

MBBS Endocrinology – Physiology Chapter Wise Previous Exam Questions conducted by KUHS (Kerala University of Health Sciences)

1. Metabolic effects of insulin
2. Discuss the hormonal regulation of blood calcium level
3. Hormonal control of lactation
4. Milk ejection reflex
5. Describe the regulation of secretion of cortisol and its physiological role
6. Mechanism of action of steroid hormones
7. Mode of action of peptide hormone
8. Actions of aldosterone
9. Regulation of aldosterone secretion
10. Action of ADH
11. Physiological actions of growth hormones
12. Functions of growth hormone
13. Effects of hypo secretion of growth hormone
14. Cretinism
15. Tetany
16. Pituitary dwarfism
17. Adreno-genital syndrome
18. Hypo function of thyroid gland

Explain the Physiological basis

1. Exophthalmos is a clinical feature of thyroid dysfunction
2. Feedback regulation of thyroid hormone secretion
3. Hypertension is seen in Cushing's syndrome
4. Pigmentation in Addison's disease.
5. Parathyroidectomy leads to signs of neuromuscular hyperexcitability
6. Trousseau's sign.
7. Thirst in diabetes mellitus
8. Polyuria in diabetes mellitus
9. Hypoglycemic action of insulin
10. Patients of acromegaly may develop diabetes
11. Milk ejection reflex.

Draw and Label

1. Feedback regulation of thyroid hormone secretion

Cases

1. A 40 year old man complaints of head ache, difficulty in seeing objects on either side while driving a car. On examination his hands and feet were very large. His blood sugar level was 200 mg/dl.

- Give the probable diagnosis and the basic defect
- What is the cause for the visual defect?
- Explain the actions of the involved hormone
- How it is regulated (1+1+6+2=10)

2. A 33 years old woman complained of weight gain. Round face, thinning of her limbs and increased bruising of skin with discoloration on her prominent abdomen. Answer the following questions based on your knowledge in physiology :

- What is the probable endocrinological disorder
- Explain The Metabolic Actions Of The Hormone Involved
- Mention the major manifestations and their physiological basis (1+4+5=10)

3. A 50 years old lady was suffering from excess of sleep and tiredness, loss of appetite, hoarseness, of voice for the last six months. On examination, she had non- pitting edema, dry scaly skin and prolonged reflex time. Answer the following questions based on your knowledge in physiology :

- What is your clinical diagnosis.
- What will be the TSH, T3 and T4 levels.
- What is the cause of low BMR.
- How can you treat the subject.
- What will be her resting pulse rate
- Explain the action of thyroxine on the three metabolisms and on CNS. (1 + 1+ 1+ 1+ 1+ 5=10)

4. A 50 years old person complaints of increased appetite, increased thirst and increased frequency of urination. The blood glucose was found to be 180 mg/dl. Answer the following questions based on your knowledge in physiology:

- What is your probable diagnosis
- Which hormone is affected
- What are the physiological effects of this hormone in the body
- Enumerate the other hormones involved in the regulation of blood glucose (1+1+7+1=10)

5. A 48 year old man suffering from diabetes mellitus had increased frequency of micturition

- What is the physiological basis of the polyuria?
- What are the mechanisms operating in the nephron for the concentration of urine?
- What are the tests for assessing the concentrating capacity of kidneys, add a note on free water clearance (3+6+1=10)

6. A 45 year old man has come to the hospital for remarkable changes in his appearance. Physical examination: tongue is enlarged. Hands and feet are enlarged with spade like fingers and presence of hepatomegaly. Fasting blood glucose is 150mg%. Fasting growth hormone level is 60ng/ml. Answer the following questions based on your knowledge in physiology:

- Name the probable condition and what is the cause.
- Mention the normal fasting blood glucose value.
- Which are the hormone involved in this condition and what the defect is?
- What are the other clinical features associated and mention the physiological basis and actions of hormone involved (2+1+2+5=10)

7. A 30 years female with features of increased weight, menstrual abnormalities, cold intolerance. Answer the following questions based on your knowledge in physiology :

- Name the probable condition with its cause
- What are the physiological actions of hormone related to this condition
- Mention the tests for diagnosing this condition.