

## ENDOCRINE SYSTEM MCQs

1. Grave's disease is due to \_\_\_\_\_

- a) Hypoactivity of Islets of Langerhans
- b) Hyperactivity of adrenal cortex
- c) Hyperactivity of thyroid gland
- d) Hyperactivity of adrenal medulla

Answer: c

Explanation: Grave's disease is an immune system disorder. It results in over production of thyroid hormones. The thyroid gets enlarged.

2. Hypothyroidism in adult causes \_\_\_\_\_

- a) Myxoedema
- b) Cretinism
- c) Diabetes
- d) Obesity

Answer: a

Explanation: Myxoedema is loss of brain function as a result of severe low level of thyroid hormone in the blood. It is life threatening.

3. An autoimmune disease where body's own antibodies attack cells of thyroid is called \_\_\_\_\_

- a) Hoshimoto's disease
- b) Grave's disease
- c) Turner's syndrome
- d) Hyperthyroidism

Answer: a

Explanation: It is an autoimmune disorder. Immune system attacks the thyroid gland. Thyroid are damaged and can't make enough hormone.

4. Which type of epithelium is found in thyroid follicles?

- a) Squamous
- b) Cuboidal
- c) Transitional
- d) Columnar

Answer: b

Explanation: Thyroid follicles are reasonable for production and secretion of thyroid hormone. They are made up of Cuboidal epithelium.

5. The hormone that controls the level of calcium and phosphorus in blood is secreted by \_\_\_\_\_

- a) Thyroid gland
- b) Parathyroid gland
- c) Pituitary gland
- d) Thymus

Answer: b

Explanation: Parathyroid gland is tiny glands. It controls the body's calcium level. Each gland is about the size of a grain of rice.

**6. What hormone does the parathyroid produce?**

- a) Calcitonin
- b) PTH
- c) PFH
- d) Insulin

Answer: b

Explanation: PTH is known as parathyroid hormone. It is secreted by parathyroid gland. It is important in bone remodeling.

**7. How many parathyroid glands are present?**

- a) 4
- b) 3
- c) 2
- d) 1

Answer: a

Explanation: There are four tiny parathyroid gland present. It weighs about 30mg and 3-4 mm in diameter.

**8. What are the types of cells found in parathyroid gland?**

- a) Alpha and beta cells
- b) Chief cells and oxyphil
- c) Parafollicular and follicle cells
- d) Pituicytes and basophil cells

Answer: b

Explanation: Oxyphil cell is present. Along with that chief cells are also present. Oxyphil cells appear at the onset of puberty.

**9. Where are parathyroid glands present?**

- a) Posterior surface of lateral lobes of thyroid
- b) Posterior to stomach
- c) On top of kidneys
- d) Upper chest under breastbone

Answer: a

Explanation: Parathyroid glands are endocrine glands in the neck of humans. It is located on the back of the thyroid gland. They are four in numbers

**10. The Thymus is located in \_\_\_\_\_**

- a) Neck
- b) Along intestinal walls
- c) Along trachea
- d) In abdominal cavity above diaphragm

Answer: c

Explanation: The Thymus is located along the trachea behind the sternum. It is located between lungs.

**11. Thymus secretes \_\_\_\_**

- a) Thymosin
- b) Macrophages
- c) Antibodies
- d) Lymph

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Answer: a

Explanation: Thymus secretes Thymosin. It stimulates the development of disease fighting Tcells.

**12. Thymus is smaller in children than in adults**

- a) True
- b) False

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Answer: b

Explanation: After puberty thymus starts to slowly shrink. It becomes replaced by fat.

**13. T lymphocytes mature in \_\_\_\_**

- a) Spleen
- b) Thymus
- c) Red bone marrow
- d) Thyroid

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Answer: b

Explanation: T lymphocytes play a central role in cell mediated immunity, it has a receptor on the cell surface. T lymphocytes mature in Thymus.

**14. Endocrine gland thought to be involved in setting the biological clock and influencing the reproductive function of \_\_\_\_\_**

- a) Pituitary gland
- b) Thymus gland
- c) Adrenal gland
- d) Pineal gland

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Answer: d

Explanation: Pineal gland is the small endocrine gland. It secretes the hormone that affects the modulation of sleep/wake patterns and photoperiodic functions.

**15. Pineal gland of human brain secretes melatonin concerned with \_\_\_\_\_**

- a) Anger
- b) Body temperature
- c) Smell
- d) Coloration of the skin

.

Answer: d

Explanation: Melatonin is a hormone secreted by Pineal gland. It is also known as N-acetyl-5-methoxy tryptamine.

**16. The pineal gland secretes \_\_\_\_\_**

- a) Melatonin
- b) Vasopressin
- c) MSH
- d) Prolactin

.

Answer: a

Explanation: The pineal gland secretes Melatonin. It regulates sleep and wakefulness. Melatonin supplement is used to treat jet lags or sleep problems.

**17. Where is Pineal gland located?**

- a) Just below Adam's apple
- b) Hanging down from hypothalamus
- c) Between the right and left hemisphere of the brain
- d) In the frontal lobe of brain

.

Answer: c

Explanation: Pineal gland is located in the epithalamus near the centre of the brain between the two hemisphere tucked in a groove where the two halves of the thalamus join. The function of this gland was discovered last.

**18. Changes in blood concentration of glucose, oxygen and hydrogen ions are detected by \_\_\_\_\_**

- a) Baroreceptors
- b) Chemoreceptors
- c) Nociceptors
- d) Proprioceptors

.

Answer: b

Explanation: Chemoreceptors are stimulated by a change in concentration of chemicals such as glucose, oxygen, carbon dioxide and hydrogen ions.

**19. Which of these receptors detects stretching or lengthening of a muscle?**

- a) Nociceptors
- b) Muscle spindle
- c) Golgi tendon organ
- d) Meissner's corpuscle

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Answer: b

Explanation: Muscle spindle and Golgi tendon organs both transmit proprioceptive information. The muscle spindles are located within muscles while Golgi tendon organs are located within the tendons.

**20. The sensation of temperature, touch, pressure and pain occurs in \_\_\_\_\_**

- a) Temporal lobe
- b) Occipital lobe
- c) Parietal lobe
- d) Frontal lobe

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Answer: c

Explanation: The sensation of temperature, touch, pressure and pain occur in postcentral gyrus of each parietal lobe. The Parietal lobe contains primary somatic sensory cortex. The thalamus projects general somatic sensory information to this part of the cerebrum.

21. The occipital lobe contains which of the following primary sensory areas?

- a) Visual
- b) Taste
- c) Auditory
- d) Olfactory

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Answer: a

Explanation: The cerebrum is divided into lobes. The visual cortex where the visual images are processed is located in occipital lobe.

22. Which of the following is an effect of aging on the nervous system?

- a) Reduction in the number of free nerve ending
- b) Decreased awareness of tactile stimulation
- c) Identify objects by touch more easily
- d) An increases sense of two pint discrimination

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Answer: b

Explanation: As one age, free nerve endings and hair follicle receptors largely remain unchanged, however pacinian corpuscles and Meissner's corpuscles decrease in number and become structurally distorted, thus elderly have a decreased awareness of tactile and pressure stimulation

23. FSH and LH are collectively known as \_\_\_\_\_

- a) Neurohormones
- b) Antistress hormones
- c) Gonadotrophic hormone
- d) Emergency hormone

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Answer: c

Explanation: FSH and LH are collectively known as gonadotrophic hormone. It is secreted by the anterior pituitary gland. It acts on gonads controlling gamete and sex hormone production.

24. Which of the following is not a heredity disease?

- a) Hemophilia
- b) Cretinism
- c) Cystic fibrosis
- d) Thalassemia

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Answer: b

Explanation: Cretinism is a condition of severely stunted physical and mental growth owing to untreated deficiency of thyroid hormone. Cretinism is not a heredity disease.

25. Which of the following hormone is responsible for ovulation?

- a) LH
- b) FSH
- c) Progesterone
- d) Testosterone

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Answer: a

Explanation: LH is a hormone produced by gonadotrophic cells in the anterior pituitary gland. In females, an acute rise in LH triggers ovulation and development of corpus luteum.

26. Which of the following is a part of endocrine gland?

- a) Pars radiata
- b) Brunner's gland
- c) Juxtaglomerulus
- d) Crypts of Lieberkuhn

Answer: c

Explanation: Juxtaglomerulus is a part of endocrine gland. It consists of three types of cells. They are present in kidneys.

27. Who is the father of endocrinology?

- a) R H Whittakar
- b) Pasteur
- c) Thomas Addison
- d) Einthoven

Answer: c

Explanation: Thomas Addison is the father of endocrinology. In 1921 insulin was discovered and endocrinology became popular.

28. Stress hormone is \_\_\_\_\_

- a) Oxytocin
- b) Adrenaline
- c) Vasopressin
- d) Sex hormone

Answer: b

Explanation: Adrenaline is a stress hormone. It is produced by adrenal glands and certain neurons. It is also known as epinephrine.

29. Which of the following is responsible for sleep cycle movements?

- a) Melatonin
- b) Dopamine
- c) Serotin
- d) Adrenaline

Answer: a

Explanation: Melatonin is produced by a pineal gland and it regulates sleep and wakefulness.

30. Which part of the ovary of mammals acts as endocrine gland after copulation?

- a) Stroma
- b) Graaffian follicle
- c) Vitelline membrane
- d) Germinal epithelium

Answer: b

Explanation: Graaffian follicle acts as endocrine gland after copulation. It contains a liquid filled cavity and ruptures during ovulation to release an egg.

31. Which of the following hormone is a modified amino acid?

- a) Progesterone
- b) Estrogen
- c) Prostaglandins
- d) Epinephrine

Answer: d

Explanation: Epinephrine is a modified amino acid. It is a neurotransmitter. It increases cardiac output and raises glucose level in blood.

32. Ecdysone is secreted by \_\_\_\_\_

- a) Insects
- b) Nematodes'
- c) Polychaetes
- d) Algae

Answer: a

Explanation: Ecdysone is secreted by insects. It is a steroid hormone that controls moulting in insects and in arthropods.

33. Which hormone produces a calorogenic effect?

- a) FSH
- b) Thyroxine
- c) Insulin
- d) Adrenaline

Answer: a

Explanation: FSH hormone produces a calorogenic effect. FSH is produced by an anterior pituitary gland and regulates development, growth, pubertal maturation and reproductive process of the body.

34. Which of the following hormone is a steroid?

- a) Epinephrine
- b) Thyroxine
- c) Estrogen
- d) Prostaglandins

Answer: c

Explanation: Steroid is an organic compound with four rings arranged in a specific molecular configuration. Steroid included sex hormones, dietary lipid etc.

35. Deficiency of vasopressin causes \_\_\_\_\_

- a) Goitre
- b) Diabetes mellitus
- c) Myxoedema
- d) Diabetes insipidus

Answer: d

Explanation: Vasopressin is an antidiuretic hormone. It is synthesized by the hypothalamus. Deficiency of vasopressin causes Diabetes insipidus