

[LB 503]

AUGUST 2012

Sub. Code: 4054

FIRST YEAR M.B.B.S DEGREE EXAM

Paper IV – PHYSIOLOGY INCLUDING BIOPHYSICS – II

Q. P. Code: 524054

Time: 180 Minutes

Maximum: 100

Marks

Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.)(Max.)(Max.)**

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|---|----|----|----|
| 1. Define cardiac output. Discuss the factors affecting cardiac output and any one method of determination. What is the significance of ejection fraction in ventricular functioning? | 16 | 25 | 15 |
| 2. List the ascending tracts in the spinal cord and discuss the tracts of posterior column with diagram. | 16 | 25 | 15 |

II. Write notes on:

- | | | | |
|--|---|---|---|
| 1. Chemical regulation of respiration. | 3 | 8 | 5 |
| 2. Functions of middle ear. | 3 | 8 | 5 |
| 3. Hypovolumic shock. | 3 | 8 | 5 |
| 4. Ventilation-Perfusion ratio. | 3 | 8 | 5 |
| 5. Parkinson's disease with treatment. | 3 | 8 | 5 |
| 6. Classification of nerve fibres. | 3 | 8 | 5 |
| 7. Heart Sounds. | 3 | 8 | 5 |
| 8. Errors of refraction with correction. | 3 | 8 | 5 |
| 9. Transport of oxygen in blood. | 3 | 8 | 5 |
| 10. Waves of EEG. | 3 | 8 | 5 |

III. Short Answers on:

- | | | | |
|--|---|---|---|
| 1. Reynold's number. | 1 | 5 | 2 |
| 2. Summation. | 1 | 5 | 2 |
| 3. Herring - Breuer inflation reflex. | 1 | 5 | 2 |
| 4. Taste receptor. | 1 | 5 | 2 |
| 5. PR interval in ECG. | 1 | 5 | 2 |
| 6. Chronaxie. | 1 | 5 | 2 |
| 7. CSF formation. | 1 | 5 | 2 |
| 8. Phasic changes in coronary circulation. | 1 | 5 | 2 |
| 9. FEV ₁ . | 1 | 5 | 2 |
| 10. Dopamine. | 1 | 5 | 2 |
