

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

Term-End Examination

December, 2011

MFN-001 : APPLIED PHYSIOLOGY

Time : 3 hours

Maximum Marks : 100

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- Note :** (i) Attempt *any five* questions in all.
(ii) Question no. 1 is *compulsory*.
(iii) All questions carry *equal* marks.
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1. (a) Match column A with column 'B' **10x1=10**
- | A | B |
|------------------------------------|---------------------------------|
| (i) Hypocalcaemia | (A) T-lymphocytes |
| (ii) Degeneration of B cell | (B) Lymphoid tissue stimulation |
| (iii) Vasopressin | (C) Progesterone |
| (iv) Decrease acidity of bodyfluid | (D) Polyphagia |
| (v) Juxta glomerular cell | (E) Tetany |
| (vi) Pineal gland | (F) Depth of inspiration |
| (vii) Thymosin | (G) Melatonin |
| (viii) Corpus Luteum | (H) Renin |
| (ix) Pontine centre | (I) Antidiuretic hormone |
| (x) Interleukin | (J) Aldosterone |
| | (K) Trypsin |

- (b) Briefly explain the terms : **2x5=10**
- (i) Presbiopia
 - (ii) Plastid
 - (iii) Universal blood donor
 - (iv) Haemostasis
 - (v) Phagocytosis
2. (a) Describe factors that affect the cardiac output. **8+12**
- (b) Discuss the common causes of secondary hypertension.
3. (a) How will you provide artificial respiration ?
- (b) Discuss chemical control of respiration. **6+14**
4. (a) What are the composition and function of Bile ? How is it secreted ? **10**
- (b) Give the structure and functions of the Pancreas. **10**
5. (a) How does the kidney maintain pH balance ? Discuss in relation to acid and alkaline diets. **10**
- (b) Briefly discuss the renal function tests. **10**
6. (a) Name the cranial nerves. **6**
- (b) Discuss the effects of sympathetic and parasympathetic stimulations on the body system. **14**

7. (a) Discuss structure and function of ovary. 8
(b) Schematically explain the organs involved in taste perception. 6
(c) Enlist the functions of the hormones produced by adrenal cortex. 6
8. Write short notes on *any four* of the following.
- (a) Physiology of lactation. 5+5+5+5
(b) Endocrine glands in our body
(c) Major functions of cerebellum
(d) Difference between active and passive transport systems.
(e) Large Intestine - structure and functions.
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