POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

<u>POSTGRADUATE DIPLOMA IN HISTOPATHOLOGY EXAMINATION – JUNE 2017</u>

Date:- 13th June 2017

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.

- 1.1. Describe the pathogenesis and pathological changes of hypoxic injury. (60%)
- 1.2. Outline the pathogenesis of ischaemia-reperfusion injury. (40%)
- 2. A near total thyroidectomy specimen was received from a 35 year old woman with a multinodular goitre containing a hypoechoic lesion in the right lobe. FNAC report of this nodule indicates Thy 4 (TBSRTC 5).
- 2.1. Describe the handling and sampling of the thyroidectomy specimen of this patient. (35%)
- 2.2. Describe important microscopic data that you would mention in the histopathology report. (25%)
- 2.3. Histology indicates a follicular lesion. Discuss the important histopathological features helpful in the definitive diagnosis. (40%)
- 3. Write notes on:
- 3.1. Assessment of testicular biopsy in azoospermia. (50%)
- 3.2. Major changes in the 2016 WHO classification of testicular germ cell tumours. (20%)
- 3.3. Precursor lesions of endometrial carcinoma. (30%)

- 4.1. Name three (03) different methods of obtaining a liver biopsy specimen. (10%)
- 4.2. Briefly explain the problem in the interpretation of a subcapsular liver biopsy sample received for histopathological assessment. (05%)
- 4.3. Name one (01) special histochemical stain that can be performed on a liver biopsy to confirm each of the following conditions:
 - 4.3.1. Hepatitis B infection.
 - 4.3.2. Alpha 1 antitrypsin deficiency.
 - 4.3.3. Wilson disease. (10%)
- 4.4. Enumerate three (03) specific histopathological changes seen in a liver biopsy for each of the following diseases:
 - 4.4.1. Chronic viral hepatitis C infection.
 - 4.4.2. Sclerosing cholangitis. (30%)
- 4.5. Briefly explain the pathogenesis of cirrhosis in hereditary (idiopathic) haemochromatosis. (20%)
- 4.6. Name three (03) non neoplastic intestinal diseases, which can subsequently involve the liver. (05%)
- 4.7. List three (03) premalignant conditions for hepatocellular carcinoma. (10%)
- 4.8. Name one (01) immunohistochemical marker each to demonstrate
 - 4.8.1. Tumour cells in hepatocellular carcinoma.
 - 4.8.2. Sinusoidal endothelium.
 - 4.8.3. Bile duct epithelium. (10%)

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<u>POSTGRADUATE DIPLOMA IN HISTOPATHOLOGY EXAMINATION – JUNE 2017</u>

Date:- 14th June 2017

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. You are a consultant pathologist at a Provincial General Hospital. You have been requested by the oncologist to consider performing predictive markers for breast cancer patients.

Describe the factors you will take into account when establishing an immunohistochemistry service for the above request.

2. A bone biopsy sample containing a lesion rich in osteoclastic giant cells is received.

Discuss your diagnostic approach including the possible differential diagnoses.

- 3. An erythematous lesion was found at the trigone of the bladder at cystoscopy in a 50 year old man.
- 3.1. List the conditions that can give rise to such a lesion. (10%)
- 3.2. Histopathology of this biopsy showed urothelial carcinoma of stage pT2. What is meant by this stage? (10%)
- 3.3. Briefly describe the histopathological mimics of bladder carcinoma. (30%)
- 3.4. Describe the molecular pathways and salient histopathological features of the WHO (2004) grading of urothelial neoplasms. (50%)

- 4. A 40 year old man presented with a pigmented lesion of the left leg. The biopsy shows junctional nests of pigmented cells.
- 4.1. Describe the histopathological features that will help in the differential diagnosis. (60%)
- 4.2. Outline the prognostic information which you would include in the histopathology report where relevant. (40%)