# POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

# POSTGRADUATE DIPLOMA IN HISTOPATHOLOGY EXAMINATION DECEMBER 2018

Date: - 10th December 2018

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

### PAPER I

Answer all four (04) questions.

Answer each question in a separate book.

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

- "The inflammatory response may vary in its type of inflammatory cell, nature of exudate and degree and type of necrosis".
   Discuss how this concept can be used to assist in macroscopic and microscopic diagnosis of diseases at postmortem, surgical cut up, histology and cytology, giving examples. (100%)
- 2. The case of a 45 year old female who presented with a right orbital swelling and proptosis of 2 months duration was discussed at the multi-disciplinary team meeting before histological evaluation.
  - 2.1. List the possible differential diagnoses you would consider in this patient. (30%)
  - 2.2. What are your recommendations to the surgeon who plans the biopsy procedure. (20%)
  - 2.3. Describe your approach to arrive at a diagnosis. (50%)

3.

- 3.1. Briefly describe the aetiopathogenesis of cervical carcinoma. (50%)
- 3.2. Describe how you would cut up and report on a radical hysterectomy specimen performed on a 50 year old female diagnosed with an invasive cervical carcinoma on a cervical biopsy. (50%)

4.

- 4.1. Describe the histological features that are assessed in determining the grade of a breast carcinoma. (20%)
- 4.2. State features that would be useful in predicting the prognosis of a patient with breast carcinoma. (40%)
- 4.3. List three (03) germline mutations recognized to occur in patients with familial breast cancer. (15%)
- 4.4. Briefly outline the molecular classification of breast cancer. (25%)

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# POSTGRADUATE DIPLOMA IN HISTOPATHOLOGY EXAMINATION DECEMBER 2018

Date: 11th December 2018

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

### PAPER II

Answer all four (04) questions.

Answer each question in a separate book.

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

- 1. Discuss your approach to the diagnosis of soft tissue neoplasms with small round cells occurring in children and adults. Mention morphologic and immunophenotypic features, special stains and molecular tests which would be useful in the differential diagnosis. (100%)
- 2. Describe briefly the microscopic changes in the colon that occur due iatrogenic causes, highlighting the challenges they pose in routine histopathology practice. (100%)
- 3. The renal biopsy of a 35 year old male who presented with oliguria and rapidly rising serum creatinine is received with a clinical query of rapidly progressive glomerular nephritis.
  - 3.1. Outline how a renal biopsy should be sent for comprehensive pathological assessment. (20%)
  - 3.2. Explain how you would approach the reporting of this biopsy mentioning specific histological features you would look for, to arrive at a diagnosis. (60%)
  - 3.3. Discuss the usefulness of immunofluorescence in the final diagnosis. (20%)

4.

- 4.1. A 35 year old female presented to a Surgical Unit with a right cervical lymph node enlargement. Fine needle aspiration of the lymph node was performed.State two (02) differential diagnoses for each of the following possible cytological appearances.
  - 4.1.1. Smear shows collections of histiocytes admixed with giant cells (10%)
  - 4.1.2. Presence of apoptotic debris and lymphocytes of polymorphic nature (10%)
- 4.2. Name two (02) ancillary techniques/tests which can be performed on the fine needle aspirate of the above patient to arrive at a definitive diagnosis (10%)
- 4.3. State two (02) situations giving examples where a **fresh** lymph node biopsy is required. (10%)
- 4.4. Give two (02) possibilities for the following in a routinely processed H&E stained lymph node biopsy. (30%)
  - 4.4.1. If the histological section of the lymph node shows a moth-eaten appearance of lymphoid follicles
  - 4.4.2. If the lymph node reveals onion skin appearance of the lymphoid follicles
  - 4.4.3. If the lymph node shows interfollicular eosinophils and eosinophil abscesses
- 4.5. Outline two (02) uses of each of the following immunohistochemical markers in a lymph node with an abnormal lymphoid cell proliferation. (20%)
  - 4.5.1. ALK -1
  - 4.5.2. CD30
  - 4.5.3. BCL2
  - 4.5.4. MUM -1
- 4.6. List one (01) lymphoproliferative disorder associated with each of the following infections. (10%)
  - 4.6.1. HHV8
  - 4.6.2. EBV