

Question Paper

Exam Date & Time: 16-Feb-2024 (10:20 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH PROFESSIONAL YEAR MBBS DEGREE EXAMINATION - FEBRUARY 2024
SUBJECT: GENERAL MEDICINE PAPER - I
(CBME SCHEME - REGULARS)

Marks: 100 Duration: 180 mins.

Answer all the questions.

Read the questions carefully and answer to the point

Use line diagrams, tables and flow charts where appropriate

- 1) A 30-year-old school teacher who was physically active earlier complaining of shortness of breath on light physical activities recently. On examination she was dyspnoeic. Conjunctiva and oral mucosa were normal in colour. She had a pulse rate of 112/minute which was irregular and blood pressure of 110/80 mm of Hg. Precordial examination revealed palpable 1st heart sound, a thrill and diastolic murmur in mitral area.
- 1A) Mention salient additional points in history and physical examination required to arrive at diagnosis. (5)
- 1B) Discuss how to investigate this patient. (3)
- 1C) Briefly outline the principles of treatment of atrial fibrillation. (2)
- 2) A 62-year-old male hypertensive presents with history of severe headache while he is working in field followed by vomiting. Immediately he was noticed to have deviation of his mouth and inability to move his right hand. On arrival to hospital within an hour his blood pressure was 200/120 mm of Hg. Neurological examination revealed deviation of his mouth to left side along with hypotonia and weakness of the right limbs. Babinski sign was positive on same side.
- 2A) What is the most probable diagnosis? Justify (3)
- 2B) What additional information in history will aid in diagnosis? (2)
- 2C) How to investigate and treat this patient? (5)
- 3) **Short answer questions**
- 3A) Explain in a case of hypertension the importance of flank bruit, lack of good pulses in lower limb, RBCs and casts in urine, and hypokalaemia. (4)
- 3B) Enumerate the risk factors for coronary artery disease. Mention the differences in presentation between stable and unstable angina. (4)
- 3C) Mention the investigation to confirm the diagnosis of coeliac disease with diagnostic features and mention TWO disease associations of coeliac disease. (4)
- 3D) Distinguish based on the clinical presentation Crohn's disease from Ulcerative Colitis. (4)
- 3E) A 50-year-old electrician brought to triage with history of altered sensorium for 2 days. He used to consume 100 ml of whiskey daily for past 20 years but had stopped consuming it 1 month

- prior to present admission. On examination there was jaundice, spider naevi and asterixis. Mention the most probable diagnosis and outline treatment. (4)
- 3F) A 60-year-old man was found to have koilonychia during clinical examination. His stool for occult blood was positive. Mention 4 common causes for his condition. How to investigate him further? (4)
- 3G) A 70-year-old lady brought with h/o breathlessness of 1-day duration. She had severe diarrhoea and vomiting 2 days back from which she recovered with home medicine. On enquiry she informs that she didn't pass any urine in past 24 hours. What is the likely diagnosis? Describe the investigations to arrive at diagnosis in this patient. (4)
- 3H) A patient's laboratory report showed serum potassium as 6.8 mmol/L. How to manage this patient? (4)
- 3I) Describe the pathophysiological mechanisms for renal injury in following drugs: NSAIDs; Aminoglycosides, D penicillamine; Aciclovir (4)
- 3J) Describe the ethical and legal issues involved in renal replacement therapy. (4)
- 3K) Describe pathogenesis of renal osteodystrophy (4)
- 3L) An elderly farmer is brought with h/o consumption of a chemical in the field accidentally. He is having excessive salivation, drowsy and pinpoint pupils. How to evaluate and treat him? (4)
- 3M) A 21-year-old student intentionally consumed about 25 paracetamol 500 mg tablets the previous night with the intention of self-harm. Though he appeared normal his friends brought him to triage for advice. What is the natural history and treatment in this drug overdose? (4)
- 3N) Mention the clinical features of viperine snake bite. (4)
- 3O) A 25-year-old woman has pain in her fingers on exposure to cold, arthralgias, and difficulty swallowing solid food. On examination skin over her fingers appear to be thickened and adherent to underlying tissues. Mention the most probable diagnosis. Describe treatment (4)

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Question Paper

Exam Date & Time: 19-Feb-2024 (10:20 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION
THIRD PROFESSIONAL YEAR MBBS PART - II DEGREE EXAMINATION - FEBRUARY 2024
SUBJECT: GENERAL MEDICINE PAPER - II
(CBME BATCH - REGULARS)

Marks: 80

Duration: 160 mins.

SECTION 1- 'GENERAL MEDICINE '

Answer all the questions.

Read the questions carefully and answer to the point

Use line diagrams, tables and flow charts where appropriate

1) A 35-year-old female presents to the outpatient with complaints of excessive weight gain and menorrhagia of four months duration. While at the outpatient she requests the fan to be switched off. Examination reveals an obese patient with a BMI of 34Kg/m². Her pulse rate and blood pressure are 54/min and 150/100mm Hg respectively. Systemic examination is unremarkable. Her voice is noticed to be hoarse, which according to her relatives is of recent onset.

- 1A) What is the diagnosis? (1)
1B) What are the other clinical features that can be expected in this patient? (4)
1C) Describe the investigations and treatment of this patient. (5)

2) Short answer questions

2A) Ramu, 18-year-old college student started complaining of easy fatigability and excessive thirst and appetite during summer holidays. He was asked to consume more fruit juices and water by his mother. One evening he got so exhausted that he could no longer stand and became drowsy. In the hospital doctor noticed him to be over breathing and comatose. What is the most likely condition he is suffering from? How to confirm and treat him? (4)

2B) Mention causes of vitamin B12 deficiency and describe its treatment. (4)

2C) An adult farmer presents with 1 week's fever, chills, and generalised myalgia. His examination reveals icterus, petechiae, and skin rashes. Generate a differential diagnosis and discuss plan of investigations based on clinical features. (4)

2D) Describe and discuss the symptoms and signs of acute HIV seroconversion. (4)

2E) A 28- year old female presents with history of exertional breathlessness, palpitations and easy fatigability of many years duration. Examination reveals gross pallor and mild jaundice and palpable spleen. What are the differential diagnoses? Describe the investigations of this condition. (4)

2F) Describe drugs for malaria based on the species identified, prevalence of drug resistance and national program in coastal Karnataka. (4)

2G) A 55-year-old male is being evaluated for constipation. There is no history of prior gastrectomy or of upper GI symptoms. Hemoglobin is 10 g/dL, mean corpuscular volume (MCV) is 72 fL, serum iron is 4 mic.g/dL (normal is 50 to 150 mic.g/dL), iron-binding capacity is 450 mic.g/dL (normal is 250 to 370 mg/dL), saturation is 1% (normal is 20 to 45%), and ferritin is 10 ng/L (normal is 15 to 400 ng/L).

Mention the haematological abnormality. How to evaluate this patient? (4)

2H) A middle-aged male presented to outpatient department with short duration of cough, chest pain and fever. On examination he was tachypnoeic, blood pressure of 100/80 mm of Hg and bronchial breathing on chest auscultation in right infrascapular area. Mention the pathophysiological basis of his symptoms and signs. Describe and enumerate the indications for hospitalisation in patients with pneumonia. (4)

SECTION 2- GENERAL MEDICINE - 'ALLIED SUBJECTS

Answer all the questions.

3) Ms. Sheela, a 30-year-old woman, presents to the emergency department. She reports wheezing, chest tightness, and difficulty breathing. She has a history of intermittent asthma symptoms and uses an inhaler for rescue therapy as needed.

3A) Explain the pathophysiology of bronchial asthma, focusing on the role of inflammation, airway hyperresponsiveness, and bronchoconstriction in precipitating acute exacerbations. (5)

3B) Describe the pharmacological classes, mechanisms of action and indications of medications used in the management of bronchial asthma. (5)

4) Short Answer Questions

4A) A 5-year-old girl presented with itchy scaly plaques over bilateral cubital and popliteal fossa since 3 years of age with remissions and exacerbations with a family history of allergic rhinitis in father. What is your likely diagnosis and mention about the treatments available for this condition. (1+3 = 4 marks)

4B) What are the cardinal signs of leprosy? Name 4 deformities that can occur in poorly managed case of leprosy. (2+2 = 4 marks)

4C) A 65-year-old male patient comes with chief complaints of painful grouped vesicles on red base in a dermatomal pattern in the trunk. He is also a known case of type 2 diabetes mellitus. Discuss in brief regarding the management and complication in this patient. (2+2 = 4 marks)

4D) Explain the importance of maintaining the confidentiality in patient encounters and exceptions to it. (4)

4E) A woman washes her hands hundreds of times a day for fear of contamination. She cannot stop herself although her hands are raw and chafed. She knows that these fears are irrational, yet she continues to wash her hands as washing reduces her fear temporarily. What is the possible diagnosis. Outline the management plan. (4)

4F) List the clinical features of mania. (4)

4G) Mr. Subbaya an 88-year-old gentleman diagnosed as metastatic colonic malignancy previously on palliative care, presenting with respiratory distress. Describe and discuss the ethical and the medico-legal issues involved in his care. (4)

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