

[This question paper contains 2 printed pages]

Your Roll No

6850

J

M.Sc -Ph.D. Bio-Medical Sciences / II Sem.

Paper V (Bio-123)—ADVANCED HUMAN

PHYSIOLOGY

(Admissions of 2008 and before)

Time 3 Hours

Maximum Marks 75

*(Write your Roll No on the top immediately
on receipt of this question paper)*

Attempt all questions

1 Write short notes on any *five* 5×5 = 25

(i) Give the physiological basis of Acromegaly

(ii) Mechanism of insulin secretion

(iii) Cushing's Syndrome

(iv) Neurotrophins

(v) Post tetanic potentiation

(vi) Law of projection of receptors

(vii) Adequate stimulus of reflex

(viii) Hormones of adrenal cortex

(ix) Name two cranial nerves each which are afferent
efferent and mixed

2 Write in brief 5×5 = 25

(i) Ionic changes of action potential

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- (ii) Functions of thalamus
 - (iii) EEG
 - (iv) Mechanism of secretion of insulin
 - (v) Withdrawal reflex
- 3 Describe the structure of vestibular apparatus and its function and its role in regulation of posture 10

Or

Describe the mechanism of regulation of temperature and fever

- 4 Describe the structure of thyroid gland and function, formation and secretion of thyroid hormones 10

Or

Describe (a) The role of specific neurotransmitter system in psychotic behaviour and classification of headache, (b) Pain receptors and their stimulation

- 5 Write *True* or *False* 5

- (i) Protoplasmic astrocytes are glial cells which form myelin sheath in the central nervous system
- (ii) The EPSP lasts only for the duration of presynaptic potential
- (iii) The gap junction is not a component of the chemical synapse
- (iv) Prolactin is synthesized in pituitary acidophil cells
- (v) Blood glucose level tends to rise the gluconeogenesis