

**First Semester Examination-2017**

**M.Sc. NUTRITION & DIETETICS**

Paper Code: NUD-101

Full Marks : 40

Time: 2 Hours

**Write the answer for each unit in separate sheet**

**Unit-I**

**Answer question no.1 & any 3 from the rest**

**Q.1 Answer any five of the following**

**1×5=5**

- a) Which hormone regulate blood pressure-
- i) Oxytosin    ii) Angiotensin II
  - iii) Renin    iv) Angiotensinogen
- b) Cholesistokinin is secreted from-
- i) Pancreus    ii) Liver
  - iii) Gallbladder    iv) Gastrointestinal tract
- c) What is the normal amount of GFR for a healthy adult person?
- i) 125ml/min    ii) 120ml/min
  - iii) 130ml/min    iii) 90ml/min
- d) Myocytes present in which muscle?
- i) Cardiac muscle    ii) smooth muscle
  - iii) Skeletal muscle    iv) All of the above
- e) Apneustic centre present in-
- i) Medulla    ii) Pons
  - iii) Lungs    iv) Heart
- f) Platelets are formed from the cell-
- i) Melanocytes    ii) Macrophages

iii) Megacaryocyte iv) Astrocytes (Turn Over)

g) What structural component protects the lungs from outside injury?

- i) Cartilage            ii) Tinysacs  
iii) The ribs cage    iv) Diaphragm

h) ANF is secreted from-

- i) Lungs            ii) Heart  
iii) Kidney    iv) Testis

**Q.2** a) Write the composition of gastric juice. **2+2+1=5**

b) Write the function of bile salt.

c) What is role of gastrin?

**Q.3** a) Write the impact of Bohr effect and Haldane effect on O<sub>2</sub> and CO<sub>2</sub> transport. **1<sup>1/2</sup>+1<sup>1/2</sup>+2=5**

b) Write the name of chemoreceptor in regulation of respiration.

**Q.4** a) How does rennin angiotensin aldosteron mechanism helps blood pressure?

b) How kidney regulate acid base balance? **3+2=5**

**Q.5** a) Briefly state about the absorption of digestive end products of triglyceride.

b) Write names of enzymes for protein digestion. **3+2=5**

**Q.6** a) write the non excretory function of kidney. **2+2+1=5**

b) Write the function of J.G cell.

c) What is renal threshold?

**Q.7** a) Write the mechanism of changes of intrathoracic pressure during breathing. **3+2=5**

b) Write the role medulla in regulation of breathing.

(Turn Over)

**Unit- II**

**Answer question no.8 & any 3 from the rest**

**Q.8 Write any five of the following:**

**1×5=5**

a) Cytokines are-

i) Steroid      ii) Carcinogens

iii) Lipid      iv) Polypeptides

b) The functions of macrophages include-

i) Phagocytosis      ii) Antigen presenting cells

iii) Cytokine production      iv) All of these

c)  $\beta$  lymphocytes differentiate to form-

i) Plasma cell      ii) Effector cell

iii) Plasma cell & memory B cell      iv) None of these

d) A sensory neuron of the peripheral nervous system take nerve impulse from sensory receptor to the-

i) Motor neurons      ii) Inter neurons

iii) Autonomic neuron system      iv) Central nervous system

e) Which following pair of organ are known as exclusively endocrine gland?

i) Thymus and testis      ii) Adrenal and ovary

iii) Pancreas and parathyroid      iv) Adrenal and parathyroid

f) Which one of the following pairs is odd?

i) Glucagon-Beta cells (source)      ii) Insulin-Diabetis (disease)

iii) Somatostatin-Delta cells ( source)      iv) Corpusluteum-Relaxin (secretion)

g) which hormone possesses anti insulin effect?

i) Cortisol      ii) aldosteron

iii) Calcitonin      iv) Oxytosin

*(Turn Over)*

h) Which one of the following is not a secondary messenger in hormone action?

- i) cAMP      ii) cGMP  
iii) Sodium   iv) Ca<sup>2+</sup>

**Q.9** a) "Nutrients acts as immunomodulatory food or substances".....Justify the statement. **3+2=5**

b) Why is insulin known as antiketogenic hormone?

**Q.10** a) Write the role of hormone secreted from thymus. **3+2=5**

b) What is hypersensitivity?

**Q.11** a) What do you mean by auto immunity? **2+3=5**

b) Write the difference between passive and active immunity.

**Q.12** a) What is the role of HPA axis on stress? **3+2=5**

b) What do you mean by thalamic nuclei?

**Q.13** a) Write the role of neurotransmitter. **2+3=5**

b) Discuss briefly about cellular immunity?

**Q.14** a) What is cryptorchidism? **1<sup>1/2</sup>+1<sup>1/2</sup>+2=5**

b) Mention the function of sertoli cell.

c) What is meant by menopause?

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