



### **BIOLOGY**

## **BOOKS - MBD**

## Chemical Co-ordination and Integration (Endocrine System)



1. What is endocrine gland?

2. Is the action of hormone slower or faster as

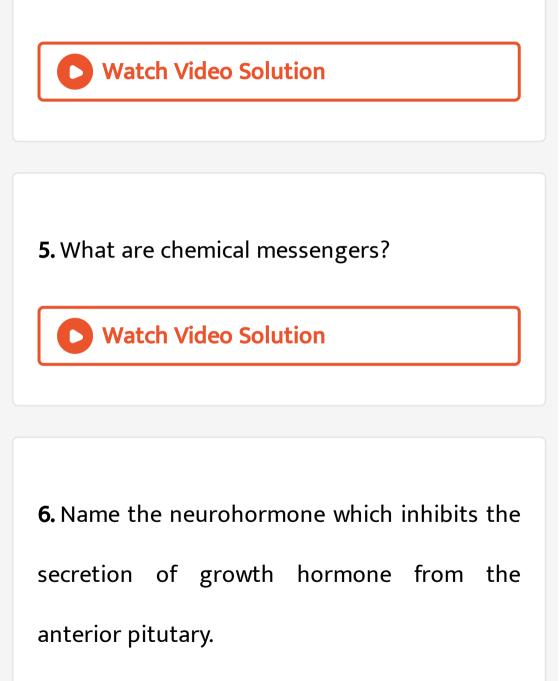
compared to nerve impulses?

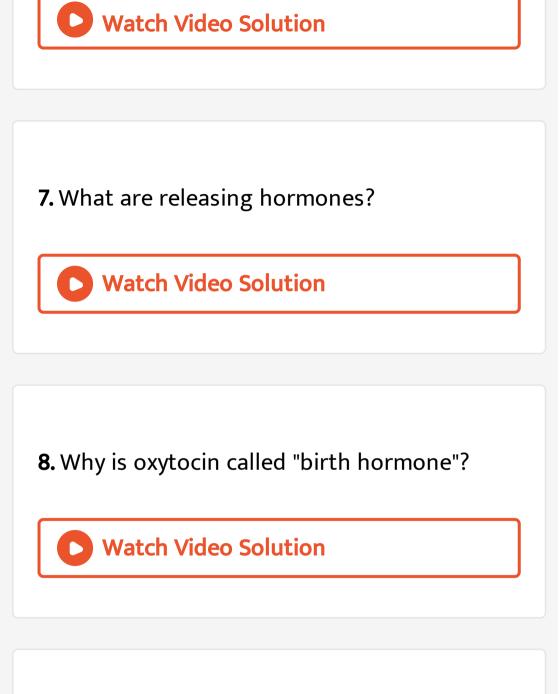
Watch Video Solution

3. List two functions which are regulated by

hormones.

4. All hormones are excitatory or inhibitory.





9. What causes gigantism?



- **10.** Thymosin is responsible for:
  - A. Raising the blood sugar level
  - B. Raising the blood calcium level
  - C. Increased production of T lymphocytes
  - D. Decrease in blood RBC.

#### Answer:

**11.** A hormone responsible for normal sleepwake cycle is:

A. Epinephrine

B. Gastrin

C. Melatonin

D. Insulin

Answer:

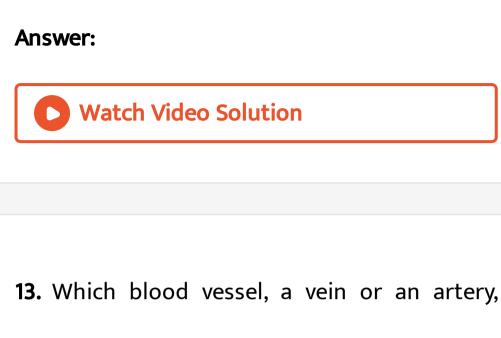
**12.** Hormones are called chemical signals that stimulate specific target tissues. Their specificity is due to the presence of signal receiving 'receptors' only in the respective target tissues. Where are these receptors present in case of hormones of protein nature?

A. Extra cellular matrix

B. blood

C. Plasma membrane

D. Nucleus

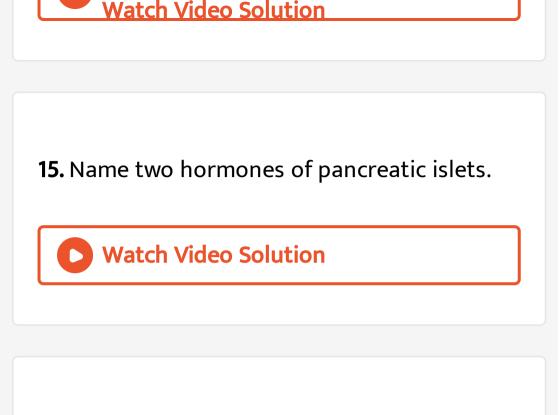


carries a hormone from an endocrine glands?



14. Write names of one male and one female

sex hormones.



**16.** Name a quick acting hormone and a hormone acting with a lag period.

17. Which hormone is called birth hormone in

the female human beings?

Watch Video Solution

**18.** Give the name for a gland which is partly

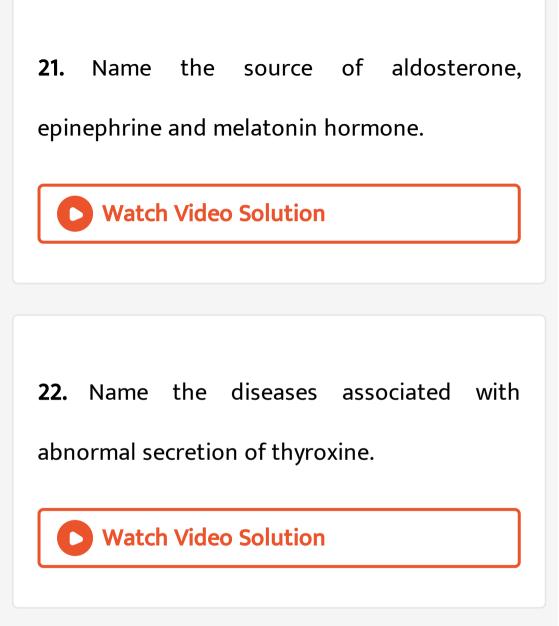
exocrine and partly endocrine.

**19.** Name the hormone responsible for secondart sexual characters in male and female.



#### **20.** Why pitutary gland is called master gland?





23. Name two hormones regulating calcium-

phosphorus balance inside the body.



**24.** Name the hormones whose definciency causes diabetes mellitus and diabetes insipidus.

25. In the mechanism of action of a protein

hormone, one of the second messengers is:

A. cyclin AMP

B. Insulin

 $\mathsf{C}.\,T_3$ 

D. Gastrin

#### **Answer:**

26. Leydig cells produce a group of hormones

#### called:

A. Androgens

B. Estrogens

C. Aldosterone

D. Gonadotropins

#### Answer:

27. Corpus luteum secrets a hormone called:

A. Prolactin

- **B. Progesterone**
- C. Aldosterone
- D. Testosterone

Answer:

28. Cortisol is secreated from:

A. Pancrease

B. Thyroid

C. Adrenal

D. Thymus

Answer:

**29.** Fill in the blanks:

Watch Video Solution

**30.** Fill in the blanks:

Secretion of milk is stimulated by .....while

ejection of milk is stimulated by .....

**31.** Fill in the blanks:

Diabetes insipidus results from a deficiency of

.....while diabetes mellitus is caused by a

deficiency of .....

Watch Video Solution

**32.** Fill in the blanks:

Growth of female secondary sec organs is stimulated at puberty by .....while growth

of male secondary sec organs is stimulated by

**33.** Fill in the blanks:

Watch Video Solution

. . . . . . . . .

Deficiency of growth hormone from childhood

produces the diseases called .....while

oversecretion of that hormone from childhood

causes .....

34. True or False

Hormones released from posterior pitutary

are not syntheiszed in posterior pituitary.



#### 35. True or False

Both myxoedema and cretinism are caused

due to hypthyroidism.

#### 36. True or False

Presence of penis is a primary sex organ in

male.

Watch Video Solution

37. True or False

Lack of insulin causes diabetes insipidus.

38. True or False

Some sex hormones are proteinous while

some sex hormones are steroid in nature.



**39.** Give the technical terms used for the following:

A chemical messenger produced by endrocrine

gland and secreated directly into blood

stream to exert a specific effect on a distant

part of body.



**40.** Give the technical terms used for the following:

A hormone produced by nervous tissue.

**41.** Give the technical terms used for the following:

A hormonal transmitter substance such as acetylcholine released by nerve ending in the transmission of impulses.

**Watch Video Solution** 

**42.** Give the technical terms used for the following:

A steroid hormone produced by adrenal cortex

carbohydrate metabolism

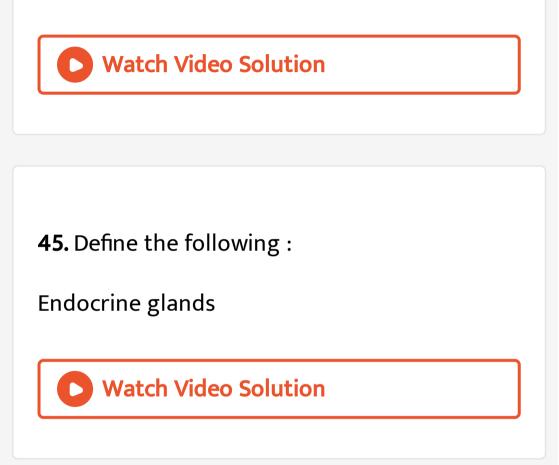


**43.** Give the technical terms used for the following:

A type of dwarfism caused by hypothyroidism

and associated with general body changes.

**44.** Define the following: Exocrine gland



46. Define the following: Hormone

47. Diagrammatically indicate the location of

various endocrine glands in our body.



# **48.** List the hormones secreted by the following:

Hypothalamus

49. List the hormones secreted by the following:Pituitary

Watch Video Solution

# **50.** List the hormones secreted by the

following:

Thyroid

51. List the hormones secreted by the

following:

Parathyroid

Watch Video Solution

#### 52. List the hormones secreted by the

following:

Adrenal

53. List the hormones secreted by the following:Pancreas

**Watch Video Solution** 

**54.** List the hormones secreted by the following:

Testis

55. List the hormones secreted by the following:Ovary

Watch Video Solution

#### 56. List the hormones secreted by the

following:

Thymus

57. List the hormones secreted by the

following:

Atrium

Watch Video Solution

58. List the hormones secreted by the

following:

Kidney

**59.** List the hormones secreted by the following:

G-I tract.



60. Fill in the blanks

Hormones Target gland

Hypothalamic hormones .....

61. Fill in the blanks

Hormones Target gland

Thyrotropin (TSH) .....

Watch Video Solution

#### 62. Fill in the blanks

Hormones Target organs/gland

Corticotrophin (ACTH) .....

**63.** Fill in the blanks

Hormones Target gland

Gonadotrophin(LH, FSH) .....

Watch Video Solution

#### 64. Fill in the blanks

Hormones Target gland

Melanotrophin (MSH) .....

**65.** Write short notes on the funtions of the following hormones: Parathyroid hormone (PTH)



## 66. Write short notes on the funtions of the

following hormones: Thyroid hormones



67. Write short notes on the funtions of the

following hormones: Thymosins

Watch Video Solution

68. Write short notes on the funtions of the

following hormones: Androgens

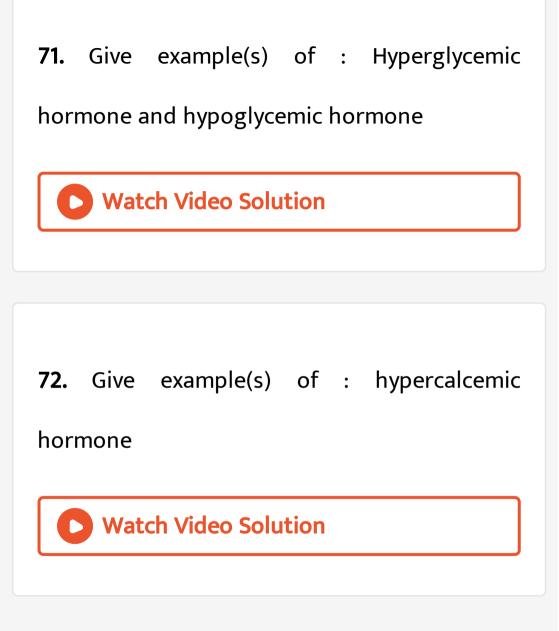
69. Write short notes on the funtions of the

following hormones: Estrogens

Watch Video Solution

70. Write short notes on the funtions of the

following hormones: Insulin and Glucagon



73. Give examples

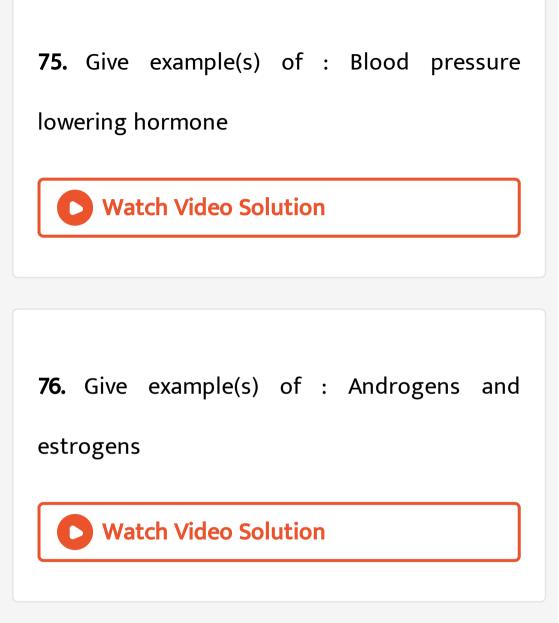
Gonadotrophic hormone

Watch Video Solution

# 74. Give example(s) of : Progestational

hormone





77. Which hormonal deficiency is responsible

for the following:

Diabetes mellitus



## 78. Which hormonal deficiency is responsible

for the following:

Goitre

79. Which hormonal deficiency is responsible

for the following:

Cretinism.

**Watch Video Solution** 

80. Briefly mention the mechanism of action of

FSH.

### 81. Match the following

Column I	Column II
$T_4$	Hypothalamus
PTH	Thyroid
GnRH	Pituitary
LH	Parathyroid.

Watch Video Solution

82. There are many endocrine glands in human

body. Name the glands which is absent in male

and one absent in female.

**83.** Which of the two adrenocortical layers, zona glomerulosa and zona reticularis lies outside enveloping the other?



# 84. What is erythropoiesis? Which hormone

stimulate it?



85. Name the only hormone secreted by pars

intermedia of the pituary gland.

Watch Video Solution

**86.** Name the endocrine gland that produces calcitonin and mention the role played by this hormone?

87. Name the hormone that helps in cellmediated immunity.Watch Video Solution

88. What is the role of second messenger in

the mechanism of protein hormone action?

89. True or False

Gastronitestinal tract, kidney and heart also

produce hormones.



#### 90. True or False

Pars distalis produces six tropic hormones.

91. True or False

B-lymphocytes provide cell-mediated immunity.

Watch Video Solution

#### 92. True or False

Insulin resistance results in a disease called

diabets mellitus.

93. A patient complains of constant thirst, excessive passing of urine and low blood pressure. When the doctor checked the patients 'blood glucose and blood insulin level, the level were normal or slightly low. The doctor diagnosed the condition as diabetes insipidus. But he decided to measure one more hormone inpatients blood. which hormone oes the doctor intend to measure?'

94. Correct the following statement by

replacing the term underlined.

Insulin is a steroid hormone.

Watch Video Solution

**95.** Correct the following statement by replacing the term underlined.

TSH is secreted from the corpus luteum.

96. Correct the following statement by

replacing the term underlined.

Tetraiothronine is an emergency hormone.



**97.** Correct the following statement by replacing the term underlined.

The pineal gland is located on the anterior

part of the kidney.



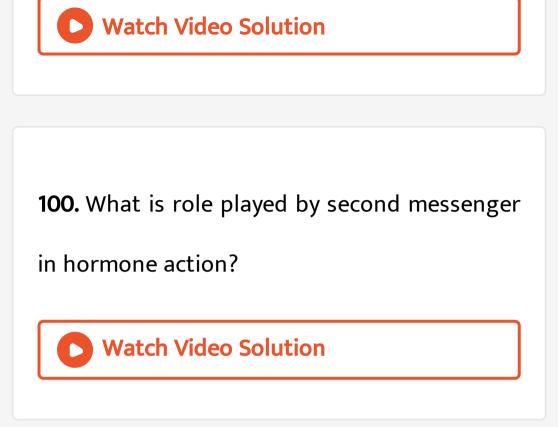
**98.** Rearrange the following hormones in Column I so as to match with their chemical

#### nature in Column II.

Col	umn I		Column II
(a) Oxy	tocin	(i)	Amino acid
			derivative
(b) Epir	nephrine	<i>(ii)</i>	Steroid
(c) Prog	gesterone	(iii)	Protein
(d) Gro	wth hormone	(iv)	Peptide

#### Watch Video Solution

**99.** What is the role played by lutenizing hormone in males and females respectively?



**101.** On an educational trip to Uttarakhand, Ketki and her friends observe that many local people were having swollen necks, Please help Ketki and her friends to find out the solutions to the following questions.

Which probable disease are these people

suffering from?

Watch Video Solution

**102.** On an educational trip to Uttarakhand, Ketki and her friends observe that many local people were having swollen necks, Please help Ketki and her friends to find out the solutions to the following questions.

How is it caused?



**103.** On an educational trip to Uttarakhand, Ketki and her friends observe that many local people were having swollen necks, Please help Ketki and her friends to find out the solutions to the following questions. What effect does this condition have on

pregnancy?

**104.** George comes on a vacation to India from US. The long journey disturbs his biological system and he suffers from jet lag. What is the cause of his discomfort?

**Watch Video Solution** 

**105.** Inflammatory response can be controlled by a certain steroid. Name the steroid, its sources and also its other important functions





106. old people have weak immune system.

What could be the reason?



107. What are the effects of hypthyroidism on

the development and maturation of a growing

baby?

 108. Mention the differences between

 hypothyroidism and hyperthyroidism.

 Watch Video Solution

**109.** A milkman is very upset one morning as his cow refuses to give any milk. The milkman's wife gets the calf from the shed. On fondling by the calf, the cow gave sufficient milk. Describe the role of endocrine gland and pathway associated with this response?



**110.** A sample of urine was diagnosed to contain high content of glucose and ketone bodies. Based on this observation, answer the following:

Which endocrine gland and hormone is related to this condition?



**111.** A sample of urine was diagnosed to contain high content of glucose and ketone bodies. Based on this observation, answer the following:

Name the cells on which this hormone acts.

**Watch Video Solution** 

**112.** A sample of urine was diagnosed to contain high content of glucose and ketone bodies. Based on this observation, answer the

following:

What is the condition called and how can it be

rectified?

Watch Video Solution

**113.** Calcium plays a very important role in the formation of bones. Write on the role of endocrine glands and hormones responsible for maintaining Calcium homeostasis.

**114.** Differentiate between the mechanism of action of proteinic hormone and steroid hormone.



# 115. Hypothalamus is a super master endocrine

gland. Elaborate.

116. Name the systems which regulate working

of body.

Watch Video Solution

**117.** What is the advantage of hormonal system even though it is slow in action as compared

to nervous system?

**118.** What is hormone?



## 119. What is shape, weight and size of pituitary

gland?

Watch Video Solution

120. How is pituitary attached to hypthalamus

of brain?



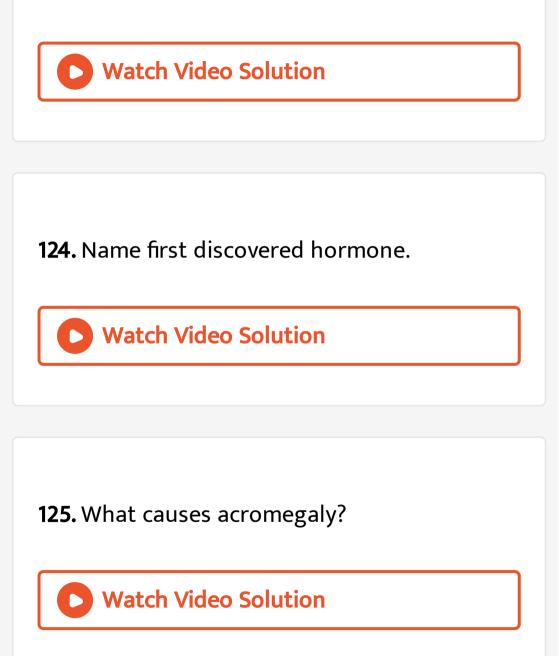
**121.** Name the two lobes and a region of pituitary gland.

Watch Video Solution

122. How is secretion of anterior lobe of

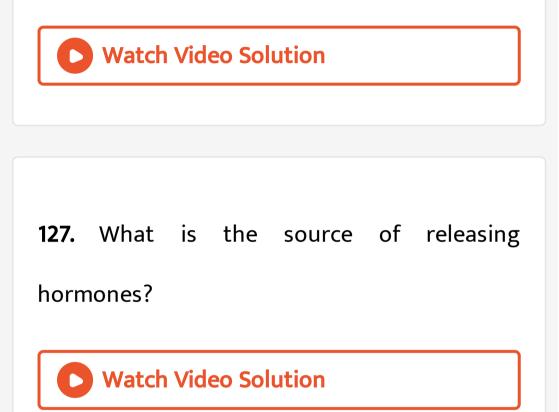
pituitary regulated?

**123.** Who gave the term hormone?



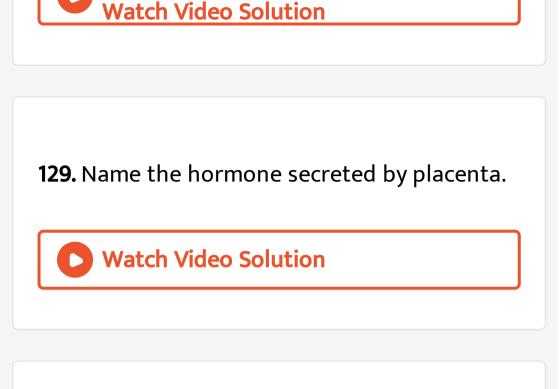
126. Name a quick acting hormone and a

hormone acting with a lag period.



**128.** Name a local hormone.

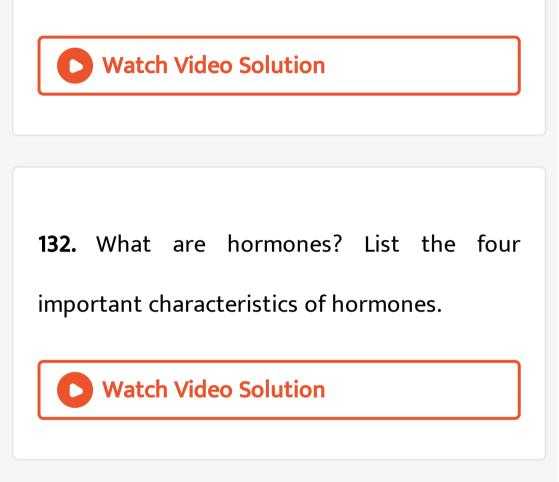




130. Give the name for a gland which is partly

exocrine and partly endocrine.

131. What is ductless gland?



**133.** Who discovered hormones?

134. What are the two kinds of hormones on

the basis of their mode of action?



## **135.** Draw the structure of thyroid gland.

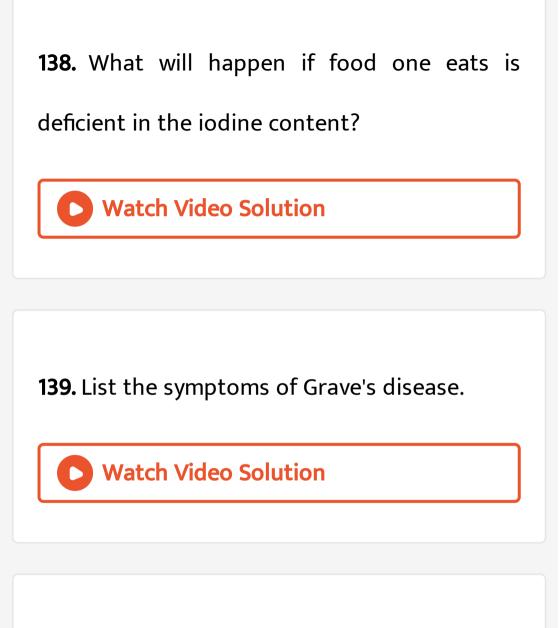


**136.** Does the thyroid gland continue to secrete thyroxine continuosusly? If no, how is its production controlled?



### **137.** List the functions of thyroid gland.





140. Make a list of symptoms of myxedema.

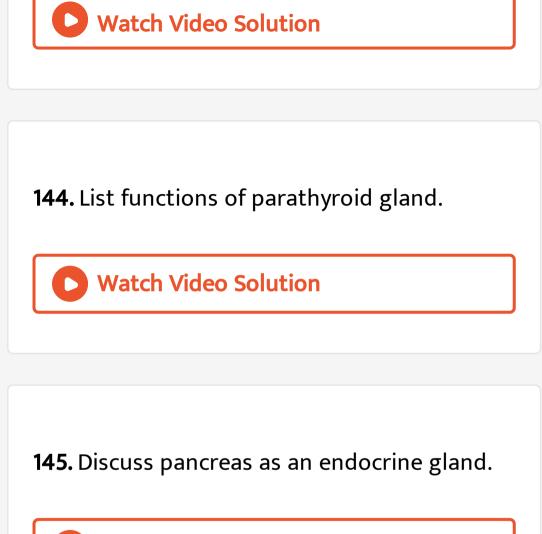
141. Make a list of symptoms of cretinism.



# **142.** Write short notes on pineal body and thymus.



143. Write short note on parathyroid glands.



146. What will happen if the endocrine cells of

pancreas are worn out?

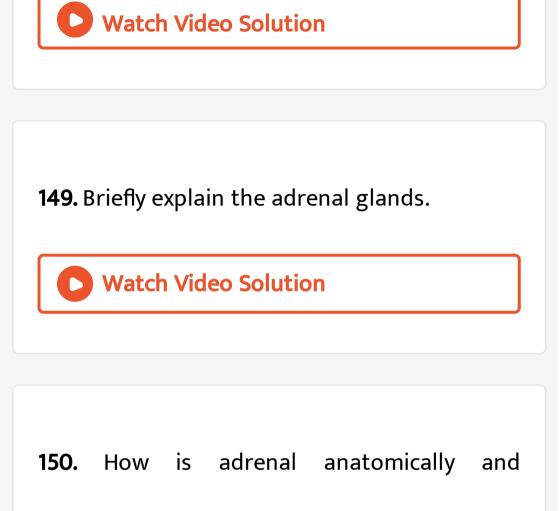
Watch Video Solution

147. Write the effects of insulin deficiency.

Watch Video Solution

148. Name the hormones secreted by adrenal

cortex.



functionally organized as a composite

endocrine gland?

**151.** Make a list a hormones secreated by anterior lobe of pituitary body. Write atleast one function of each.

**Watch Video Solution** 

### 152. Which hormone is secreted by middle lobe

of pituitary ? What is its function?

153. Discuss the role of hormones released by

posterior lobe of pituitary.

Watch Video Solution

154. Where are vasopressin and oxytocin

produced in our body? Give their functions.

155. What will happen if pituitary stops secreting LH hormone? Watch Video Solution **156.** What are androgens? Watch Video Solution

**157.** What is eunuchoidism?

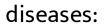
**158.** Give the name of the hormones and the related glands concerning the following diseases:

Goitre

**Watch Video Solution** 

**159.** Give the name of the hormones and the

related glands concerning the following



myxedema



160. Give the name of the hormones and the

related glands concerning the following diseases:

Cretinism

**161.** Give the name of the hormones and the related glands concerning the following diseases:

Diabetes

Watch Video Solution

**162.** Give the name of the hormones and the related glands concerning the following diseases:

Addison's disease





163. Give the name of the hormones and the

related glands concerning the following diseases:

Tetany

Watch Video Solution

164. Name any two diseases of hypthyroidism.

How these can be cured?

**165.** How fall and rise in blood calcium stimulates secretion of parathyroids?



166. Write the names and sources of the

hormones regulating the following:

Uterine changes in pregnancy

**167.** Write the names and sources of the hormones regulating the following:

Urinary elimination of water.



**168.** Write the names and sources of the hormones regulating the following:

Metamorphosis of tadpoles.

**169.** Write the names and sources of the hormones regulating the following: Plasma  $Ca^{2+}$  level.

Watch Video Solution

**170.** Write the names and sources of the hormones regulating the following:

 $Na^+$  and  $K^+$  metabolisms.

Follicle stimulating hormone and luteinizing

hormone.



## **172.** Distinguish between:

Somatostatin and somatotropin



Vasopressin and oxytocin

Watch Video Solution

174. Distinguish between:

estrogen and progesterone

glucocorticoids and miner-alocorticoids

Watch Video Solution

176. Distinguish between:

diabetes mellitus and diabetes insipidus

exophthalamic goitre and iodine deficiency

goitre

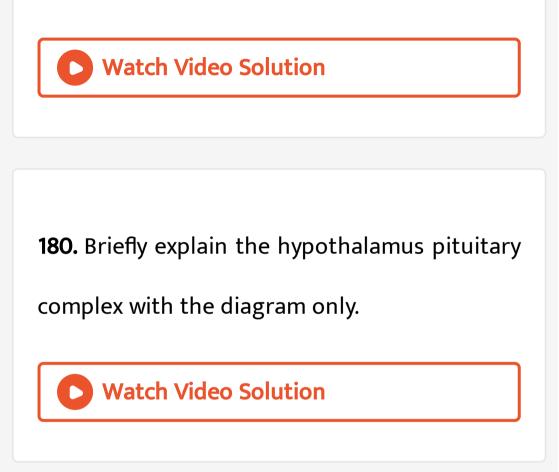


**178.** Distinguish between:

cretinism and dwarfism.



**179.** List the charcteristic of hormones.



**181.** Explain briefly the following :

Hormones are informational molecules.



## **182.** Explain briefly the following :

Hormones differ from enzymes both in

structure and function.

**Watch Video Solution** 

**183.** Write the sources and names of the hormones regulating the following:

Blood sugar level





184. Write the names and sources of the hormones regulating the following:Leydig cells of testis

Watch Video Solution

185. Write the names and sources of the

hormones regulating the following:

Milk secretion

**186.** Write the names and sources of the hormones regulating the following:

Contraction of uterus during delivery.

**Watch Video Solution** 



1. Name the hormone which causes diabetes.

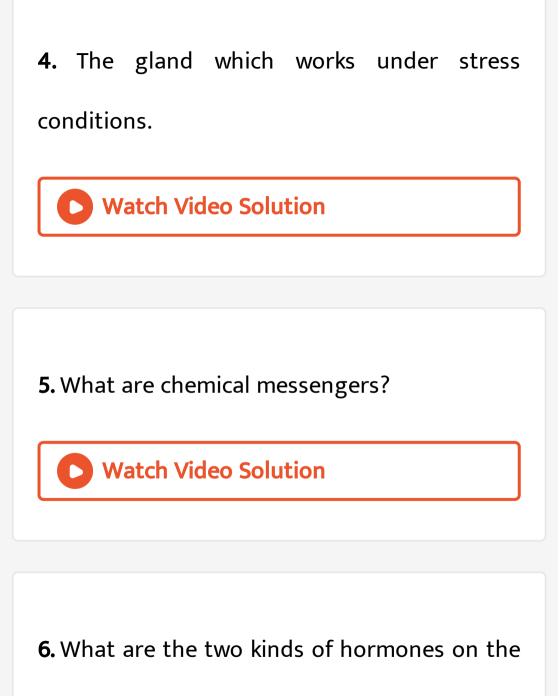
#### 2. Name tempory hormone secreting organ.



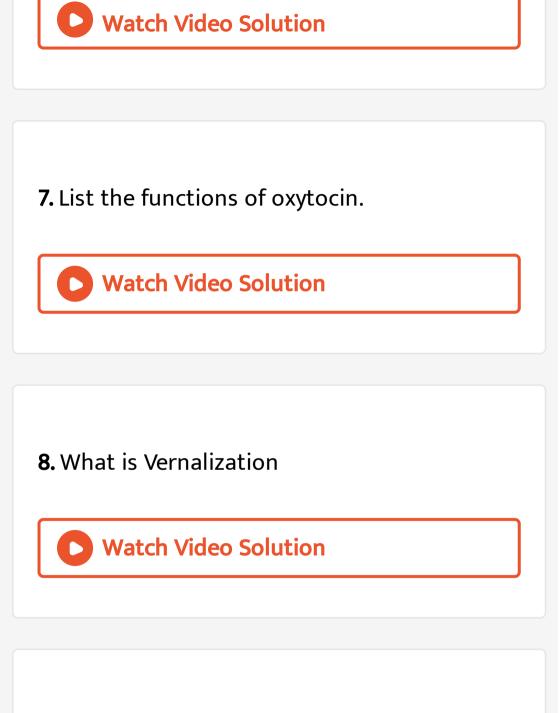
**3.** Which gland is exocrine as well as

endocrine?

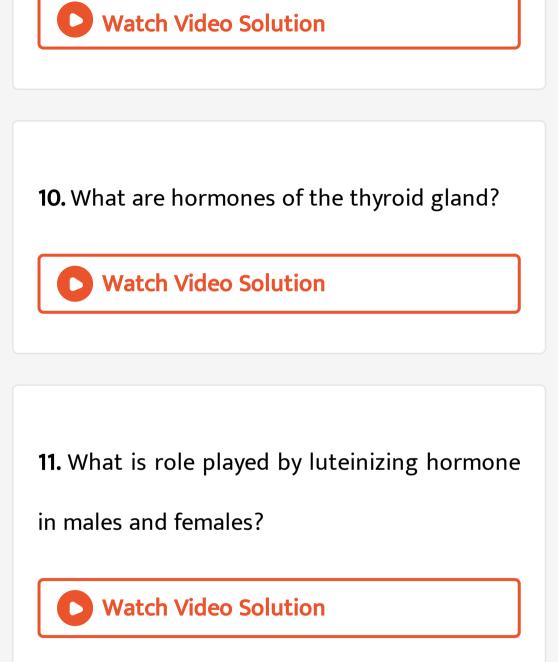




basis of their mode of action?



**9.** Why pitutary gland is called master gland?



12. Name the hormones secreted by adrenal

cortex.



**13.** Give the differences between dwarfism and cretinism.



14. Write a brief note on androgens and

estrogens.