

Time: 3 Hours

Total marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
 - Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

1. Multiple Choice Questions

(10x1=10)

The Answers to MCQ questions (Q.No. i to Q.No. x) shall be written continuously on the first two writing sheets (ie Page No. 3 & 4) only

- Posterior pituitary secretes:

a) Oxytocin	b) Prolactin	c) MSH	d) FSH
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- Functions of basal ganglia include:

a) Gross motor function	b) Skilled movements
c) Emotions	d) Maintenance of equilibrium
- Cephalic phase of gastric secretion is caused by:

a) Parasympathetic nerves	b) Sympathetic nerves
c) Gastrin	d) Neurohormones
- Testosterone is mainly produced by:

a) Sertoli cells	b) Leydig cells	c) Seminiferous tubules	d) Epididymis
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- In a lady with highly regular 29 day menstrual cycle, ovulation should occur on day:

a) 14	b) 15	c) 17	d) 19
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- Medial geniculate body is related with:

a) Vision	b) Hearing	c) Smell	d) Taste
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- Medium with highest refractive index in the eye is:

a) Cornea	b) Nucleus of the lens	c) Cortex of the lens	d) Aqueous humour
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- Which of the following is an example of epimers:

a) Mannose & glucose	b) Glucose & ribose
c) Galactose & mannose	d) Glucose & galactose
- Which of the following involves carrying genetic information from DNA for protein synthesis:

a) sn-RNA	b) r-RNA	c) m-RNA	d) t-RNA
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- Which compounds are responsible for the coordinated regulation of glucose & glycogen metabolism:

a) Fructose 2, 6-biphosphate	b) acetyl co-A	c) NADH	d) NAD+
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Short Answer Questions

(8x5=40)

- Explain the regulation of hormones from the hypothalamus.
- Explain the secretion of posterior pituitary hormones.
- Classify reflexes and explain the properties of reflex.
- Explain the connection and functions of thalamus.
- Describe the process of absorption in large intestine.
- Explain the role of prolactin hormone.
- Explain the sensation of olfaction.
- Explain the different properties of lipids.

(2+3)

(2+3)

Long Answer Questions

(5x10=50)

- Explain the regulation and action of thyroid hormone.
- A 65 year old man consult doctor with complaints of difficulty in walking and loss of balance while walking. On examination showed incoordinated movements & intention tremor.

(1)

a) What is your diagnosis (1).
b) Which part of CNS is affected and write about its function & connection. (1+5+2)
c) Which is the neurotransmitter. (1)

- Write in detail about mechanism and regulation of pancreatic juice secretion. (3+7)
- Explain the fertilization and implantation of ovum. (5+5)
- Explain the different types of refractive errors.
