

**MASTER OF SCIENCE (DIETETICS AND  
FOOD SERVICE MANAGEMENT)**

**Term-End Examination**

**June, 2015**

**MFN-001 : APPLIED PHYSIOLOGY**

*Time : 3 hours*

*Maximum Marks : 100*

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- Note :** (i) Attempt *any five* questions.  
(ii) Question No. 1 is *compulsory*.  
(iii) All questions carry *equal* marks.
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1. (a) Give one example for each of the following : **1x10=10**
- (i) Enzyme of Gastric Juice
  - (ii) Connective Tissue
  - (iii) Type of muscle tissue
  - (iv) Type of Antibody
  - (v) Unicellular organism
  - (vi) Renal Function Tests
  - (vii) Errors of refraction
  - (viii) Endocrine Glands
  - (ix) Retinal Nerve Cells
  - (x) Spinal nerves
- (b) Briefly explain the following terms in 2 - 3 sentences each : **2x5=10**
- (i) Cyanosis
  - (ii) Tidal Volume
  - (iii) Alzheimer's disease
  - (iv) Enzymes
  - (v) Puberty

2. (a) Explain the structure and functions of the heart. **10+10**  
(b) Describe the unique properties of the heart.
3. (a) Explain the structure and functions of the stomach. **10+10**  
(b) Describe the composition and functions of the gastric juice.
4. Describe the structure and functions of the Autonomic Nervous System. **5+15**
5. (a) Draw and label the different parts of a nephron. Enlist the various functions of kidney. **6+4**  
(b) Explain the process of urine formation in the human body. **10**
6. (a) What do you understand by the term "Endocrine Glands" ? **4+4+12**  
(b) Enlist the endocrine glands present in human body.  
(c) Describe the structure and functions of any of the endocrine glands.
7. Explain the following terms briefly : **4x5=20**  
(a) Sinus Bradycardia  
(b) Sinus Tachycardia  
(c) Sinus Arrhythmias  
(d) Ventricular Fibrillation  
(e) Secondary Hypertension

**8. Write short notes on any four of the following :**

- (a) Functions of Liver 5+5+5+5
  - (b) Mid Brain
  - (c) Contraception
  - (d) Structure and function of middle ear
  - (e) Mechanics of Respiration
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