

First BHMS Degree Supplementary Examinations, August 2013

PHYSIOLOGY & BIOCHEMISTRY- PAPER II

Time: 3 Hours

Max Marks: 100

- **Answer all the questions**
- **Draw diagrams wherever necessary**

Essays:

(2x10=20)

1. Explain the mechanism of synaptic transmission. Explain briefly the properties of synapses.
2. Describe the hormonal, uterine, ovarian changes during different phases of menstrual cycle.

Short notes:

(10x5=50)

3. Classify hormones. Explain the mechanism of action of hormones.
4. What are the clinical features of cretinism and explain how they are produced.
5. Compare and contrast the action of epinephrine and nor-epinephrine.
6. Explain the cardiovascular and respiratory changes during exercise.
7. What is nutrition and balanced diet explain.
8. Gastro intestinal hormones
9. Explain liver function tests.
10. List the secondary sexual characters in male and female.
11. Briefly describe the functions of placenta.
12. Explain Kreb's cycle.

Answer briefly:

(10x3=30)

13. Name fat soluble vitamins and brief note on vitamin D.
14. List the functions of limbic system.
15. What is aphasia and mention its types.
16. Zollinger-ellision syndrome.
17. What is sham feeding.
18. List four functions of hydrochloric acid.
19. List the difference between diabetes mellitus and diabetes insipidius.
20. Define glycogenesis and glycogenolysis. Explain with one example
21. Define basal metabolic rate. Mention three physiological factors which influence BMR.
22. Disorders of sleep.