2021

PHYSIOLOGY — HONOURS

Paper : CC-12

(Endocrinology)

Full Marks : 50

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Group – A

1. Answer ***any five*** questions from the following : 2×5

(a) Name the hypophysiotropic hormone regulating the secretion of (i) growth hormone and (ii) prolactin.

(b) What do you mean by thyrotoxic myopathy?

(c) State episodic release of Prolactin.

(d) State the histological characteristics of thyrocytes.

(e) Name the thyroid hormone binding proteins.

(f) What do you mean by non-suppressible insulin-like activity?

(g) What do you understand by ultra short loop feed back control of hypophysiotropic hormone release?

(h) Name the GI hormone secreted from (i) stomach and (ii) ileum.

Group – B

2. Answer ***any two*** questions from the following : 5×2

(a) Give a brief note on Hypocalciuric hypercalcemea.

(b) Briefly describe the mechanism of gastrin mediated increased gastric acid secretion.

(c) Describe the biosynthesis of pineal hormones with reference to their diurnal fluctuation.

(d) Write short note on POMC family.

(e) Briefly describe the molecular basis of insulin mediated glucose uptake.

Group – C

3. Answer ***any three*** questions from the following :

(a) Describe the molecular basis of action of growth hormone. Give a brief account of functions of growth hormone. Write short note on insulin like growth factors. 3+4+3

(b) Briefly describe the biosynthesis, interneuronal transport and secretion of posterior pituitary hormones. Give a brief account of functions of oxytocin. (2+1+1)+6

(c) Describe the iodine transport across thyrocytes. Mention the role of Peroxidase enzyme in thyroid hormone synthesis. State the calorigenic role of thyroid hormones. 5+3+2

(d) Briefly describe the integrated compensatory endocrine mechanism for the recovery from hypoglycemia in healthy adults. What are neuroglycopenic symptoms? 7+3

(e) Describe the role of GI hormones in regulation of digestion and nutrient absorption. Give a brief account of the following GI hormones : GIP and motilin. 6+(2+2)

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