FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA

FINAL EXAMINATION FOR MEDICAL DEGREES – November 2014

MEDICINE PAPER 1

17th November 2014   (1.00 – 4.00 pm) 3 hours

Index Number: [   ]

Instructions to candidates

1. Write the index number on all the pages before starting to answer the questions.

2. Answer all the questions.

3. Write your answers in the space given below each part of the question.

4. The space given is adequate for the expected answer.

5. Please return question books with all the pages at the end of the examination.

1   A 24-year-old male is admitted with weakness of all four limbs progressing over three days. On examination he had flaccid weakness of all four limbs with absent tendon reflexes.

1.1   List **three** possible differential diagnoses that you would consider on admission.

(30 marks)

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1.2   Mention **two** clinical features that would support each of your differential diagnosis mentioned in 1.1   (30 marks)

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1.3 List **one** investigation to support each of the diagnosis mentioned in 1.1 with expected results.

(15 marks)

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1.4 List **five** steps in the management of one condition you mentioned in 1.1 (25 marks)

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2 A 56-year-old male, taking treatment for recurrent swelling of both legs over last few months presented with three days history of progressive drowsiness and passing black coloured loose stools.

Physical examination revealed a febrile, drowsy male with Glasgow Coma Scale (GCS) of 9 /15. He was icteric and had tense, tender ascites. His pulse rate was 110/ min and blood pressure was 110/ 70 mmHg. He had no neck stiffness or focal neurological deficit.

INDEX NO:

2.1 What is the most likely underlying diagnosis causing recurrent swelling of legs in this patient? **(10 marks)**

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2.2 What **four** complications of the diagnosis you mentioned in 2.1 are present in this patient on admission **(20 marks)**

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2.3 List **five** investigations you would request to manage this patient during the first 24 hours of admission mentioning the relevance of each of them. **(40 marks)**

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2.4 List **four** drugs you would use to manage this patient stating the reasons for your choice in each. (30 marks)

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3 A 30-year-old female presented with acute shortness of breath, cough and wheezing. She had episodic asthma from her childhood. The patient was on inhaled beclomethazone dipropionate 400 micrograms twice a day for the past two years. Her general practitioner diagnosed acute asthma and directed her to the emergency treatment unit.

3.1 List **five** clinical features that would help in determining the severity of her acute episode of asthma (15 marks)

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3.2 List **three** reasons for the acute exacerbation of asthma. (15 marks)

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3.3 List **five** different pharmacological agents that can be used to treat her acute illness indicating the mode of delivery and mechanism of action. (40 marks)

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3.4 List **three** bedside measurements to assess the response to treatment in the emergency treatment unit (15 marks)

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3.5 Despite receiving optimal therapy the patient's response was poor. List **three** possible causes for the poor response to treatment. (15 marks)

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4. A 35-year-old female presented with sudden onset shortness of breath and left sided chest pain on breathing for three hours duration. She had no cough, wheezing or fever. On examination, pulse rate: 110/bpm regular, blood pressure: 110/70mmHG, jugular venous pressure: 5cm elevated, cardiac apex was not displaced. The respiratory rate was 25 cycles/minute, pulmonary auscultation revealed normal vesicular breath sounds. General examination revealed oedema of right lower limb.

4.1 State the complete clinical diagnosis. (20 marks)

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4.2 Give **four** additional questions in the history that you would ask, to support the diagnosis. (20 marks)

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4.3 List **five** investigations to support the diagnosis and state the expected findings.

(40 marks)

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4.4 List **two** pharmacological therapies that are immediately indicated to treat this patient.

(10 marks)

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4.5 List **two** other therapeutic options available to treat this condition.   (10 marks)

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5 A 17-year-old school girl presented with weight loss and vague ill health for three weeks duration. She also had on and off diarrhoea with watery stools during the same period. On examination she was slightly wasted with BMI of 18 kg/M^2 and had fine finger tremors.

5.1 What is the most likely clinical diagnosis?

(10 marks)

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INDEX NO:

5.2 List **two** possible causes for the diagnosis mentioned in 5.1   (10 marks)

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5.3 List **four** physical signs that would differentiate the two causes mentioned in 5.2 and indicate their value in differentiating each of the causes.   (30 marks)

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5.4 List **four** investigations you would arrange and state the expected results. (30 marks)

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5.5 List the steps in the management of **one** of the conditions mentioned in 5.2 (20 marks)

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6. A 65-year old previously healthy female presented with exetional dyspnea for 04 weeks duration. The following investigations were available on admission. (Normal values are given within brackets)

Hemoglobin	6.4 g/dL	(14-18 g/dL)
MCV	82.4 fL	(80-94 fL)
MCH	30.7 pg	(27-31 pg)
WBC	1000 x10^9/L	(3000-9500x10^9/L)
Platelets	76 x 10^{12}/L	(130-400 x 10^{12}/L)

6.1 What is the hematological diagnosis? (10 marks)

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6.2 List **three** possible causes for the diagnosis mentioned in 6.1 (15 marks)

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6.3 List **two** features either in the history or in the examination that would support each of the condition mentioned in 6.2 (30 marks)

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6.4 List **five** investigations you would arrange for this patient mentioning the expected findings. (25 marks)

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6.5 List **four** precautions you would take on admission of this patient to prevent possible complications.

(20 marks)

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7. A19-year-old previously healthy female is admitted complaining of swelling around the eyes and reddish discolouration of urine for 3 days. She has no fever, nausea or loss of appetite. She has not been on any medication

7.1 What is the most likely clinical diagnosis?

(10 marks)

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7.2 List **two** other features in the history that you will elicit to support the diagnosis.

(10 marks)

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7.3 List **three** relevant physical signs that you would look for.   (15 marks)

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7.4 List **three** investigations that you would arrange on admission with expected results. (15 marks)

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7.5 List **three** important steps in the management mentioning the pharmacological and non-pharmacological methods to be used. (30 marks)

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7.6 List **three** clinical or laboratory criteria which will indicate that the patient is fit for discharge. (10 marks)

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7.7 List **three** clinical or laboratory parameters that you would assess at the first follow up clinic visit. (10 marks)

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8. A 36–year-old female was admitted to the Teaching Hospital Karapitiya following an overdose of paracetamol tablets following a family dispute. She had taken the tablets 30 minutes prior to admission. Her GCS is 15 / 15.

8.1 List **three** features that you would look for in the clinical information (history and examination) which would determine whether this is a life threatening ingestion.

(15 marks)

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8.2 If it is a life threatening ingestion, list **three** immediate steps in her management. (30 marks)

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8.3 List **three** clinical parameters you would continue to monitor in the next 48 hours.

(15 marks)

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8.4 List **three** relevant investigations you would arrange indicating the optimal time of sending the samples. (15 marks)

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8.5 List **five** clinical parameters you would consider in deciding fitness for discharge.

(15 marks)

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8.6 State the follow up plan for this patient. (10 marks)

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