

Model Question Paper

QP code: xxxxxx

Reg. No

III Professional Part 2 MBBS degree R/S Examinations

General Medicine 2

Time: 3 hours

Max Marks: 100

Instructions:

- Answer all the questions to the point neatly and legibly
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together
- Draw diagrams wherever necessary

1. Multiple Choice Questions

(1 x 20 = 20)

Question numbers (i-v) are case scenario-based questions. Select the best answer

A 45-year-old woman presents with symptoms of unexplained weight loss, increased appetite, and persistent diarrhoea. She also reports feeling unusually hot and sweating excessively. On physical examination, she has a diffuse goitre and tremors in her hands. Laboratory tests reveal:

Serum TSH: < 0.01 mU/L (low); Serum Free T4: 2.5 ng/dL (elevated); Serum Free T3: 6.0 pg/mL (elevated)

A thyroid scan shows increased uptake throughout the thyroid gland.

- What is the most likely diagnosis for this patient based on her clinical presentation and laboratory findings?**
 - Hypothyroidism
 - Graves' disease
 - Hashimoto's Thyroiditis
 - Thyroid carcinoma
- What is the most appropriate initial treatment for this patient's condition?**
 - Thyroid hormone replacement therapy
 - Antithyroid medications such as Methimazole or Propylthiouracil
 - Radioactive iodine therapy
 - Surgical thyroidectomy
- Which of the following potential complications should be monitored for in this patient?**
 - Hypercalcaemia
 - Osteoporosis
 - Adrenal insufficiency
 - Insulin resistance
- Which additional test would be useful to understand the aetiology?**
 - Serum calcitonin level
 - Thyroid antibody panel (including TSH receptor antibodies)
 - Serum Cortisol level
 - Serum vitamin D level
- What will be the treatment of choice if the patient is pregnant?**
 - Carbimazole

- b. Methimazole
- c. Propylthiouracil
- d. Radioiodine

For Questions (vi-x), each of the questions given below, have two statements marked as Assertion (A) and Reason (R). Select the best option from the choices given below

- a. Both A and R are true. R is the correct explanation of A
 - b. Both A and R are true. R is not the correct explanation of A
 - c. A is true but R is false
 - d. A is false but R is true, but not applicable as A by itself is false
- vi. **Assertion:** "Selective serotonin reuptake inhibitors (SSRIs) are commonly prescribed for depression.
Reasoning: "SSRIs increase the levels of serotonin in the brain by inhibiting its reuptake, which can help alleviate depressive symptoms."
- vii. **Assertion:** "Antibiotic resistance is a growing concern in the treatment of bacterial infections."
Reasoning: "Resistance occurs when bacteria evolve mechanisms to evade the effects of antibiotics, leading to treatment failures and the spread of resistant strains."
- viii. **Assertion:** "Vitamin B12 deficiency can lead to megaloblastic anaemia."
Reasoning: "Vitamin B12 is essential for DNA synthesis, and its deficiency impairs the production of red blood cells, resulting in their abnormal, large size."
- ix. **Assertion:** "Corticosteroids are commonly used in the management of chronic asthma."
Reasoning: "Corticosteroids reduce airway inflammation and hyperreactivity, which helps in controlling asthma symptoms and preventing exacerbations."
- x. **Assertion:** "Thyroid-stimulating hormone (TSH) levels are used to diagnose hypothyroidism."
Reasoning: "In hypothyroidism, TSH levels are elevated because the pituitary gland increases its production of TSH to stimulate the underactive thyroid gland."

Question numbers (xi –xv) Read the statements & select the best option

- a. 1 & 2 are correct
 - b. 1 & 3 are correct
 - c. 3 & 4 are correct
 - d. 2 & 4 are correct
- xi. **Which of the following conditions can cause an elevated platelet count? (Select two.)**
- 1. Essential thrombocythemia
 - 2. Iron deficiency anaemia
 - 3. Chronic Myeloid Leukaemia (CML)

4. Aplastic anaemia

xii. Which of the following are common signs of a urinary tract infection (UTI) in adults?

1. Fever
2. Abdominal pain
3. Jaundice
4. Haematuria

xiii. Which of the following are recommended for the prevention of healthcare-associated infections in hospitals? (Select two.)

1. Hand hygiene protocols
2. Routine use of broad-spectrum antibiotics
3. Use of personal protective equipment (PPE)
4. Regular patient screening for viral hepatitis

xiv. Which of the following conditions can lead to an elevated white blood cell count? (Select two.)

1. Leukaemia
2. Anaemia
3. Chronic infection
4. Haemophilia

xv. Which of the following conditions are known causes of secondary adrenal insufficiency?

1. Addison's disease
2. Pituitary adenoma
3. Chronic use of corticosteroids
4. Congenital adrenal hyperplasia

Question numbers (xvi-xx) select the best option.

xvi. All of the following are indications of bariatric surgery, except

- a. BMI > 40 Kg/m²
- b. Maintaining surgery eligible weight > 1 yr
- c. No addictions
- d. capable of surgical tolerance

xvii. All of the following are clinical features of Cushing's syndrome, except

- a. Hyperkalaemia
- b. Moon facies
- c. Amenorrhoea
- d. Central obesity

xviii. All of the following are used as criteria for diagnosis of type2 DM, except

- a. FBS > 110
- b. Symptoms of diabetes plus RBS>200
- c. 2 hr PPS >200

d. HbA1c>6.5

xix. All of the following are features of Zieve syndrome, except

- a. Haemolysis
- b. Transaminitis
- c. Abdominal pain
- d. Hyperlipidaemia

xx. Following is a feature of Inflammatory back pain

- a. Normal ESR/CRP
- b. relieved by lying down for 1 hour
- c. Presence of constitutional symptoms
- d. worse in the evening

Long Essays

(10 x 2=20 Marks)

2. Write about aetiology, clinical features, complications, investigations, treatment of Crohn's disease (2+2+2+2+2 = 10)

3. A 29 year old female with history of recent travel to Tamil Nadu presents to your clinic with history of fever and anorexia. She says she has a history of high coloured urine. She was dehydrated, jaundiced and had a tender hepatomegaly. Her investigations showed a total Bilirubin of 12, direct Bilirubin of 9, ALT of 3548, AST of 2890, ALP 290. She said that a friend of her who travelled along with her is admitted somewhere else with similar complaints.

- A. What is the most likely diagnosis? (1 mark)
- B. Write 4 other causes of acute hepatitis? (2 marks)
- C. What investigations will you do in this patient? (2marks)
- D. What is the management that you will give to her? (2 marks)
- E. What are the complications that she can develop? (3 marks)

Short Essays

(6 x 6 = 36 marks)

- 4. Grave's disease
- 5. Clinical features of alcohol withdrawal
- 6. Sickle cell anaemia
- 7. HSV encephalitis
- 8. Psoriasis
- 9. Hodgkin's disease

Short Answers

(4 x 6 = 24 marks)

10. Chronic complications of type 2 DM
11. Medico-legal implications of the Human Organ Transplantation Act?
12. Clinical manifestations of multiple myeloma
13. Post exposure prophylaxis in HIV
14. Management of lung abscess
15. Three clinical phases in clinical course of CML