

NEET CHEMICAL COORDINATION AND INTEGRATION — MECHANISM OF HORMONE ACTION — PYQS

Max. Marks: 40

Questions: 10

Section A (MCQ) — 10 questions

Q.1 Which of the following is not a steroid hormone?

[NEET (UG) 2024]

- (1) Cortisol (2) Testosterone
(3) Progesterone (4) Glucagon

Scan or tap for the full solution

Q.2 Given below are two statements: one is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**.**Assertion (A):** FSH which interacts with membrane bound receptors does not enter the target cell.**Reason (R):** Binding of FSH to its receptors generates second messenger (cyclic AMP) for its biochemical and physiological responses.

In the light of the above statements, choose the most appropriate answer from the options given below

[NEET (UG) 2022 (Phase 2)]

- (1) (A) is not correct but (R) is correct
(2) Both (A) and (R) are correct and (R) is the correct explanation of (A)
(3) Both (A) and (R) are correct but (R) is not the correct explanation of (A)
(4) (A) is correct but (R) is not correct

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Q.3 How does steroid hormone influence the cellular activities?

[NEET (UG) 2019]

- (1) Activating cyclic AMP located on the cell membrane
(2) Using aquaporin channels as second messenger
(3) Changing the permeability of the cell membrane
(4) Binding to DNA and forming a gene-hormone complex

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Q.4 Which one of the following is not a secondary messenger in hormone action?

[AIPMT 2006]

- (1) cAMP (2) cGMP (3) Calcium (4) Sodium

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Q.5 Which of the following is an amino acid derived hormone?

[NEET 2018]

- (1) Ecdysone (2) Estriol
(3) Epinephrine (4) Estradiol

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Q.6 The amino acid tryptophan is the precursor for the synthesis of

[NEET 2016 (Phase 1)]

- (1) estrogen and progesterone
(2) cortisol and cortisone
(3) melatonin and serotonin
(4) thyroxine and triiodothyronine.

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Q.7 Which one of the following pairs of hormones are the examples of those that can easily pass through the cell membrane of the target cell and bind to a receptor inside it (mostly in the nucleus)?

[AIPMT 2012 (Prelims)]

- (1) Insulin, glucagon
(2) Thyroxine, insulin
(3) Somatostatin, oxytocin
(4) Cortisol, testosterone

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Q.8 What is correct to say about the hormone action in humans?

[AIPMT 2012 (Prelims)]

- (1) Glucagon is secreted by β -cells of islets of Langerhans and stimulates glycogenolysis.
(2) Secretion of thymosins is stimulated with aging.
(3) In females, FSH first binds with specific receptors on ovarian cell membrane.
(4) FSH stimulates the secretion of estrogen and progesterone.

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Q.9 Which one of the following hormones is modified amino acid?

[AIPMT 2004]

- (1) Epinephrine (2) Progesterone
(3) Prostaglandin (4) Estrogen

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Q.10 Chemically hormones are [AIPMT 2004]

- (1) biogenic amines only
- (2) proteins, steroids and biogenic amines
- (3) proteins only
- (4) steroids only

Scan or tap for the
full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	
Ans.	4	3	4	4	3	3	4	3	1	2	