13UNDCT2003 - UND/CT/2003 B.SC. DEGREE EXAMINATION,APRIL 2018 I YEAR - II SEMESTER Core Major- Paper III - HUMAN PHYSIOLOGY Time : 3 Hours Max.marks :75

Section A $(10 \times 2 = 20 marks)$

Answer any **TEN** questions

- 1. What are stem cells?
- 2. Differentiate between prokaryotic and eukaryotic cell.
- 3. Define synapse.
- 4. What are Rods and cones?
- 5. Define cardiac output.
- 6. What are kuppfer cells?
- 7. List the functions of pepsin in stomach.
- 8. Define vital capacity.
- 9. Write a note on reflex arc.
- 10. What is glomerular filtration rate?
- 11. Mention the hormones involved in lactation process.
- 12. Differentiate between cardiac and smooth muscle.

Section B $(5 \times 5 = 25marks)$

Answer any **FIVE** questions

- 13. Explain the different phases of mitosis?
- 14. Write a brief note on physiology of muscle contraction.
- 15. Give the composition and functions of blood.
- 16. Describe the mechanism of respiration with diagrammatic sketch.
- 17. Draw and explain the structure of kidney?
- 18. Explain menstrual cycle in detail?
- 19. Describe the physiology of vision.

Section C $(3 \times 10 = 30 marks)$

Answer any **THREE** questions

- 20. Write a detailed note on classification and functions of Tissue.
- 21. Explain autonomic nervous system in detail.
- 22. Describe the events of cardiac cycle with diagrammatic sketch.
- 23. Enumerate the digestion and absorption process of carbohydrates.
- 24. Describe the structure, functions and regulation of hormones of pituitary gland.