Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER– II • EXAMINATION – SUMMER-2016

Subject Code: 220004 **Date: 10/06/2016**
Subject Name: Anatomy Physiology and Health Education - II
Time: 10:30 AM to 1:30 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)**	Discuss process of nerve action potential generation. Explain 'Gating Mechanism' of sodium channels.	**06**
	(b)	Write composition, circulation and functions of cerebrospinal fluid (CSF).	**05**
	(c)	Explain following terms; (i) Meningitis, (ii) Myocardial infarction, (iii) Myxoedema, (iv) Asthma, (v) Cataract	**05**
Q.2	**(a)**	Draw a labeled diagram of Human Brain. Give functions of Cerebellum.	**06**
	(b)	Explain briefly: (i) Ovary (ii) Testis	**05**
	(c)	Write a note on distribution and functions of Cranial nerves.	**05**
Q.3	**(a)**	Enumerate endocrine hormones. Describe physiological effects of hormones from islets of Langerhans.	**06**
	(b)	Discuss physiology of Nephron with labeled diagram.	**05**
	(c)	Explain spermatogenesis with reference to the role of FSH, LH and testosterone.	**05**
Q.4	**(a)**	Draw a labeled diagram of ear. Explain the physiology of Hearing.	**06**
	(b)	Discuss the concept of Reflex arch with suitable diagram.	**05**
	(c)	Explain following terms: (i) Olfactory, (ii) Cardiac Output, (iii) Vital Capacity, (iv) Resuscitation, (v) Oogenesis	**05**
Q.5	**(a)**	Describe formation, storage and release of thyroid hormones.	**06**
	(b)	Write a note on Menstrual Cycle.	**05**
	(c)	Differentiate Followings: (Any two) (i) Internal and External Respiration, (ii) Systemic and pulmonary circulation (iii) Hypothyroidism and Hyperthyroidism	**05**
Q. 6	**(a)**	Describe in detail cardiac cycle with labeled diagram.	**06**
	(b)	Write the principles of first aid. Discuss first aid steps for Burns.	**05**
	(c)	Explain Briefly: (i) ECG (ii) Retina	**05**
Q.7	**(a)**	Draw a labeled diagram of respiratory system. Describe Chloride shift.	**06**
	(b)	Enumerate properties of cardiac muscles. Write a note on impulse conduction in heart.	**05**
	(c)	Explain: (i) Hypermetropia (ii) Astigmatism	**05**

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