

**GUJARAT TECHNOLOGICAL UNIVERSITY****BPHARM – SEMESTER II • EXAMINATION – WINTER - 2013****Subject code: 2220004****Date: 24-12-2013****Subject Name: Human Anatomy Physiology-II****Time: 10:30 am to 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.**

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| <b>Q.1</b> | (a) Explain: (i) EPSP (ii) IPSP (iii) Post-titanic potential   | <b>06</b> |
|            | (b) Write composition and functions of CSF.  | <b>05</b> |
|            | (c) Write a detailed note on reflex arch with suitable diagram.  | <b>05</b> |
| <b>Q.2</b> | (a) Discuss mechanism and regulations of respiration.  | <b>06</b> |
|            | (b) Write location and functions of cerebellum.  | <b>05</b> |
|            | (c) Define following: (i) Asthma (ii) Glaucoma (iii) Renal calculi   | <b>05</b> |
|            | (iv) Acromegaly (v) Diabetes mellitus  |           |
| <b>Q.3</b> | (a) Give difference between sympathetic and parasympathetic system.  | <b>06</b> |
|            | (b) Write a note on: Adrenergic transmission.  | <b>05</b> |
|            | (c) Draw a labeled diagram of nephron. Comment: Urinary tract infections are more common in female.                                  | <b>05</b> |
| <b>Q.4</b> | (a) Draw a labeled diagram of eye-ball. Write a note on photoreceptors.  | <b>06</b> |
|            | (b) Explain physiology of hearing in detail.   | <b>05</b> |
|            | (c) Enlist hormones of supra-renal gland. Write functions of glucocorticoids.  | <b>05</b> |
| <b>Q.5</b> | (a) Draw a labeled diagram of female reproductive system.  | <b>06</b> |
|            | (b) Write a note on: Menstrual cycle.  | <b>05</b> |
|            | (c) Enlist thyroid hormones. Discuss control of release and functions of thyroxin.   | <b>05</b> |
| <b>Q.6</b> | (a) Enumerate various methods of contraception. Describe surgical methods in detail.   | <b>06</b> |
|            | (b) Enumerate hormones of anterior pituitary gland. Discuss the control of hypothalamus over release of anterior pituitary hormones. | <b>05</b> |
|            | (c) Write a note on: Cranial nerves.   | <b>05</b> |
| <b>Q.7</b> | (a) Explain following: (i) Parkinson's disease (ii) Blood brain barrier (iii) Vital capacity   | <b>06</b> |
|            | (b) Write anatomy and functions of cerebral cortex.  | <b>05</b> |
|            | (c) Discuss physiology of urine formation in detail.   | <b>05</b> |

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