## POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

## POSTGRADUATE DIPLOMA IN HISTOPATHOLOGY EXAMINATION JULY 2015

**Date :-** 6<sup>th</sup> July 2015

**Time :-** 1.00 p.m. - 4.00 p.m.

#### PAPER I

Answer all questions.

Answer each question in a separate book.

Weightage for different parts (if any) is indicated within brackets.

- 1. A 55-year old patient presented with blood and mucus diarrhoea of acute onset. He had a past history of a similar episode. Colonic biopsies were obtained as the main differential diagnosis included infectious colitis and chronic inflammatory bowel disease.
  - 1.1. What are the microscopic features which are common to both differential diagnoses? (10%)
  - 1.2. Describe features of chronicity which will favour a diagnosis of chronic inflammatory bowel disease. (30%)
  - 1.3. Discuss the microscopic features which favour ulcerative colitis over Crohn disease in a colonic biopsy series. (20%)
  - 1.4. What are the two macroscopic types of dysplasia which occur in ulcerative colitis? (05%)
  - 1.5. How would you distinguish regenerative changes from dysplasia in a patient with long standing ulcerative colitis? (10%)

The clinician also queried about the possibility of this patient having chronic ischaemic colitis.

- 1.6. What are the microscopic features which are common to ulcerative colitis and chronic ischaemic injury to colon? (15%)
- 1.7. What are the features which will help you to distinguish chronic ischemia from ulcerative colitis in a colonic biopsy? (10%)

2.1. Give a brief account on how you would interpret the significance of following cells in fine needle aspiration of the thyroid.

2.1.1. Hurthle cells (20%)

2.1.2. Microfollicles (20%)

- 2.2. Briefly describe the variants of papillary carcinoma of thyroid. (40%)
- 2.3. Briefly discuss the current concepts regarding genetic abnormalities in papillary carcinoma and follicular neoplasms of thyroid. (20%)
- 3. A 55-year old habitual tobacco smoker presented with haemoptysis and shortness of breath. Chest X-ray showed an opacity in the left lung suspicious of malignancy associated with a pleural effusion.
  - 3.1. Mention the value of different samples that could be obtained from this patient to arrive at a morphologic diagnosis of malignancy.

    (20%)
  - 3.2. Describe the cytological features of different types of primary lung malignancy. (30%)
  - 3.3. Describe the cytological and immunohistochemical features that would help to distinguish malignant mesothelioma from adenocarcinoma in a pleural effusion. (20%)
  - 3.4. Briefly describe the macroscopic and microscopic features of two non-neoplastic diseases that this patient could have in the lungs due to habitual tobacco smoking. (30%)
- 4. Discuss the differential diagnosis of malignant tumours with an "epithelioid" appearance which occur in the extremities. Include characteristic microscopic features, immunohistochemical markers and molecular genetic changes (where relevant) which help to distinguish them from one another.

(100%)

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# POSTGRADUATE DIPLOMA IN HISTOPATHOLOGY EXAMINATION <u>JULY 2015</u>

**Date :- 7**<sup>th</sup> July 2015

Time :- 9.00 a.m. - 12.00 noon

#### PAPER II

Answer all questions.

Answer each question in a separate book.

Weightage for different parts (if any) is indicated within brackets

1.

- 1.1. Describe the aetiopathogenesis of venous thrombosis giving examples. (50%)
- 1.2. Discuss the sequelae and clinicopathological effects of venous thrombosis. (50%)
- 2. Discuss the role of immunohistochemistry in the diagnosis and management of breast lesions. (100%)
- 3. A 60 year old male presented with headache and convulsions. CT scan showed a space occupying lesion in the left cerebral hemisphere.
  - 3.1. Mention the lesions which could be responsible for the above condition. (20%)
  - 3.2. Outline the role of the histopathologist in arriving at a diagnosis in this patient. (20%)
  - 3.3. If a biopsy of this patient showed a poorly- differentiated malignancy, indicate what immunohistochemical markers you would use to arrive at a diagnosis, giving reasons. (30%)
  - 3.4. Describe the postmortem findings indicative of raised intracranial pressure due to this space occupying lesion. (30%)
- 4. Describe the clinical, macroscopic, microscopic and immunohistochemical features that would help to distinguish cystic lesions of the pancreas. (100%)