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M.B.B.S. PHASE - I Degree Examination – JULY 2015

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

## PHYSIOLOGY - II (RS2 & RS3) QP Code: 1078

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

LONG ESSAY 2 X 10 = 20 Marks

- Describe the parts, connections and functions of cerebellum. 1.
- Describe the ovarian and endometrial changes during menstrual cycle. Explain their hormonal regulation.

SHORT ESSAY 10 X 5 = 50 Marks

- 3. Role of hypothalamus in regulation of food intake
- 4. Components and functions of limbic system
- 5. Role of cortisol in stressful situation
- 6. Explain the action of insulin on carbohydrate metabolism.
- 7. Steps in thyroid hormone synthesis and their clinical applications
- Mechanisms involved in accommodation reflex R
- 9. Describe taste pathway.
- Describe neuromuscular transmission in skeletal muscle.
- Role of calcium in skeletal muscle contraction
- What is core and shell temperature? Explain heat loss mechanisms.

10 X 3 = 30 Marks SHORT ANSWERS

- Write the role of epididymis, seminal vesicle and prostate in reproduction.
- Functions of CSF
- Write differences between cardiac and smooth muscle.
- Draw a sarcomere in relaxed and contracted state.
- Three differences between superficial and deep reflexes
- Functions, absorption of Aqueous humor and its applied aspect
- Attenuation reflex and impedance matching
- Draw a visual pathway.
- 21. Mention three hormones regulating blood calcium levels. State their mechanism of actions.
- What is an aldosterone escape? 22.

