

UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES–Part II (2nd)
December 2013
Pathology- Paper II

Date: 04.12.2013.

Time: 3 hours

Answer all the ten questions

Answer each question in separate answer book

1. The patient presented with enlarged thyroid gland. Thyroidectomy was done and specimen was sent for histopathology. The report came as neoplasia of thyroid.
 - 1.1.1 List 5 different types of thyroid neoplasia. (20 Marks)
 - 1.1.2 Mention two (2) pathological changes (histological or cytological features) that will help in the diagnosis of **each** of the condition you have mentioned in 1.1.1. (30 Marks)
 - 1.1.3 Mention two (2) long term complications that may occur following thyroidectomy. (10 Marks)
 - 1.1.4 List two(2) laboratory investigation that would help to monitor each of the condition you mentioned in 1.1.3. (20Marks)
- 1.2 List five (5) biochemical changes that could be observed in a patient presented with tumour in the adrenal cortex. (20Marks)
2. A 55 year old female presented to the surgical OPD with right hypochondrial pain. Ultrasonography reveals stones in the gallbladder.
 - 2.1 List the types of gall stones and mention three (3) risk factors for **each** type of gall stone you mentioned. (25Marks)
 - 2.2 Discuss the pathogenesis of gall stone. (40Marks)
 - 2.3 List five (5) complications of gall stone. (25 Marks)
 - 2.4 List two (2) biochemical changes that could be observed in common bile duct obstruction. (10 Marks)

3. A 35 year old male patient admitted to surgical casualty ward following a road-traffic accident with extensive loss of skin and soft issue over the lower limbs.
- 3.1. Mention the type of wound healing in this patient. (10 Marks)
- 3.2. Briefly describe the steps involved in healing of this wound. (40)Marks)
- 3.3 What is wound contraction? (10Marks)
- 3.4 List five (5) factors affecting the wound healing. (20Marks)
- 3.5 List four (4) complications of wound healing in this patient. (20 Marks)

4. **Write short notes on**
- 4.1 chronic osteomyelitis. (25 Marks)
- 4.2 Cervical Intraepithelial Neoplasia(CIN). (25Marks)
- 4.3 complications of atherosclerotic plaque. (25 Marks)
- 4.4 pathological calcification. (25 Marks)

5. A 30-year-old man is admitted following fever. He had been prescribed a medication after which he noted passage of dark urine and yellow discoloration of his eyes. G6PD deficiency was suspected.

- 5.1 Describe the pathophysiology of yellow discoloration of his eyes. (20 Marks)
- 5.2 Describe the pathophysiology of dark urine. (20Marks)
- 5.3 List investigations that would confirm the diagnosis. (15Marks)
- 5.4 List 3 abnormalities that you would see in his blood picture. (15Marks)
- 5.5 What advice would you give on discharge. (20Marks)
- 5.6 How is this disease inherited? (10Marks)

6.

A 53 year old previously healthy teacher presented to the outpatient department with the history of headache and visual disturbance of two months duration.

Full blood count report as follows:

Red blood cell count - $7.3 \times 10^6 / \mu\text{l}$

Haemoglobin 21.3g/dL

Haematocrit 64 %

White cell count $13 \times 10^3 / \mu\text{l}$

Neutrophil 75%,

Lymphocytes 10%,

Eosinophils 9%,

Basophils 3%,

Monocytes 3%

Platelets $600 \times 10^3 / \mu\text{l}$

- 6.1 Mention the abnormalities you can observe in his full blood count. (20Marks)
- 6.2 What is the most likely diagnosis? (20 Marks)
- 6.3 List two investigations from the peripheral blood that would be useful in confirming the diagnosis. (20Marks)
- 6.4 Briefly describe the pathological changes you can observe in the bone marrow aspirate and trephine biopsy of a patient with the condition you mentioned in 6.2. (30Marks)
- 6.5 Mention two complications of the condition you mentioned in 6.2. (10 Marks)

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A 34 year old male presented with blood and mucous diarrhea. The colonoscopy reveals ulcerated areas in the rectum. The histological diagnosis is that of Inflammatory bowel disease.

- 7.1 List the macroscopic and microscopic features that help to differentiate ulcerative colitis from Crohns disease. (50 Marks)
- 7.2 Name three other conditions that can lead ulceration of the gastrointestinal tract. (30 Marks)
- 7.3 List 2 complications of Inflammatory bowel disease. (20Marks)

8.

- 8.1** Compare and contrast the vegetations seen in Rheumatic fever and Infective endocarditis. (40Marks)
- 8.2** Describe the other macroscopic and microscopic features of the heart in Acute Rheumatic fever (other than vegetations). (30 Marks)
- 8.3** What is the commonest valve affected in Rheumatic fever? (10Marks)
- 8.4** List 2 other organs than are involved in Rheumatic fever. (20Marks)

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9.1

A 45year old male presented with cough, chest pain fever, and copious amounts of foul-smelling purulent sputum. The chest radiograph showed a right upper lung 3cm nodule with air- fluid level

- 9.1.1** What is the most probable diagnosis? (5 Marks)
- 9.1.2** List three (3) predisposing causes of the condition you mentioned in (9.1.1). (15 Marks)
- 9.1.3** Briefly Describe the pathological features of the above condition (20 Marks)
- 9.1.4** List five (5) complications of this condition (10 Marks)

9.2

A 50 year old man, who was a chain smoker presented with progressive dyspnea and cough for 1 year duration. The chest radiograph showed hyper inflated lungs with reduced vascular markings

- 9.2.1** What is the most probable diagnosis? (10 Marks)
- 9.2.2** Discuss the pathogenesis of the above process. (20 Marks)
- 9.2.3** Describe the pathological features of the above condition. (20 Marks)

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- 10.1** List main five (5) causes leading to chronic glomerulonephritis. (25Marks)
- 10.2** Describe the pathological features of chronic glomerulonephritis. (25Marks)
- 10.3** Briefly describe the pathological features of diabetic nephropathy. (25Marks)
- 10.4** Describe the pathological features of most common type of renal cell carcinoma (adenocarcinoma) of the kidney. (25Marks)

