

[LA 503]

FEBRUARY 2012

Sub. Code : 4054

**FIRST M.B.B.S. DEGREE EXAMINATION****Revised (Non-Semester) Regulations****PAPER IV – PHYSIOLOGY INCLUDING BIO-PHYSICS – II****Q. P. Code : 524054****Time : 180 Minutes****Maximum: 50 Marks**Answer **ALL** questions**I. Elaborate on :**

1. Draw an oxygen dissociation curve & describe how oxygen is transported in the blood.  
Depict the Bohr's effect. **(1 x 10 = 10)**
2. Classify pain. What are the receptors for pain? **(1 x 5 = 5)**  
Describe the dual Pathways for pain. What is Analgesic system in the brain?

**II. Write Short notes on :****(10 x 2 = 20)**

1. Frank-Starling's law of the heart.
2. Cardiac pacemaker potential.
3. Draw a labelled diagram of a normal ECG in lead II. Write a brief note on PR interval.
4. Non progressive shock.
5. Travelling waves in the ear.
6. Ventilation-perfusion ratio.
7. Caisson disease.
8. Brown Sequard syndrome.
9. Functions of Ascending reticular activating system.
10. Role of Purkinje cells of cerebellum.

**III. Short Answers on :****(15 x 1 = 15)**

1. Astigmatism.
2. Ocular dominance columns.
3. Dicrotic notch.
4. Cardiac reserve.
5. Reynold's number.
6. J point.
7. Extrasystole.
8. Bell-Magendie law.
9. Cog-wheel rigidity.
10. Betz cells.
11. Homunculus.
12. Anomic aphasia.
13. Timed vital capacity.
14. Pneumotoxic centre.
15. Asphyxia.