



PERL EDUCATION

PRIMARY EDUCATION & RIGHTEOUSNESS LEARNING

ALUMNI OF IITs / NITs

JEE - 2021 RESULT



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NEET - 2021 RESULT



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AIIMS



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Ch - 11 : Endocrine System

OUR ICSE - 10th TOPPERS



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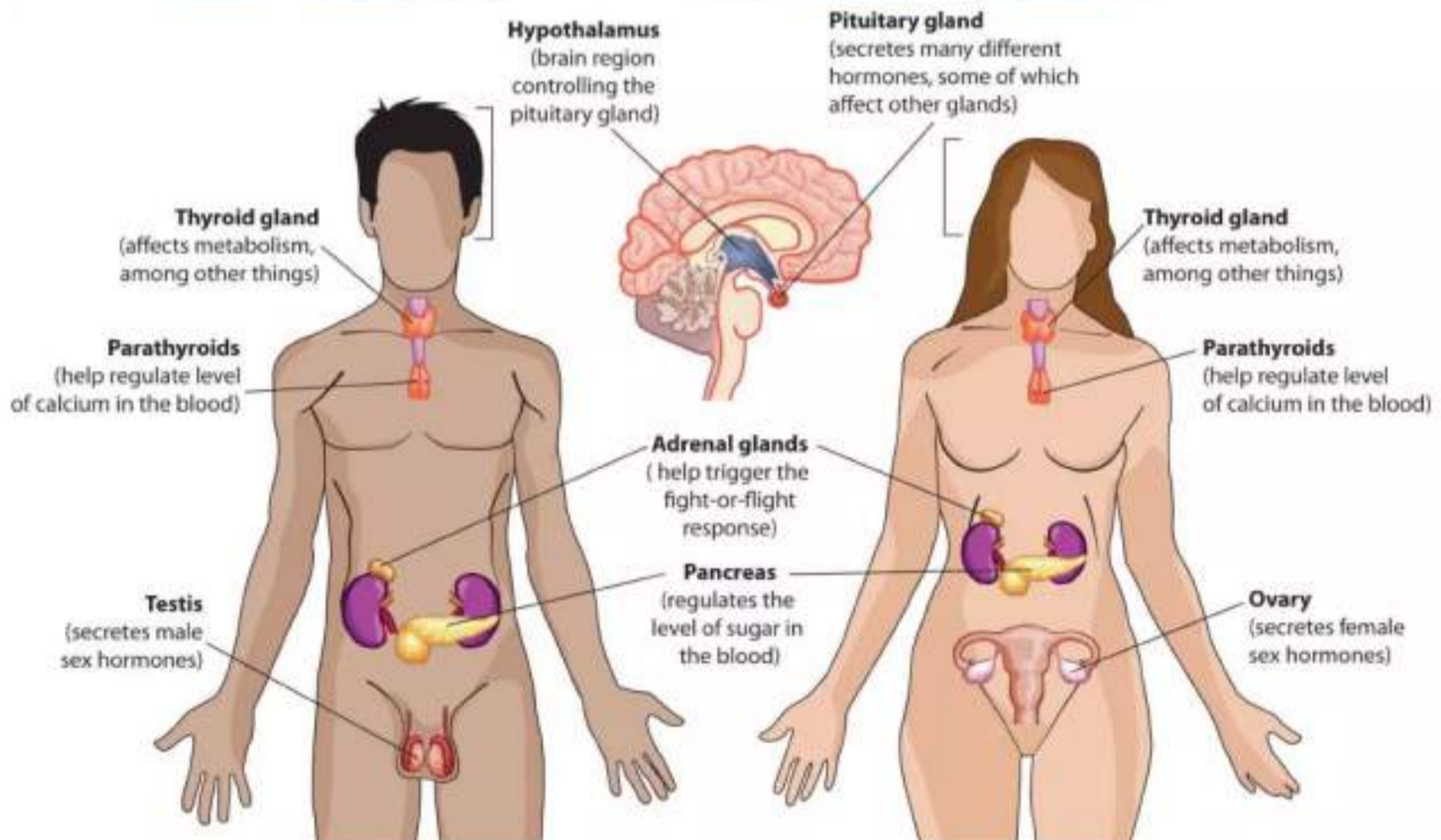
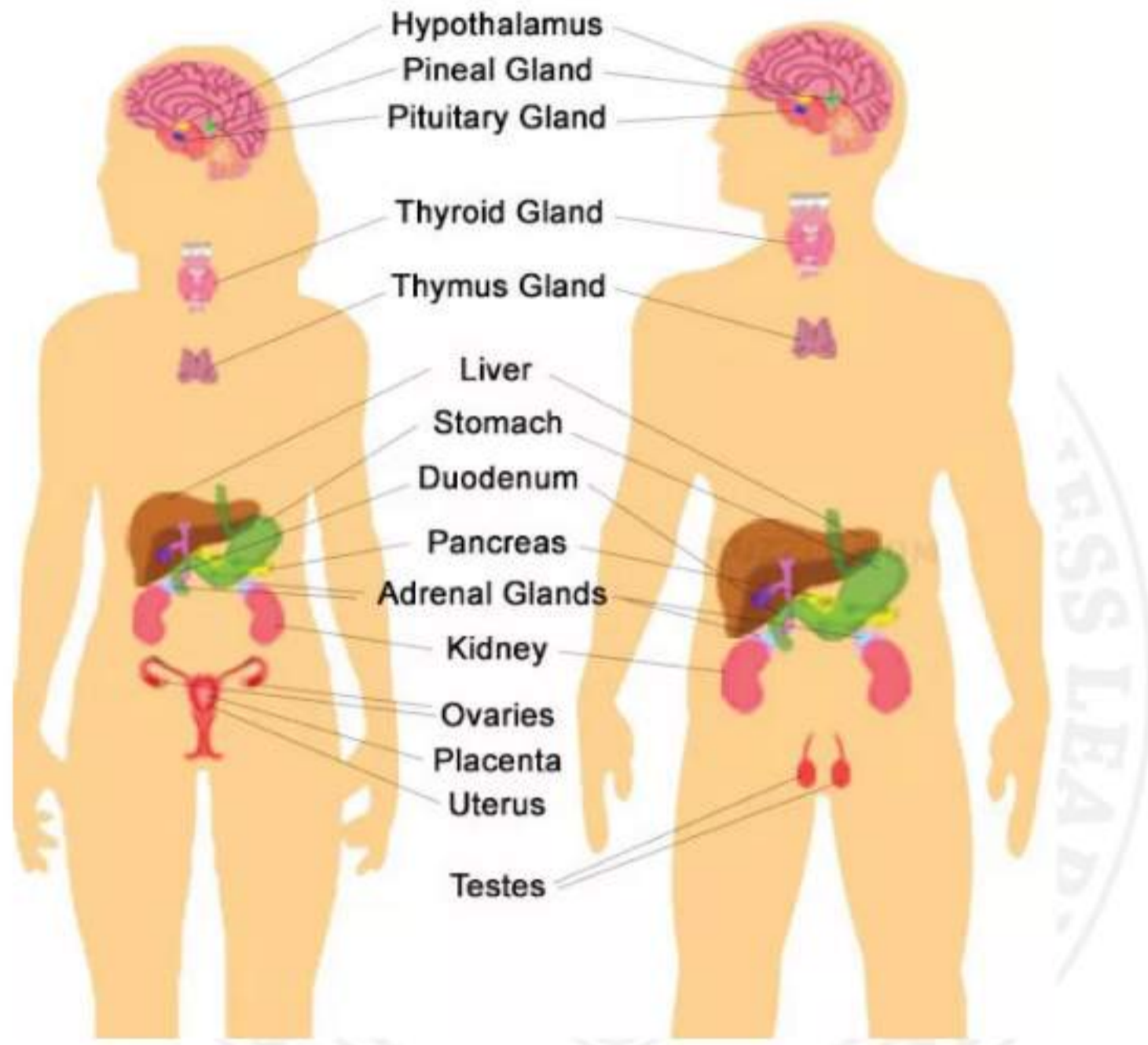
Samidha Deshmukh
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Short Questions

Question 1: What do you mean by endocrine system ?



Question 2: What is a hormone ?

Question 3: What are endocrine glands ?

Question 4: What is the chemical nature of hormone ?

Question 5: Why are hormones called 'chemical messengers' ?

Question 6: What are the general properties of hormones ?

Question 7: Which parts of the alimentary canal produce hormones ?

Question 8: Name the different endocrine glands found in the body of man.

Question 9: What are tropic hormones ?

Question 10: Name the hormone produced by the following glands giving one function of each.

(i) Thyroid.

(ii) Pancreas

(iii) Adrenal medulla

Question 11: Write about some functions of adrenal glands.

Question 12: Are the following glands exocrine or endocrine glands ?

(i) Salivary gland, (ii) Liver, (iii) Thyroid gland, (iv) Pancreas, (v) Adrenal.

Question 13: Which hormones are secreted by anterior pituitary gland ?

Question 14: How is iodine important to our body ?

Question 15: Where is the thymus gland located and what is its function ?

Question 16: People living in hilly regions usually suffer from simple goitre. Explain.

Question 17: What is osteoporosis and what is its cause ?

Question 18: Write in brief about the causes and symptoms of exophthalmic goiter.

Question 19: List some of the functions of pituitary gland.

Question 20: What are the two kinds of diabetes ? Mention their symptoms and the causes.

Question 21: Complete the following :

Gland/Organ	Hormone	Function
(i) Stomach
(ii) Parathyroid
(iii)	Lowers blood sugar level
(iv) Adrenal medulla
(v) Pancreas (Alpha cells)
(vi) Testes

Question 22: Given below is a table consisting of a set of items belonging to a common category. Complete the table by filling in the category and the odd one in the blanks.

Set	Category	Odd one
Adrenaline, Penicillin, Insulin, Thyroxin		
Vasopressin, growth hormone, TSH, ACTH, FSH		

Question 23: Complete the table given below by filling in the blanks numbered 1 to 8.

Gland	Hormone Secreted	Effect on Body
1	2	Regulates basal metabolism
Pancreas ((3-cells)	3	4
5	6	Increases heart beat
7	Thyroid stimulating hormone	8

Give Reasons

Question 1: Hormones are called 'chemical messengers'.

Question 2: Organs like the stomach and intestine are also endocrine glands. Why ?

Question 3: The thyroid gland is called as nature gland.

Question 4: Goiter is usually observed in people living in hilly regions.

Question 5: The thymus is larger and more prominent in children than is adults.

Question 6: Pancreas is both an exocrine gland and an endocrine gland. Explain.

Question 7: Insulin is injected into the body of a highly diabetic patient and not given orally. Explain.

Question 8: The pituitary is called the master gland.

Question 9: Adrenaline is also known as emergency hormone.

Question 10: Our hair stands on their ends during fear.

Question 11: Some adult women may develop facial hairs. What may be the cause for it ? Question 12: The release of progesterone in the urine is an indication of pregnancy. Explain.

Differentiate

Question 1: Endocrine gland and Exocrine gland.

Question 2: Hormones and Enzyme.

Question 3: Insulin and Glucagon.

Question 4: Nervous control and Hormonal control.

Question 5: Cretinism and Myxedema.

Question 6: Gigantism and Acromegaly.

Question 7: Simple Goitre and Exophthalmic Goitre.

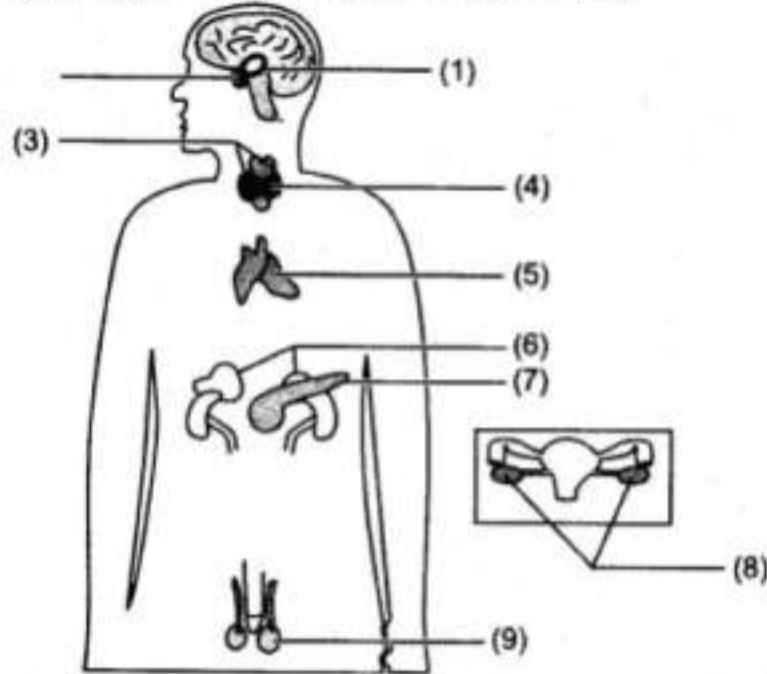
Question 8: Diabetes mellitus and Diabetes insipidus.

Question 9: Acromegaly and Myxedema.

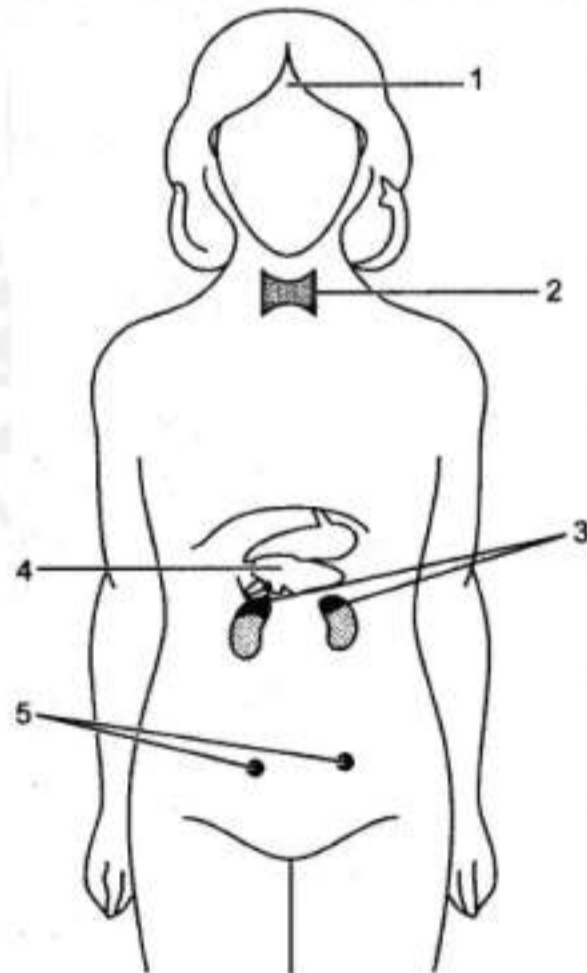
Diagram Based Questions

Question 1: Place the words at the bottom of the page next to the number that shows the location of the Endocrine Glands.

(1)..... (2) (3) (4) (5) (6) (7) (8) (9)



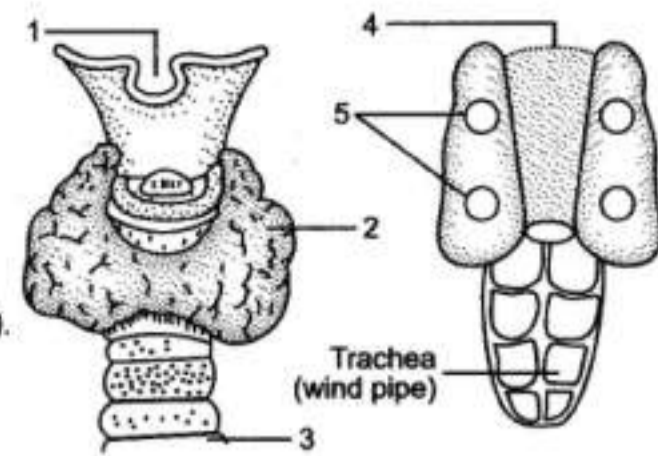
Question 2: Some of the endocrine glands are shown by the guidelines.



- (i) Name the glands marked 1 to 5.
- (ii) Name the hormone secreted by 2. Give one important function of this hormone.
- (iii) Name the endocrine Cells present in part 3.
- (iv) Name the hormone secreted by part 4. Give one important function of this hormone.

Question 4: Given alongside are the diagrammatic sketches of some endocrine glands. Observe the figures and answer the following questions

- (i) Label the parts numbered 1 to 5.
- (ii) Name the hormones secreted by (2) and (5).
- (iii) Which chemicals in our body are greatly affected by hormones ?
- (iv) What is the chemical nature of hormones ?
- (v) Name the elements related with the functioning of hormones secreted by the structure (2) and (5).



Question 5: Study the diagram given below and then answer the questions that follow :



- (i) Name the cells of the pancreas that produce (1) glucagon, (2) insulin.
- (ii) State the main function of (1) glucagon, (2) insulin.
- (iii) Why is the pancreas referred to as an exo-endocrine gland ?
- (iv) Why is insulin not given orally but is injected into the body ?
- (v) What is the technical term for the cells of the pancreas that produce endocrine hormones ?
- (vi) Where in the body is the pancreas located ?

Question 6: The sketch below shows a certain condition in an individual:



- (i) Name the condition.
- (ii) What is the underlying cause of this condition ?
- (iii) Name two other conditions that could have resulted due to a similar cause.
- (iv) Which hormone is required for iodine synthesis ?
- (v) Where is thyroid gland located ?
- (vi) The hormone secreted by thyroid gland is controlled from which hormone ?

Name the Following

Question:

1. Which gland is exocrine as well as endocrine gland.
2. Which hormone is secreted by the pancreas.
3. Hormone secreted by p-cells of Islets of Langerhans.
4. Disease caused by the deficiency of insulin.
5. The hormone produced by the thyroid gland.
6. Disorder caused by excess of thyroid hormone.
7. Iodine is necessary for the secretion of which hormone.
8. The master gland of the body, because it controls the activity of other endocrine gland also.
9. Hormone controls absorption of water from kidney tubules.
10. Hormone secreted by corpus luteum.

Give Technical Terms

Question:

1. What are the substances that control the growth and development in animals?
2. Name the gland in the body that secretes the so-called 'Emergency hormone'.
3. When your mouth dries up and the heart begins to beat faster, which hormone brings about the feeling ?
4. Name the hormone which prepares the body to face an emergency situation.
5. Name a condition caused due to hypo secretion of thyroxin in adults.
6. Name the blood vessels which transport hormones from the endocrine glands to the various parts of the body.
7. Name the hormones secreted by the pancreas.
8. The condition which results in the abnormally long bones, long lower jaw bone due to hyper secretion of pituitary hormone.
9. Name the cells of islets of langerhans in pancreas, which secretes insulin and glucagon.
10. Name two hormones secreted by the alimentary canal.
11. Name the hormone which maintains glucose level in the blood.
12. What are releasing hormones?
13. Name a hormone which controls developments of male secondary sexual characters.
14. Name the structure which produces testosterone.
15. The structure which controls the master gland.
16. Name the glands which secrete the following hormones:

Fill in the Blanks

Complete the following sentences with appropriate words :

1. _____ is called father of endocrinology.
2. Nervous system and _____ are very closely related.
3. The glands with ducts are called _____.
4. A hormone which influences the ossification of bones is _____.
5. The activities of the thyroid gland are controlled by _____ secreted by the _____.
6. A disease caused in children due to under secretion of thyroxine is _____.
7. In adult deficiency in secretion of thyroid produces a disease called _____.
8. Lack of iodine in diet causes _____.
9. The endocrine part of the pancreas is _____.
10. _____ is a disease caused by hypothyroidism.
11. Insulin makes the liver turn blood sugar into _____.

True & False

Mention, if the following statements are True or False. If false rewrite the wrong statement in its correct form:

1. Hormones are produced by endocrine gland.
2. Hormones are chemically protein.
3. The pituitary gland is both exocrine and endocrine in function.
4. The alpha cells of the pancreas secrete insulin.
5. Adrenal gland is called Master gland.
6. Calcium is the main element of thyroxin.
7. Adrenal cortex produces emergency hormone adrenaline.
8. Adrenal medulla produces adrenaline.
9. Thyroxin regulates metabolism.
10. Rickets is caused due to deficiency of iodine.
11. Glucagon converts glucose into glycogen.

State the Location

Name	Location
Thyroid	
Adrenal	
Pancreas	
Prostate gland	
Pituitary gland	

State the Function

Write the functional activity of the following structures:

Name	Function
Thyroxin	
Insulin	
Testosterone	
Oestradiol	
Progesterone	
Relaxin	
Oxytocin	

Choose the Odd One Out

1. Goitre, Cretinism, Scurvy, Myxedema.
2. Cretinism, Myxedema, Simple goitre, Acromegaly.
3. Somatotropin, Gonadotropin releasing hormone, Corticotrophin releasing hormone, Oxytocin.
4. Thyroid gland, Adrenal gland, Pituitary gland, Prostate gland.
5. Adrenal, liver, thyroid, pituitary.
6. Oestrogen, Progesterone, Testosterone, Prolactin.
7. Oxytocin, Insulin, Prolaction, Progesteron.
8. Growth hormone, TSH, Vasopressin, LH.
9. Cushing's syndrome, Eunuchoidism, Addison's disease, Virilism.
10. Aldosterone, Cortisol, Progesterone, Epinephrine.
11. Testosterone, Epinephrine, Progesterone, Aldosterone.
12. Cortisone, Cortisol, Progesterone, Epinephrine.
13. Insulin, Glucagon, Diabetes insipidus, Diabetes mellitus.
14. Glucocorticoids, Mineralocorticoids, Corticotrophin, Sex corticoids.
15. FSH, ICSH, Prolactin, LH.
16. Insulin, blood sugar, adrenaline, thyroxine.

Multiple Choice Questions

1. Which statement is not for a hormone ?
 - (a) They act on target organs usually away from the source glands.
 - (b) They are secreted directly into the blood.
 - (c) They are used again and again like catalysts.
 - (d) They are produced in very minute quantities and are biologically very active.
2. The basal metabolic rate in body cells is regulated by :
 - (a) The parathyroid (b) The thyroid
 - (c) The pituitary (d) The thymus
3. The mammalian thymus is mainly concerned with:
 - (a) Regulation of body temperature (b) Regulation of body growth
 - (c) Secretion of thyrotropins (d) Immunological functions
4. Which of the following glands has both endocrine and exocrine functions ?
 - (a) Pituitary gland (b) Thyroid gland
 - (c) Pancreas gland (d) Adrenal gland
5. Pancreas is a mixed gland in which:
 - (a) All cells secrete enzymes and hormones.
 - (b) Most cells secrete hormones
 - (c) Few cells secrete enzymes
 - (d) Enzymes and hormones are secreted by separate cells.
6. Secretin is secreted by :
 - (a) Testes and stimulates male secondary character
 - (b) Adrenal glands and stimulates heart beat
 - (c) Small intestine and stimulates pancreas
 - (d) Pancreas and stimulates conversion of glycogen into glucose.
7. Vasopressin is concerned with:
 - (a) Quick digestion (b) Slow heart beat
 - (c) Concentration of urine (d) Dilution of urine
8. Glucagon is secreted by :
 - (a) The p cells of islets of langerhans (b) The a cells of islets of langerhans
 - (c) The p cells of pancreas (d) The Adrenal cortex
9. Leydig cells are meant for:
 - (a) Formation of sperms (b) To produce progesterone
 - (c) To produce testosterone (d) Nutrition of sperm
10. Human chronic Gonadotropin:
 - (a) Stimulates the growth of placenta
 - (b) Stimulates the development of new follicles
 - (c) Inhibits the secretion of milk till child birth
 - (d) Stimulates the corpus luteum to grow and secrete progesterone.

Match the Column

Column 'II' is a list of items related to ideas in Column 'I'. Match the term in Column 'II' with the suitable idea given in Column 'I'.

Column A	Column B
(i) Pituitary	(a) produces male sex characteristics
(ii) Ovaries	(b) decreases blood sugar level
(iii) Thyroid	(c) increases heart and breathing rate, raises blood pressure
(iv) Thymus	(d) produces female sex characteristics
(v) Adrenals	(e) is known as emergency hormone
(vi) Hypothalamus	(f) regulates the level of calcium and phosphorus
(vii) Pancreas	(g) increases rate of metabolism
(viii) Testes	(h) maintains the level of calcium
(ix) Parathyroid	regulates the amount of water excreted in urine.
(x) Cretinism	(j) stimulates skeletal growth
(xi) Diabetes mellitus	(k) regulates the activities of other glands
(xii) Insulin shock	(l) stimulates development of male and female sex organs
(xiii) Gigantism	(m) Shortage of glucose in blood.
(xiv) Enlargement of breasts in adult males	(n) Over-secretion of growth hormone
(xv) Exophthalmic goitre	(o) Excess of glucose in blood
(xvi) Acromegaly	(p) Over-secretion of thyroxin
(xvii) Addison's disease	(q) Dwarfism and mental retardation
(xviii) Cretinism	(r) Over-secretion of cortical hormones
(xix) Dwarfism	(s) Under-secretion of adrenal cortex
(xx) Adrenalin	(t) Under-secretion of thyroxin in children
(xxi) Vasopressin	(u) Over-secretion of growth hormones in adults