

**MASTER OF SCIENCE (DIETETICS AND FOOD
SERVICE MANAGEMENT)****TERM-END EXAMINATION****MFN-001 : APPLIED PHYSIOLOGY****Time : 3 Hours]****[Maximum marks : 100**

Note : Attempt five questions in all. Question no.1 is compulsory. All questions carry equal marks.

1. (a) Give one example of each of the following:
[1×10=10]

- (i) Vitamin necessary for night vision
- (ii) Prokaryotic Cell
- (iii) Humour in Ayurvedic Concept
- (iv) Agranulocyte
- (v) Macrophage
- (vi) Phase of Respiration
- (vii) Composition of Bile

(viii) Part of Large Intestine

(ix) Hormone Produced by Kidney

(x) Neurotransmitter

(b) Briefly explain the following terms in 2-3 sentences each : [2×5=10]

(i) De-differentiation cells

(ii) Significance of meiosis

(iii) Osmotic pressure

(iv) Function of platelet

(v) NK cells

2. (a) What is the uniqueness of our heart ? [8]

(b) Discuss the nervous control mechanism of heart and blood vessels. [12]

3. (a) What is respiratory centre ? [6]

(b) Describe the chemical control of respiration in detail. [14]

4. (a) What are the G. I. Hormones ? [6]
- (b) How is fat absorbed and utilised in the human body ? [14]
5. (a) How are the molecules transported across the cell membranes ? [6]
- (b) Describe the passive transport mechanism in detail. [14]
6. (a) Make a labelled diagram of Eyeball. [8]
- (b) Discuss the microscopic structure and functions of retina with the help of diagram. [12]
7. (a) What do you understand by Non-specific Defence Mechanism ? [3]
- (b) What are the types of internal defence mechanisms ? [5]
- (c) Discuss in detail about the role of leucocytes in internal defence mechanism. [12]

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

[5+5+5+5=20]

- (a) Endoplasmic Reticulum
- (b) Smooth muscle
- (c) Megaloblastic Anaemia
- (d) Classification of antibodies
- (e) Chloride shift
- (f) Digestive function of Pancreas

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