

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) -PART 11 EXAMINATION
JANUARY, 1991

Date: 21st January 1991

Time: 2.00 - 5.00 p.m.

PAPER I

Answer question 1, which is compulsory.

Answer Three other questions.

Answer each question in a separate Book.

1. List the different lipid substances that could accumulate in tissues under pathological conditions. Discuss the pathogenesis of such lipid deposition and the pathological changes and pathological effects of such deposition.
2. What do you understand by "small cell tumors of childhood"?
How would you proceed to handle a biopsy specimen from a probable small cell tumor of childhood and what histological features may suggest a provisional diagnosis?
What other special investigations, if any would help you to arrive at a firm diagnosis?
3. State the different laboratory techniques you would apply to a renal biopsy and discuss how such applications help in diagnosis of glomerular diseases giving examples.
4. Describe the macroscopic appearances of gastric neoplasm. Give a classification of gastric carcinomas and describe the histological pattern of each type.
5. Write notes on,
 - 5.1 Epstein Barr virus associated lesions.
 - 5.2 Tumors associated with AIDS.
 - 5.3 Fibrous histiocytoma.
 - 5.4 Medullary carcinoma of thyroid.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) PART II EXAMINATION
JANUARY, 1991

Date: 22nd January 1991

Time: 9.00 a.m.- 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate Book.

1. Write notes on -
 - 1.1 Placental site trophoblastic tumor.
 - 1.2 Rosettes in tumors.
 - 1.3 Malakoplakia.
 - 1.4 Bone changes in chronic renal failure.

2. Discuss the causes of obstruction to cerebrospinal fluid. Describe the pathological changes that could develop as a result of such obstruction and explain their pathogenesis.

3. Describe the clinicopathological features of the lesions produced by Mycobacterium leprae in the human body. What is the immunopathological basis of these lesions?

4. Discuss the pathology and pathogenesis of alcohol induced liver disease.

5. Give an account of the information that can be obtained from the cytological examination of cervical and vaginal smears in females from menarche to old age.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1991

Date: 25th November 1991

Time: 2.00p.m. - 5.00 p.m.

PAPER I

Answer question 1, which is compulsory.

Answer Three other questions.

Answer each question in a separate Book.

1. Write an account of why viruses are considered to be carcinogenic and state briefly giving reasons what is known about their mechanism of carcinogenic action.
2. Describe the clinicopathological features of tumors of the liver. What aetiological agents are known to be responsible for the causation of malignant lesions of the liver?
3. Describe the range of histological appearances that may be found on uterine curettage of a perimenopausal female with persistent bleeding.
4. A male of 18 years presents with a mass in the anterior mediastinum. Discuss the possible causes and describe in detail the histological appearances of one condition.
5. Write notes on,
 - 5.1 Castleman's Disease
 - 5.2 Necrotising Lymphadenitis
 - 5.3 Dysplastic Naevus Syndrome
 - 5.4 Arnold-Chiari Malformation

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1991

Date: 26th November 1991

Time: 9.00 a.m.-12.00 noon

PAPER II

Answer 4 questions.

Answer each question in a separate Book.

1. A 55-year-old male is found to have a symptomatic space occupying mass in the frontal lobe ,
 - 1.1 Discuss the differential diagnosis of such a lesion emphasizing gross and microscopic features.
 - 1.2 Discuss the pathological effects that such a lesion may induce in the central nervous system.
2. Discuss the pathogenesis and complications of conditions producing necrotic lesions in the small intestine.
3. Give an account of the inflammatory and inflammatory-like lesions of the thyroid.
4. Classify renal tumors of childhood and discuss the pathological features Wilm's Tumor.
5. Write notes on,
 - 5.1 Wegener's Granulomatosis
 - 5.2 Alveolar soft part sarcoma
 - 5.3 The pathological appearances of Erythroplasia of Querat.
 - 5.4 Neuroendocrine Tumors of the Bronchopulmonary Tree.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1992

Date: 30th November 1992

Time: 2.00p.m. - 5.00p.m.

PAPER I

Answer question 1, which is compulsory.

Answer Three other questions.

Answer each question in a separate Book.

1. Discuss the defects which neutrophils could manifest leading to their dysfunction. Make reference to the mechanisms involved and the effects of such dysfunction.
2. Give an account of the differential diagnosis and your approach to the elucidation of granulomatous processes affecting the skin.
3. Give a classification of malignant tumors of the lung. Describe the clinico-pathological features of small cell carcinoma of the lung.
4. Discuss the pathological lesions which may develop in the gastrointestinal tract of a patient with the acquired immunodeficiency syndrome (AIDS).
5. Write short notes on ,
 - 5.1. Xanthogranulomatous cholecystitis
 - 5.2. Meleny's (Synergistic) Gangrene
 - 5.3. Growth factors in relation to oncogenesis
 - 5.4. Oestrogen receptors

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1992

Date: 1st December 1992

Time: 9.00a.m. - 12.00noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. Describe the possible pathological findings at autopsy in an elderly female with diabetes mellitus.
2. Write an essay on pathological pigmentation.
3. A sixteen-year-old boy presents with a pathological fracture of the lower end of the tibia. What neoplastic lesions may account for this condition? Give a descriptive account of any two lesions you mention.
4. Discuss the aetiology and biopsy pathology of rheumatoid arthritis.
5. Write short notes on ,
 - 5.1. Chordoma
 - 5.2. Medulloblastoma
 - 5.3 Glioblastoma
 - 5.4 Cerebral changes in malaria

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1993

Date: 29th November 1993

Time: 2.00 p.m. - 5.00 P.M.

PAPER I

Answer Question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Write an account of four (4) abnormal materials that are known to accumulate in cells, indicating the mechanisms involved and pathological effects of such accumulation,
2. Describe the autopsy findings in a 54-year-old female who died from bronchiectasis.
3. A male of 45 years presents with a firm swelling 2 cms. in diameter just below the left ear.
What are the possible causes of this condition? How would you establish the diagnosis?
Give a brief account of the conditions you mention.
4. Describe the pathology of inflammatory diseases of the colon, making reference to appearances, which are important in their differentiation one from another.
5. Write notes on ,
 - 5.1. Multiple endocrine neoplasia syndromes.
 - 5.2. Carcinoid tumors of the bronchus.
 - 5.3. Fibrinous pericarditis
 - 5.4. Whipple's disease.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY)-HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1993

Date: 30th November 1993

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. List the malignant tumors that primarily arise in the metaphysis of long bones. Describe the clinico-pathological features of any two of the lesions you mention.
2. Discuss the causes, pathological features and complications of urinary calculi.
3.
 - 3.1. Classify the bullous diseases of the skin giving examples of each category.
 - 3.2. Give the histological descriptions of two of them.
4. Write an account of what information could be obtained by pathological examination of endometrial curettings in an adult female.
5. Write notes on
 - 5.1. Pilomatricoma.
 - 5.2. Syphilitic aortitis
 - 5.3. Glioblastoma
 - 5.4. Bone changes in rickets

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1994

Date: 21st November 1994

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer Question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Write an account on the mononuclear phagocytic system making reference to the role it plays in disease processes.
2. A right hemicolectomy specimen from a patient with biopsy Proven caecal carcinoma is received in the fresh state in the Laboratory.
 - 2.1. Describe how you would "handle" this specimen, including the macroscopic examination.
 - 2.2. Outline current thinking on the pathogenesis and evolution of colorectal carcinoma.
3. A young male patient 20 years old presents with a history of cervical lymphadenopathy. List the pathological lesions you would consider as likely causes of this condition.
Describe briefly what histological features you would expect to see in a lymph node biopsy in any five of the conditions you mention.
4. Write short notes on ,
 - 4.1 Giant cell arteritis
 - 4.2 Hydatidiform mole
 - 4.3 AIDS related malignancies
 - 4.4 Cholesteatoma of the ear.
5. Discuss the aetiology and pathogenesis of primary tumors of the liver.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1994

Date: 22nd November 1994

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. Differentiate lesions of the skin in which a granulomatous reaction occurs.

2. Discuss the aetiology and pathogenesis of abscesses in
 - 2.1 Brain
 - 2.2 Lungs

3.
 - 3.1. How would you examine and obtain sections for histology from a specimen of total abdominal hysterectomy (with tubes and ovaries) containing an uterine tumor?

 - 3.2. Describe the types of adenocarcinoma of the endometrium indicating the prognosis of each type.

4. List the aetiological agents of encephalitis and encephalomyelitis, focal and diffuse.
List the specific aetiological agents that have been identified in Sri Lanka.
Describe the general pathological features, macroscopic and microscopic, common to most cases of viral encephalitis.
Describe the specific pathological features useful in the diagnosis of one of the viral encephalitis or encephalomyelites prevalent in Sri Lanka.

5. List the pathological changes that have been observed in the heart in-patients with ischaemic heart disease, acute and chronic, and discuss the pathogenesis of these.
Comment briefly on noteworthy features in ischaemic heart disease in Sri Lanka with reference to age distribution and risk factors.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1995

Date: 27th November 1995

Time: 2.00p.m. -5.00p.m.

PAPER I

Answer Question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Describe with examples the pathological changes that could develop in a cell as a result of neoplastic transformation and state the mechanism involved in the production of these changes.
2.
 - 2.1 List the non-malignant conditions in which an endoscopic rectal biopsy may provide a diagnosis.
 - 2.2 Describe the light microscopic features of any six of them.
 - 2.3 Indicate the limitations of the use of this procedure in diagnosis.
3. Outline the classification of malignant Non-Hodgkin's lymphomas proposed in the working formulation (of National Cancer Institute Sponsored Study). Name 5 features that make it useful in diagnosis and management of patients with Non-Hodgkin's lymphoma. What are the morphological, immuno-logical and cytogenetic criteria that are used to differentiate between T cell and B cell lymphomas?
4. Give examples of generalized systemic diseases, which cause pathological manifestations in the eye. Describe the pathological features of the ocular lesions and state the mechanisms involved in the production of the lesions you mention.
5. Write notes on ,
 - 5.1 Histopathological changes in the CNS associated with AIDS.
 - 5.2 Endometrial hyperplasia.
 - 5.3 Helicobacter pylori in gastric pathology
 - 5.4 Pathological effects of pulmonary embolism.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1995

Date: 28th November 1995

Time: 9.00a.m. - 12.00noon

PAPER II

Answer Four (4) questions.

Answer each question in a separate book.

1. You are the Director of Histopathology at the Colombo General Hospital. The Medical Superintendent has asked you to report to him whether a new immunoperoxidase service should be started in the Laboratory. Indicate what you will say in this report.
2. Describe the various benign spindle cell proliferations in soft tissues, which may mimic malignant lesions. Emphasize the features, which enable you to establish a diagnosis.
3. In carcinoma of the breast
 - 3.1 What is known about hormone receptors?
 - 3.2 Describe the factors in the tumor (histologic and ancillary) that are useful in predicting prognosis.
 - 3.3 List the techniques available to make a diagnosis in breast carcinoma.
4. A 52-year-old female with a solitary nodule in the left lobe of the thyroid is sent to you for fine needle aspiration.
 - 4.1 Describe in detail the procedure of fine needle aspiration, including how you would process the specimen.
 - 4.2 What are the possible diagnoses that you may reach on aspiration and what criteria are used to reach these diagnoses?
 - 4.3 Discuss the accuracy of diagnosis of this procedure.
5. Write notes on:
 - 5.1 Pathological changes in Fallot's tetralogy.
 - 5.2 Skin biopsy in lepromatous leprosy.
 - 5.3 Ulceration of cervix uteri.
 - 5.4 Glomerular changes in diabetes mellitus.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1996

Date: 25th November 1996

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer Question (1), which is compulsory.
Answer 3 other questions.
Answer each question in a separate book.

1.
 - 1.1. Define "metastasis".
 - 1.2. Describe the cellular events involved in the spread and development of a metastasis
 - 1.3. Outline the various pathways of metastatic spread, using common examples
 - 1.4. What does the occurrence of a metastasis mean in terms of prognosis?

2. Discuss the role of arterial atherosclerosis in the pathogenesis of the diverse manifestations of acute and chronic cerebral ischaemia

3.
 - 3.1. Discuss the pathogenesis of endometriosis in relation to the anatomical distribution of the lesions.
 - 3.2. Give an account of the pathology of endometriosis
 - 3.3. What are the principal aetiological factors implicated in endometriosis?

4. A 7-year-old boy presents with painless enlargement of right submandibular lymph nodes. A lymph node biopsy is performed.
 - 4.1. Enumerate six malignant neoplasms that could have caused this swelling
 - 4.2. Outline the diagnostic morphological features you would look for in the lymph node in those conditions you have listed in 4.1.

5. Write notes on ,
 - 5.1. Biochemical derangement's in liver cells that lead to alcoholic fatty liver
 - 5.2. Pathology of Goodpasture's Syndrome
 - 5.3. Kawasaki's disease
 - 5.4. Barrette's oesophagus

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1996

Date: 26th November 1996

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer Four (4) questions.

Answer each question in a separate book.

1.
 - 1.1 What is a delayed hypersensitivity reaction?
 - 1.2 Give examples of such reactions.
 - 1.3 Write an account on the mechanisms involved in such reactions and the results that follows them.

2. A 50-year-old male presents with a testicular mass.
 - 2.1 List the possible causes
 - 2.2 Describe the macroscopic and microscopic features of five of the primary malignant neoplasms that you mention.

3. Discuss the value of frozen section in histopathological diagnosis with particular reference to their use during a surgical procedure.

4. Discuss the value and limitations of needle biopsy of the kidney in the diagnosis and management of nephrotic syndrome.

5. Write notes on ,
 - 5.1. Pathological pigmentation in the oral cavity
 - 5.2. T lymphocytes
 - 5.3. Subepidermal bullous lesions
 - 5.4. Cytologic criteria for the diagnosis of carcinoma in a fine needle aspiration of a breast mass.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
DECEMBER 1997

Date: 1st December 1997

Time: 2.00p.m. - 5.00p.m.

PAPER I

Answer question (1) is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Write an account of B lymphocyte development and function. What role do the lymphocytes play in the disease processes?
How would you assess B lymphocyte functions in tissue sections and at molecular level?
2. A 60-year-old woman has been found to have a solitary peripheral right upper lobe lung lesion. A FNA has been performed under radiographic control and sent to you.
 - 2.1 Describe the procedure involved in performing a FNA, including processing.
 - 2.2 What possible diagnoses could be made from the FNA?
 - 2.3 What are the limitations of the procedure and possible pitfalls?
3. Write an essay on the pathology of parasitic diseases encountered in histopathological practice in Sri Lanka.
4. A 27-year-old woman has died of disseminated intravascular coagulation (DIC) following a full term normal delivery.
 - 4.1 Discuss the pathogenesis of DIC in pregnancy.
 - 4.2 Describe the post mortem findings in the lungs and kidneys.
5. Write notes on the histopathology of:
 - 5.1 The renal complications of infective endocarditis.
 - 5.2 Polyps of the GI tract in children.
 - 5.3 Thymic epithelial tumors.
 - 5.4 Haemachromatosis.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
DECEMBER 1997

Date: 2nd December 1997

Time: 9.00a.m. -12.00noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. You have been asked by your Director of Histopathology to look into the feasibility, including the cost of starting an Immunohistochemistry or an electron microscopy service.
 - 1.1 How would you assess the relative merits and limitations of each service?
 - 1.2 What would be your recommendation and why?

2. A 33-year-old man with AIDS died in the advanced stages of the disease.
 - 2.1 What is known about the pathogenesis of AIDS?
 - 2.2 At autopsy:
 - (a) What central nervous system lesions may be found? and (b) What malignant diseases might be present in the gastrointestinal tract?
 - 2.3 Describe the pathology of the central nervous system and gastro-intestinal lesions.

3. You have been sent a skin lesion from a 25-year-old man which shows a prominent lymphocytic infiltrate.
What cutaneous lesions in this age group are characterized by a significant lymphocytic infiltrate and how would you make a diagnosis in each case?

4. A 36-year-old woman has returned to the U.K. after an extended trip to India. She has developed diarrhea, has lost weight and been found to have malabsorption.
 - 4.1 What possible diseases might she be suffering from?
 - 4.2 How would you establish the diagnosis in each case?
 - 4.3 What is the pathogenesis of the diseases you have identified?

5. Write short notes on:
 - 5.1 Sarcoid lung.
 - 5.2 Central nervous system lesions in an elderly alcoholic
 - 5.3 Mesothelial proliferation.
 - 5.4 Cardiac findings in mitral stenosis.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER 1998

Date: 16th November 1998

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Write an essay on the general pathological processes that lead to organomegaly. Illustrate your answer with common examples.

2. Write short notes on ,
 - 2.1. Interpretation of endometrial currettings in molar pregnancy
 - 2.2. Causes of cardiomyopathy
 - 2.3. The histopathological appearances of hepatitis C
 - 2.4. The normal microanatomy of the spleen

3. What do you understand the value of audit in cellular pathology to be? Discuss with examples of how audit may be achieved.

4. Describe how you would dissect an anterior resection specimen containing a rectal carcinoma and the facts, which your histopathology report should contain to be useful for prognosis and further management.

5. Discuss the pathological features of pneumonia in an immunocompromised patient.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1998

Date: 17th November 1998

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. A 50-year-old man with a history of headache and alteration in level of consciousness died shortly after admission. Discuss the possible autopsy findings.

2. Write short notes on ,
 - 2.1. Pathological findings in Myasthenia gravis
 - 2.2. Autopsy findings in leptospirosis
 - 2.3. Difficulties encountered in the diagnosis of prostatic carcinoma in a trucut biopsy

3. Clarify and describe the histological appearances of and diagnostic pitfalls in borderline ovarian tumors.

4. Write short notes on any four of the following ,
 - 4.1. FNA cytology of the thyroid gland
 - 4.1. Fibrolamellar hepatocellular carcinoma
 - 4.2. Olfactory neuroblastoma
 - 4.4. Rosai-Dorfman disease
 - 4.5. Cholesteatoma of the middle ear

5. Discuss the histological assessment of a liver biopsy showing cirrhosis in an adult.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
JULY, 1999

Date: 5th July 1999

Time: 2.00 - 5.00 P.M.

PAPER I

Answer question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Discuss the role of viruses in human cancer.
2. Discuss the pathology of death in pregnancy. Describe briefly the special steps you would take in an autopsy in a maternal death.
3.
 - 3.1 List the indications for testicular biopsy, indicating the reasons and special steps that you would take in assessing the biopsy in the conditions mentioned.
 - 3.2 Describe the pathological changes you would expect in an infertile testis.
4. What are the criteria for diagnosing malignancy in cutaneous melanocytic lesions?
5. Write short notes on any four of the following ,
 - 5.1 Mantle cell lymphoma
 - 5.2 Telomerase
 - 5.3 Cerebral amyloid
 - 5.4 Calcinosis cutis
 - 5.5 Mitral valve incompetence

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
JULY, 1999

Date: 6th July 1999

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. Discuss the changes in cervical smears and biopsies that may be confused with high-grade squamous intra-epithelial neoplasia.
2. Write an essay on the special staining techniques that are useful in the interpretation of liver biopsies.
3. You receive a transurethral resection of prostate from a 75-year-old male.
 - 3.1 List the lesions you might encounter in this specimen.
 - 3.2 Write a short histopathological description of the non-malignant lesions you have mentioned and comment on their significance.
 - 3.3 What are your criteria for diagnosing prostatic carcinoma?
4. What are the causes and consequences of chronic gastritis?
5. Write short notes on ,
 - 5.1 Radial scars in the breast
 - 5.2 Interstitial nephritis
 - 5.3 Medullary carcinoma of the thyroid
 - 5.4 Cytological diagnosis of small cell carcinoma of lung

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1999

Date: 23rd November 1999

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. Explain tumor progression and discuss the mechanisms of tumor invasion and metastasis.
2. A mastectomy specimen was received in the laboratory from a 45-year-old woman diagnosed as having carcinoma of the breast ,
 - a) Describe how you would examine the specimen-
 - b) What macroscopic and microscopic criteria would you use to assess the prognosis of breast cancer?
3. Discuss the pathology of the liver in an adult presenting with obstructive jaundice.
4. Discuss the value and limitations of the different diagnostic techniques available, to arrive at a pre-operative pathological diagnosis of a lung malignancy.
5. Write notes on ,
 - 5.1 Hurthle cells in thyroid disease
 - 5.2 Cytological features of fibroadenoma of the breast.
 - 5.3 Hypertrophic cardiomyopathy.
 - 5.4 Barrett's oesophagus.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 1999

Date: 24th November, 1999

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. A 55-year-old man died following a clinical diagnosis of a "stroke"
 - 1.1 Mention the two common cerebral lesions responsible for the above clinical condition.
 - 1.2 Describe the aetiopathogenesis of these lesions.
2. Describe the different types of inflammatory reactions encountered in histopathological practice and explain briefly how histological examination of tissue help in identifying the aetiology of the inflammation.
3. A 60-year-old man with a long history of diabetes mellitus died of renal failure. Discuss the possible pathological findings at post - mortem.
4. Write notes on ,
 - 4.1 Fat necrosis
 - 4.2 Malakoplakia
 - 4.3 Gastric lymphoma
 - 4.4 Free radical cell injury
5.
 - 5.1 List different types of cervical biopsies you may receive in the laboratory.
 - 5.2 What are the limitations of the different types of biopsies listed in 5.1 and what steps would you take to ensure an accurate diagnosis.
 - 5.3 Discuss the significance of endometrial cells in a cervical smear.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
JULY/AUGUST 2000

Date: 31st July 2000

Time: 2.00 p.m. - 5. 00 p.m.

PAPER I

Answer question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1. A 67-year-old man who used to be a shipyard worker exposed to asbestos has developed a pleural effusion. A mesothelioma is suspected.
 - 1.1 Describe the special techniques, which are available to assist in the diagnosis
 - 1.2 What other pathology may occur in relation to asbestos exposure.

2. Discuss critically the basis of the REAL classification of the non-Hodgkin's Lymphomas.

3. You have received a liver biopsy showing fatty change.
 - 3.1 Discuss the aetiology of fatty change.
 - 3.2 How could you achieve a more precise diagnosis as to the cause?

4. Write an essay on non-neoplastic pathological lesions of bone.

5. Write short notes on 3 of the following
 - 5.1 cystic fibrosis of the pancreas.
 - 5.2 apoptosis
 - 5.3 desmoplastic melanoma
 - 5.4 giant cell arteritis.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
JULY/AUGUST, 2000

Date: 1st August 2000

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. Virus has long been associated with the development of cancer.
 - 1.1 Which human tumors are aetiologically associated with viruses?
 - 1.2 What are the possible pathogenetic mechanisms, which may link viral infection with the development of cancer.

2. A 55-year-old man with indigestion and weight loss has been admitted for endoscopy and possible gastric biopsy.
 - 2.1 Discuss the mechanism and handling of endoscopic biopsies.
 - 2.2 Describe the various pathologies, which may be present in this man's gastric biopsy.

3. You have received a renal biopsy of a patient suffering from a renal failure.
 - 3.1 Provide a working classification of glomerulonephritis
 - 3.2 What morphological changes may be present in the nephrotic syndrome?

4. A thyroid biopsy has shown evidence of thyroiditis.
 - 4.1 Describe the morphological variants of thyroiditis.
 - 4.2 Discuss critically the pathogenesis of thyroiditis.

5. Write short notes on 3 of the following
 - 5.1 Langerhans cell histiocytosis
 - 5.2 Irritable bowel syndrome
 - 5.3 Diseases caused by Prions
 - 5.4 Primitive Neuroectodermal tumor.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 2000

Date: 20th November 2000

Time: 2.00 p.m. - 5.00p.m.

PAPER I

Answer question (1), which is compulsory.

Answer 3 other questions.

Answer each question in a separate book.

1.
 - 1.1 Discuss the role of host immunity in chronic infections. (40 marks)
 - 1.2 Discuss the pathological features of cutaneous lesions of leprosy (60 marks)

2. A radical prostatectomy specimen is received fresh in your laboratory, as treatment for prostate carcinoma.
 - 2.1 Discuss in detail how you would handle and cutup the specimen (40 marks)
 - 2.2 What pathological findings should be highlighted in your report as indicators of prognosis? (60 marks)

3. Write notes on ,
 - 3.1 Pathology of Dengue Haemorrhagic fever (25 marks)
 - 3.2 Duchenne Muscular dystrophy (25 marks)
 - 3.3 Macroscopic appearance of the brain of a patient who died following a left subdural haematoma (25 marks)
 - 3.4 ER/PR (Oestrogen and Progesterone receptor) status of breast carcinoma (25 marks)

4.
 - 4.1 categorize the lung tumors with neuroendocrine differentiation. (20 marks)
 - 4.2 Describe the morphological features of the tumours listed above. (50 marks)
 - 4.3 What pathological investigations would confirm the diagnosis of a lung carcinoma? (30 marks)

5. A 60-year-old male presented with backache and weakness of lower limbs. MRI Scan revealed an infiltrating mass in the sacral region. Muroid flesly tissue was removed.
 - 5.1 What neoplastic lesions could be responsible for this mass? (30 marks)
 - 5.2 Describe their histological appearances and state how you would arrive at a precise diagnosis. (70 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 2000

Date: 21st November 2000

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four (4) questions.

Answer each question in a separate book.

1. You have been asked to set up a cytology service by the health authorities for the first time.
As the pathologist in charge of the laboratory, describe in detail how you would plan and implement the above to suit Sri Lanka. (100 marks)

2. Write an account on primary gastrointestinal lymphomas. (100 marks)

3. A 50-year-old man presents with deep jaundice. His serum bilirubin is 12mg/dl with direct bilirubin fraction of 11mg/dl.
How does a liver biopsy help in arriving at the cause of the jaundice? (100 marks)

4. Discuss your approach to the autopsy and pathological diagnosis of a 65-year-old patient who died following rapidly progressive dementia. (100 marks)

5. Write notes on ,
 - 5.1 Gestational trophoblastic tumours (25 marks)
 - 5.2 Pathogenesis of atherosclerosis (25 marks)
 - 5.3 Pathological features of the endometrium in a woman with perimenopausal bleeding (50 marks)

5. Write short notes on any four (4) of the following:
- 5.1 Microsatellite instability (25 marks)
 - 5.2 Histological features of mycosis fungoides (25 marks)
 - 5.3 Chromophobe carcinoma of the kidney (25 marks)
 - 5.4 Special stains for diagnosis of amyloid in paraffin sections. (25 marks)
 - 5.5 Bacillary angiomatosis (25 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
DECEMBER, 2001

Date: 11th December, 2001

Time: 9.30 a.m. - 12.30 p.m.

PAPER II

Answer four questions.

Answer each question in a separate book.

1. Discuss the benign breast lesions that may mimic malignant disease on histology, emphasizing the histological features which would help to distinguish between the two. (100 marks)
2. A 10 year old child was found to have a space occupying lesion in the cerebellum.
 - 2.1 Give a differential diagnosis for this lesion. (30 marks)
 - 2.2 Write an account of the cystic lesions you have mentioned illustrating the diagnostic approach. (70 marks)
3. A 14 year old girl was found to have an anterior mediastinal mass.
 - 3.1 List the possible pathological lesions. (30 marks)
 - 3.2 Describe the histological features of any two mentioned in 3.1 (60 marks)
 - 3.3 What are the methods available for obtaining material from this lesion ? (10 marks)
4. Write short notes on **four (4)** of the following:
 1. Sinus histiocytosis with massive lymphadenopathy (Rosai-Dorfman disease) (25 marks)
 2. Rhabdoid tumours (25 marks)
 3. Gastrointestinal stromal tumours (25 marks)
 4. P 53 gene (25 marks)
 5. Pseudomembranous colitis (25 marks)
5.
 - 5.1 Discuss the lesions in the female genital tract associated with the Human Papilloma Virus. (70 marks)
 - 5.2 Briefly describe the role of the virus in the causation of lesions mentioned in 5.1. (30 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION –
DECEMBER, 2003

Date: 1st December, 2003

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer question (1) which is compulsory

Answer 3 other questions.

Answer each question in a separate book.

1. Describe the histological appearances of lesions caused by immune-mediated reactions.
Cite examples commonly encountered in histopathological practice (Details of mechanisms of the immune reactions are not required). (100 marks)

2. 2.1. Discuss the clinicopathological features of papillary neoplasms of the endometrium. (50 marks)

- 2.2. Describe the morphological features of the endometrium in anovulation. (50 marks)

3. Discuss the histopathological features useful in the diagnosis of adenocarcinoma of the prostate in core needle biopsy specimens, including potential pitfalls and diagnostic difficulties. (100 marks)

4. Write an account of the macroscopic and microscopic pathology of chronic ulcerative colitis.
Describe the possible complications of this disease. (100 marks)

5. Discuss the differential diagnosis of malignant soft tissue tumours with 'epithelioid' cells.

Discuss special diagnostic tests you would use to arrive at a specific diagnosis. (100 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
DECEMBER, 2003

Date: 2nd December, 2003

Time: 9.30 a.m. - 12.30 p.m.

PAPER II

Answer four questions.

Answer each question in a separate book.

1. A 30 year old male presented with nephrotic syndrome. He has had 2 similar Attacks within the last 2 years. A renal biopsy was performed.
State the possible causes for this condition.
Describe how you would assess this biopsy to arrive at a diagnosis. (100 marks)
2. Describe the following :
 - 2.1. Post mortem appearance of the brain from a 40 year old male who had a biopsy proven Glioblastoma in his left frontal lobe. (70 marks)
 - 2.2. Pathological features of the brain in Alzheimer's disease (30 marks)
3. Discuss the value and limitations of fine needle aspiration cytology in the assessment of breast lumps. (100 marks)
4. Describe the histological variants of papillary carcinoma of the thyroid mentioning the clinical significance where relevant. (100 marks)
5. Write brief notes on three. of the following :-
 - 5.1. Hereditary non polyposis colon cancer
 - 5.2. Adamantinoma of bone
 - 5.3. Pathological lesions in lymph nodes in Acquired Immune Deficiency Syndrome
 - 5.4. Staging and grading of urothelial neoplasms of the bladder (100 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 2004

Date: 29th November, 2004

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer question (1) which is compulsory
Answer 3 other questions.
Answer each question in a separate book.

- 1)
 - 1.1 Discuss, citing examples, the causes and pathogenesis of arterial thrombosis, and the fate of such thrombi.
(70 marks)
 - 1.2 Describe the lesions that may occur in the tissues supplied by the affected arteries, subsequent to the processes described in 1.1.
(30 marks)
- 2) Discuss the prognostic factors that should be included in the histopathological report of a breast carcinoma.
(100 marks)
- 3) Describe the histopathological approach to a biopsy from a soft tissue mass in the thigh of a boy of 10 years when haematoxylin and eosin staining shows a malignant round cell tumour. What additional techniques might prove helpful ?
(100 marks)
- 4) A 50 year old patient has a carcinoma in the kidney.
 - 4.1 Describe how you would dissect the nephrectomy specimen of this patient.
(40 marks)
 - 4.2 List the pathological features that you would include in the histology report, giving reasons for doing so.
(60 marks)
- 5) Write an account of non-neoplastic tubo-ovarian masses including the salient histological features.
(100 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 2004

Date: 30th November, 2004

Time: 9.00 a.m.- 12.00 noon.

PAPER II

Answer four questions.

Answer each question in a separate book.

- 1) What conditions give a histological nodular pattern of lymphoid proliferation in a lymph node.

Describe the characteristic features and the differential diagnosis of each of the conditions you mentioned. What steps would you take to confirm the diagnosis.
(100 marks)

- 2) Discuss the analytical approach to the histological diagnosis of epithelial tumours of the parotid gland. (100 marks)

- 3) Describe the cerebellar space occupying lesions in childhood. (100 marks)

- 4) A sample of pleural fluid of an adult is sent to you for reporting.

4.1 Describe the techniques by which you would make maximum use of this sample to arrive at a diagnosis. (30 marks)

4.2 What are the reaction patterns that are seen in pleural fluid. Give examples and describe briefly the morphology of cells.
Discuss the diagnostic approach to malignant effusions. (70 marks)

- 5) Write short notes on any **four** of the following :

5.1 Features of papillary carcinoma of the thyroid in a fine needle aspiration.

5.2 Pseudomembranous colitis.

5.3 Pyogenic osteomyelitis.

5.4 Non- alcoholic steatohepatitis.

5.5 Barrett's oesophagus.

(25 marks for each part)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
DECEMBER, 2005

Date: 5th December, 2005

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer question (1) which is compulsory

Answer 3 other questions.

Answer each question in a separate book.

1. Describe the different histological appearances of injured cells and briefly explain the pathogenesis of these changes. (100 marks)

2. The excision biopsy of a skin nodule on the forehead of a 60 year old man shows a mitotically active tumour composed of plump spindle shaped cells and pleomorphic cells. There is no bone involvement. Discuss the differential diagnosis mentioning histological features and state the special tests you would perform on the biopsy material to confirm the diagnosis. (100 marks)

3. Discuss the problems encountered by a pathologist in diagnosing a suspected osteogenic sarcoma of the femur in a 19 year old male. (100 marks)

4.
 - a) Describe your approach to dealing with a lymph node biopsy received unfixed from the operating theatre. (50 marks)

 - b) Describe the immunocytochemical panels required for the diagnosis of diffuse peripheral non-Hodgkin lymphomas. (50 marks)

5. Discuss the possible lesions you may see in serial colonic biopsies, and how you would interpret them, in a patient with ulcerative colitis during follow up. (100 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
DECEMBER, 2005

Date: 6th December, 2005

Time: 9.30 a.m.- 12.30 p.m.

PAPER II

Answer four questions.

Answer each question in a separate book.

1. Write an essay on intraduct epithelial proliferative lesions of the breast with special emphasis on the histological differential diagnosis. (100 marks)
2. Discuss the differential diagnosis of intra-thoracic spindle cell tumours and which special techniques may be required to establish a diagnosis. (100 marks)
3.
 - a) Describe how you would handle a specimen of bronchial brushings and washings in a patient with a radiological lung opacity. (50 marks)
 - b) Discuss the differential diagnosis of the above, mentioning the cytological appearances. (50 marks)
4. Discuss the differential diagnosis and problems encountered in the interpretation of a liver biopsy, in an adult, with evidence of non- neoplastic bile duct pathology. (100 marks)
5. Write brief notes on the following.
 - a) Peritoneal implants in ovarian borderline tumours (25 marks)
 - b) Diagnosis of leiomyosarcoma in the uterus. (25 marks)
 - c) Hydatidiform mole (25 marks)
 - d) Villoglandular carcinoma of the endometrium (25 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD(PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 2006

Date: 27th November, 2006

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

PAPER I

Answer question (1) which is compulsory
Answer 3 other questions.
Answer each question in a separate book.

1. Why do tumours arise ? (100 marks)

2. Write an essay on the differential diagnosis of granulomatous lesions of the skin emphasizing diagnostic histological features and special stains. (100 marks)

3. Discuss the causes and effects of intracranial haemorrhage. (100 marks)

4. Discuss the possible pathologies of a scrotal mass in a 65 year old man. (100 marks)

5.
 - 5.1 List the differential diagnosis of a breast lesion with a papillary configuration. (30 marks)

 - 5.2 Discuss your diagnostic approach to this lesion based on histological features and other ancillary studies. (70 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HISTOPATHOLOGY EXAMINATION
NOVEMBER, 2006

Date: 28th November, 2006

Time: 9.00 a.m.- 12.00 noon.

PAPER II

Answer four questions.

Answer each question in a separate book.

1. Discuss the aetiopathogenesis of intracardiac causes of systemic embolism. (100 marks)

2. A patient has undergone radical surgery for carcinoma of the lower end of the oesophagus.
How would you deal with this specimen to give maximum prognostic information to the clinician. (100 marks)

3. What are the lesions that could be diagnosed on a synovial biopsy ?

Describe the histological features of each. (100 marks)

4. Describe the histology of primary peritoneal tumours in a female and indicate the special stains / techniques that would be useful in arriving at a diagnosis. (100 marks)

5. Write short notes on:
 - a) . Cytology of high grade squamous intra epithelial lesions of the uterine cervix (25 marks)
 - b) Pulmonary hypertension (25 marks)
 - c) Use of bronchial wash cytology in diagnosing lung pathology (25 marks)
 - d) The diabetic kidney (25 marks)