of gastrin secretion.
- Draw a graph to illustrate pressure changes within urinary bladder as it is gradually filled
- 22. Explain functions of collecting ducts of nephrons
