

**GUJARAT TECHNOLOGICAL UNIVERSITY****BPHARM – SEMESTER II (OLD Syllabus) • EXAMINATION – SUMMER • 2015****Subject code: 220004****Date: 06-06-2015****Subject Name: Anatomy Physiology and Health Education - II****Time: 10:30 am - 01:30 pm****Total Marks: 80****Instructions:**

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q.1** (a) Draw a labeled diagram of ear and explain physiology of vision. **06**  
(b) Write functions of skin in detail with a labeled diagram. **05**  
(c) Explain following terms (i) Glaucoma (ii) Goiter (iii) Meningitis (iv) Calculi (v) Blood volume **05**
- Q.2** (a) Write in detail about structural and function unit of kidney. **06**  
(b) Discuss in detail about Male Reproductive System with a labeled diagram. **05**  
(c) Explain properties of cardiac muscles. **05**
- Q.3** (a) Describe the biosynthesis, storage and release of T<sub>3</sub> and T<sub>4</sub> from thyroid gland. **06**  
(b) Draw a labeled diagram of human brain and write note on cerebral cortex. **05**  
(c) Draw neat and clean diagram of internal structure of heart. **05**
- Q.4** (a) Explain reflex action with neat and clean labelled diagram of reflex arch. **06**  
(b) Write a short note on cardiac output. **05**  
(c) Write a short note on cerebral spinal fluid (CSF). **05**
- Q.5** (a) Discuss physiology of menstruation cycle. Write a note on Oogenesis. **06**  
(b) Discuss in detail about physiology of Ageing process. **05**  
(c) Classify hormones and write a note on hormone obtained from  $\beta$ -cells of islets of Langerhans. **05**
- Q. 6** (a) Draw a labeled diagram of lungs and write a note on respiratory volumes. **06**  
(b) Give difference between parasympathetic and sympathetic nervous system. **05**  
(c) Write a short note on cranial nerves. **05**
- Q.7** (a) Explain physiology of urine formation. **06**  
(b) Write a short note on (i) Renin angiotensin system (ii) ECG **05**  
(c) Explain following terms (i) Bronchial Asthma (ii) Addison's disease **05**  
(iii) Diabetes Mellitus (iv) Limbic system (v) CCF.