

Seat No.:-----

Enrolment No.:-----

**UKA TARSADIA UNIVERSITY**

**Maliba Pharmacy College**

B.Pharm 2<sup>nd</sup> Semester Internal Examination 2012

**030020203 Human Anatomy & Physiology II**

Time: 1:30 to 4:30 p.m.

Max. Marks: **70**

Date: 18/04/2012

**Instructions:**

- Question no. **1 is compulsory.**
- From Q.2 to Q.7 attempt any **four** questions.
- Make suitable assumption whenever necessary.
- Figures to the right indicate full marks.

- Q.1 (a) Answer the following: (any six) 06**
- 1 What is nerve impulse?
  - 2 Define: (a) Tidal volume (b) Vital capacity
  - 3 Differentiate between sensation and perception.
  - 4 What is negative feedback mechanism? Give one example of it.
  - 5 Enlist the muscles involved in the inhalation & exhalation during the normal quiet respiration.
  - 6 Define: GFR
  - 7 Name several factors that can enhance transfer of information from Short term memory to Long term memory.
  - 8 What is COPD?
- (b) Describe in brief: (any four) 08**
- 1 Enlist functions of Limbic system.
  - 2 Write down the location and function of chemoreceptors.
  - 3 Write a note on Blood brain barrier.
  - 4 Write a short note on counter current mechanism.
  - 5 Give the functions of glucocorticoids.
  - 6 Explain extrapyramidal system in brain with its functions.
- Q.2 (a) Discuss in detail the Renin Angiotensin Aldosterone system & its significance. 04**
- (b) Explain functional classification of brain. 05**
- (c) Describe the physiology of urine formation in detail. 05**
- Q.3 (a) Differentiate between SNS and ANS. 04**
- (b) Explain anatomy and physiology of spinal cord. Write a note on reflex arc. 05**
- (c) What is electroencephalograph? Explain the clinical importance of various waves. 05**
- Q.4 (a) Explain the Acid – Base balance by urinary system. 04**
- (b) Describe the formation, storage and release of thyroid hormones. 05**
- (c) Draw a labelled diagram of Human Brain. Write a note on cerebral cortex. 05**
- Q.5 (a) Explain structure and functions of neuron with suitable diagram. 04**
- (b) Write the short note on anterior and posterior pituitary hormones. 05**
- (c) Write in brief about the control of respiration. 05**
- Q.6 (a) Define Neurotransmitters. Write their characteristics. 04**
- (b) Explain cranial nerves along with their functions. 05**
- (c) Explain the disorders of urinary system. 05**
- Q.7 (a) Differentiate between exocrine and endocrine glands. 04**
- (b) What is neuroglia? Explain its types along with their functions. 05**
- (c) Explain in detail the exchange of gases at lung and tissue level during respiration. 05**