



**FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA  
FINAL EXAMINATION FOR MEDICAL DEGREE – MAY 2017  
MEDICINE PAPER 1**

**2<sup>nd</sup> May 2017**

**(1.00 – 4.00pm) 3 hours**

**Index Number:**

**Instructions:**

- 1. Write your index number in all the pages.**
- 2. Answer all questions.**
- 3. Write your answers in the space given after each part of the question.**
- 4. The space given is adequate for the expected answer.**

1. A 65-year-old woman with hypertension and diabetes of 10 year duration presents with sudden onset chest pain and shortness of breath of 2 hours duration. She has undergone abdominal hysterectomy and bilateral salphingo-oophorectomy for a suspected ovarian malignancy 10 days previously and discharged from the hospital only 3 days ago.

1.1 List **two (02)** possible causes for her clinical presentation. (20 marks)

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1.2 List **four (04)** physical signs that would help you to differentiate the two conditions mentioned in 1.1 and state the abnormalities expected in each condition.

(30marks)

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1.3 List **five (05)** investigations that would help you to differentiate the **two (02)** conditions mentioned in 1.1 and briefly discuss the abnormalities expected in each condition. (50 marks)

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2. A 68-year-old male who is treated for type 2 diabetes and chronic obstructive airways disease presented to the outpatient department with a three day history of fever, cough and right sided chest pain. Physical examination revealed a febrile and dyspneic male with a pulse rate of 110/ bpm, respiratory rate of 28 cycles per minute and blood pressure of 90 / 70 mmHg. There were coarse crepitations and bronchial breathing on the left mid and lower zones on auscultation.
- 2.1 What is the clinical diagnosis? (10 marks)
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- 2.2 List **three (03)** microbial agents likely to have caused the condition mentioned in 2.1. (15 marks)
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- 2.3 Outline **five (05)** steps you would take in the immediate management of this patient. (30 marks)
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- 2.4 List five (05) abnormalities you would expect to find in the chest radiograph of this patient. (25 marks)

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- 2.5 What antibiotic / s you would select to treat this patient? Briefly describe the rationale of your choice of antibiotic therapy. (20 marks)

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3. A 25-year-old female presented with fatigue and breathlessness of three-month duration. On examination she had moderate pallor, mild icterus and bilateral firm cervical lymphadenopathy. She had no fever. A firm spleen was felt 2 cm below the costal margin on abdominal examination.

Investigations are as follows.

Hb 6g/dL, PCV 30, MCV 32fl, WBC 7500/mm<sup>3</sup>, Neutrophil 55%, lymphocyte 45%, Platelets 250,000/mm<sup>3</sup>. Serum bilirubin 3mg/dL (normal value 0.2 – 1.2 mg/dL), Urine Bile- Nil, Urine Urobilinogen- Increased, ESR 60 mm/1<sup>st</sup> hour.

- 3.1 What is the most likely type of anaemia that this patient is having? (10 marks)

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- 3.2 Give two (02) investigations to confirm the type of anaemia giving the expected results. (20 marks)

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- 3.3 What is the most likely underlying diagnosis that this patient is having? (10 marks)

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- 3.4 List five investigations that you would request in this patient to confirm the diagnosis mentioned in 3.3, giving the expected findings. (60marks)

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4. Part A

- 4.1 List **three (03)** conditions presenting with headache that requires urgent hospitalization for inward investigations and management. (10 marks)

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- 4.2 List **three (03)** different clinical features which will help you to suspect each of the conditions mentioned in 4.1. (30 marks)

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4. Part B

- 4.3 List **four (04)** different unilateral headache disorders. (10 marks)

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- 4.4 A 24-year-old university student presents with episodic unilateral headache with nausea and vomiting. Each attack last for about 12 hours and during the attack the patient refuses to talk and sleeps in a dark room. Her mother also suffers from similar episodic headaches and vomiting. Neurological examination is normal.

Discuss how you would manage this patient's problem. (50 marks)

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5. A 56-year-old female complained of recent onset of weight loss and mild on and off diarrhea for three-week duration. Examination revealed an anxious thin built female with a pulse rate of 110/bpm and blood pressure of 100/72mmHg.



- 5.1 What is the most likely diagnosis? (10 marks)

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- 5.2 List three (03) possible etiologies for the condition mentioned above.(15 marks)

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- 5.3 Mention **three (03)** physical signs which are useful to differentiate the three causes mentioned above and state the expected findings. (30 marks)

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- 5.4 Mention **four (04)** investigations that you would carry out in this patient and state the expected findings. (20 marks)

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- 5.5 Discuss in brief the management of **one (01)** of the conditions mentioned in 5.2. (25 marks)

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6. A 40-year-old farmer was transferred from a Peripheral Unit after being bitten by an unidentified snake. On admission to the TH Karapitiya the examination revealed a pulse rate of 100/bpm, blood pressure of 100/80mmHg, respiratory rate of 20 cycles per minute and bilateral partial ptosis. His whole blood clotting time was more than 20 minutes.

6.1 What is the most likely snake which has bitten this patient? (10 marks)

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6.2 List four (04) immediate measures which need to be done at the local hospital. (20 marks)

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6.3 Briefly describe administration and continuation of the specific therapy that should be commenced at TH Karapitiya. (25marks)

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- 6.4 List three (03) life threatening complications this patient could develop due to envenomation. (15marks)

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- 6.5 Describe briefly how would you monitor this patient for above complications over next 24 hours. (30marks)

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7. A 45-year-old man who has been previously healthy is admitted with fever for five days. He feels tired and has loss of appetite. His fever has responded poorly to Paracetamol. On examination the temperature is 100°F. He is ill looking and there is yellowish discolouration of sclera.

- 7.1 What is the most likely diagnosis? (10 marks)

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- 7.2 List three (03) other differential diagnoses. (10 marks)

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- 7.3 Give four (04) questions that you would ask in the history and explain how they will help ascertaining the correct diagnosis. (20 marks)

- 7.4 List four (04) features in the clinical examination that you will look for and explain how they will help ascertain the correct diagnosis. (20 marks)

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- 7.5 On day 6 of illness the patient develops deepening jaundice, flapping tremors and confusion. What is the most likely complication that has arisen? (10 marks)

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- 7.6 List **two (02)** investigations stating expected results that will be useful to establish the complication mentioned in 7.5. (10 marks)

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- 7.7 List **two (02)** therapeutic measures to be taken explaining the rationale.

(20 marks)

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8. A 70-year-old male is admitted with vague ill health, ankle oedema and puffiness around eyes for one month.

- 8.1 List **four (04)** questions you would ask in the history to establish that the ankle oedema is due to a possible renal disease. (20 marks)

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- 8.2 List four (04) physical signs that you will look for in the clinical examination to ascertain whether the symptoms are due to a renal disease. (20 marks)

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- 8.3 List four (04) investigations that will help to establish the underlying cause for renal disease explaining how they will help. (40 marks)

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- 8.4 The patient developed shortness of breath at rest two days after admission. List two (02) most likely complications that may have arisen and briefly describe their management. (20 marks)

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