

M.B.B.S. 2ND PROF. EXAMINATION, JANUARY-2013
PATHOLOGY
PAPER FIRST

[Time allotted: Three hours]

[Max Marks: 40]

Note: Attempt all questions. Question should be answered as per the sequence given in the question paper.
 Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions – separate sheet given

(½ x 16=08)

Q. 2. Problem based question:

(2+2+4 =08)

18 years old boy, with a history of bee sting one hour back, presented in emergency with severe bronchospasm and shock.

- a. What is your diagnosis?
- b. Classify the disease.
- c. Discuss it's pathogenesis.

Q. 3. Classify anaemias and discuss lab diagnosis of megaloblastic anaemia.

(08)

Q. 4. Write short notes on:

(2 x 4 =08)

- a. Inclusions in RBCs
- b. Diagnosis of HIV/AIDS
- c. Shock- definition and classification
- d. Differences between benign and malignant tumors.

Q. 5. Write briefly on:

(2 x 4 =08)

- a. Intracellular accumulations
- b. Klinefelter's syndrome
- c. Hodgkin's disease –types
- d. Cellular events in acute inflammation

M.B.B.S. 2ND PROF. EXAMINATION, JANUARY- 2013**PATHOLOGY****PAPER FIRST- MCQ****Time allotted for MCQ – 15 minutes****Set - B****Q. 1. Multiple Choice questions (Encircle the single best response)****(½ x 16=08)**

1. Platelets count associated with post traumatic bleeding is:
 - a. 10 – 20,000/ μ l
 - b. 20 – 30,000/ μ l
 - c. 30 – 60,000/ μ l
 - d. None of the above
2. Double bodies are:
 - a. Toxic azurophilic granules
 - b. Rough ER aggregates
 - c. Swollen lysosomes
 - d. Cytoplasmic vacuoles
3. In American form of Burkitt's lymphoma the site of tumor is:
 - a. Maxilla
 - b. Mandible
 - c. Abdomen
 - d. Skull bones
4. "Fish-flesh" appearance of cut lymph node is seen in:
 - a. Hodgkin's lymphoma
 - b. NHL
 - c. AML
 - d. CLL
5. Philadelphia chromosome is NOT found in:
 - a. AML
 - b. CML
 - c. ALL
 - d. CLL
6. Earliest organelle to dilate:
 - a. ER
 - b. Golgibody
 - c. Lysosome
 - d. Nucleus
7. The hallmark of inflammation is:
 - a. Transient vasoconstriction
 - b. Leukocyte margination
 - c. Phagocytosis
 - d. Increased vascular permeability
8. A keloid is:
 - a. Exuberant granulation tissue
 - b. Excessive collagen accumulation
 - c. Scar due to severe burn.
 - d. Recurrent fibroblastic tumor
9. Dependent oedema is seen in:
 - a. Cirrhosis
 - b. Malnutrition
 - c. Nephritic syndrome
 - d. CHF
10. An example of co-dominance is:
 - a. Sickle cell anaemia
 - b. Haemolytic anaemia
 - c. Blood group antigens
 - d. Spermatoc antigens
11. Class I MHC molecules interact with:
 - a. Helper T cells
 - b. Cytotoxic T cells
 - c. B cells
 - d. Immature T cells
12. AIDS patients are at risk of lymphoma when CD4 count is below:
 - a. 1000/ μ l
 - b. 50/ μ l
 - c. 200/ μ l
 - d. 500/ μ l
13. Which virus is carcinogenic for liver:
 - a. HPV 16
 - b. HBV
 - c. EBV
 - d. HTLV
14. The normal myeloid to erythroid ratio is:
 - a. 3 : 1
 - b. 1 : 3
 - c. 4 : 1
 - d. 6 : 1
15. In sickle cell anaemia:
 - a. Valine replaces glutamic acid
 - b. Glutamic acid replaces valine
 - c. Valine replaces glutamine
 - d. Glutamine replaces valine
16. Transferrin is synthesized in :
 - a. Bone marrow
 - b. Spleen
 - c. Liver
 - d. Endothelium

M.B.B.S. 2ND PROF. EXAMINATION, JANUARY- 2013
PATHOLOGY
PAPER SECOND

[Time allotted: Three hours]

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Note: Attempt all questions. Question should be answered as per the sequence given in the question paper.
 Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions – separate sheet given (½ x 16=08)
- Q. 2.** Problem based question: (2+3+3 =08)
 A young female presented with cough and matted cervical lymphnodes. X-ray chest showed apical opacity.
 a. What is the diagnosis?
 b. Which investigations would you like to do to confirm the diagnosis?
 c. Discuss the etiopathogenesis and morphology of this disease.
- Q. 3.** Describe etiopathogenesis of gastric ulcer. Give the morphology of peptic ulcer. List the complications of peptic ulcer. (4+2+2= 08)
- Q. 4.** Write short notes on: (4 x 2 = 08)
 a. Polycystic kidney
 b. Hydatidiform mole
- Q. 5.** Write briefly about: (2 x 4 = 08)
 a. Morphology of giant cell tumor
 b. Teratoma
 c. Australia antigen
 d. Complications of rheumatic heart disease

M.B.B.S. 2ND PROF. EXAMINATION, JANUARY- 2013**PATHOLOGY
PAPER SECOND- MCQ****SET - A****Time allotted for MCQ – 15 minutes****Q. 1. Multiple Choice questions (Encircle the single best response)****(½ x 16=08)**

1. In hypertensive heart disease left ventricular hypertrophy is associated with:
 - a. Duration of hypertension
 - b. Severity of hypertension
 - c. Cause of hypertension
 - d. Severity of atherosclerosis
2. Medial calcification of arteries is seen in:
 - a. Monckeberg's arteriosclerosis
 - b. Atherosclerosis
 - c. Vasculitis
 - d. Hemangioma
3. Pulmonary surfactant is secreted by:
 - a. Clara cells
 - b. Membranous pneumocytes
 - c. Type II pneumocytes
 - d. Type I pneumocytes
4. The usual source of pulmonary embolism is:
 - a. Pelvic veins
 - b. Mesenteric veins
 - c. Portal veins
 - d. Deep veins of leg
5. The most common malignant tumor of oesophagus is:
 - a. Adenocarcinoma
 - b. Squamous cell carcinoma
 - c. Carcinoid
 - d. Undifferentiated carcinoma
6. Common site of duodenal ulcer is:
 - a. Posterior wall of 1st part of duodenum
 - b. Anterior wall of 1st part of duodenum
 - c. 2nd part of duodenum
 - d. Transverse part of 3rd part of duodenum
7. Malignant ulcer is differentiated from benign by:
 - a. Heaping up margins
 - b. Fibrous scar radiating from crater
 - c. Induration of base
 - d. All of the above
8. Krukenberg's tumor of ovaries can occur as a result of metastasis from:
 - a. Lung
 - b. Bone
 - c. Stomach
 - d. Liver
9. Major source of collagen in cirrhosis is:
 - a. Hepatocytes
 - b. Sinusoidal cells
 - c. Ito cells
 - d. Kupffer's cells
10. Chronic hepatitis develops in >50% of patients infected with hepatitis virus:
 - a. A
 - b. B
 - c. C
 - d. D
11. Reduction in beta cell mass of pancreas occurs in:
 - a. NIDDM
 - b. IDDM
 - c. MODY
 - d. All of the above
12. Renal cell carcinoma occurs in:
 - a. Von Hippel Lindau Syndrome
 - b. Ehlers – Danlos Syndrome
 - c. Osler – Weber – Rendu disease
 - d. Letterer – Siwe disease
13. The counterpart of testicular seminoma in ovary is:
 - a. Thecoma
 - b. Granulosa cell tumor
 - c. Androblastoma
 - d. Dysgerminoma
14. Most common invasive cancer of female genital tract is:
 - a. Cervical cancer
 - b. Endometrial carcinoma
 - c. Vaginal carcinoma
 - d. Ovarian carcinoma
15. Adroblastoma of ovaries manifests as:
 - a. Hirsutism
 - b. Breast atrophy
 - c. Amenorrhoea
 - d. All of the above
16. The most common benign breast tumor is:
 - a. Lipoma
 - b. Adenoma
 - c. Fibroma
 - d. Fibroadenoma

M.B.B.S. 2ND PROF. EXAMINATION, JUNE - 2013
PATHOLOGY
PAPER FIRST

[Time allotted: Three hours]

[Max Marks: 40]

Note. Attempt all questions. Question should be answered as per the sequence given in the question paper.
 Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions – separate sheet given

(½ x 16=08)

Q. 2. Problem based question:

(1+2+3+2=08)

A 35 years old female presented with pallor, weakness, glossitis and tingling numbness in hands and feet.

- What is the clinical diagnosis?
- What laboratory investigations would you advise?
- Write in brief about its etiopathogenesis.
- Describe peripheral smear and bone marrow findings in this disease.

Q. 3. Describe the mechanism of invasion and metastasis in cancer.

(08)

Q. 4. Write short notes on:

(4 x 2 =08)

- Type IV hypersensitivity
- Sickle cell anaemia

Q. 5. Write briefly on:

(2 x 4 =08)

- ITP
- Virchow's triad
- Differentiate between tuberculoid and lepromatous leprosy.
- Type of acute inflammation based on morphology.

M.B.B.S. 2ND PROF. EXAMINATION, JUNE - 2013**PATHOLOGY****PAPER FIRST- MCQ****Time allotted for MCQ – 15 minutes****Q. 1. Multiple Choice questions (Encircle the single best response)****(½ x 16=08)**

1. When a functional gene is inherited from one parent only, the condition is known as:
 - a. Genomic imprinting
 - b. Alleles
 - c. Mosaicism
 - d. Chimerism
2. Which of the following is NOT a component of Virchow's triad?
 - a. Activation of coagulation cascade
 - b. Endothelial injury
 - c. Stasis of blood
 - d. Blood hypercoagulability
3. During inflammation, VCAM-1 molecules on endothelium binds with:
 - a. β_1 - integrin
 - b. Sialyl-Lewis X
 - c. L selectin
 - d. β_2 - integrin
4. Painful condition called chokes and bends are seen in:
 - a. Amniotic fluid embolism
 - b. Fat embolism
 - c. Air embolism
 - d. Pulmonary embolism
5. Which of the following is NOT an endogenous pigment?
 - a. Anthracotic pigment
 - b. Melanin pigment
 - c. Homogentisic acid
 - d. Lipofuscin pigment
6. Which of the following complement proteins is a powerful chemotactic agent?
 - a. C5a
 - b. C3a
 - c. C5b
 - d. C3b
7. Osmotic fragility is increased in:
 - a. Hereditary Spherocytosis
 - b. Thalassemia
 - c. Hemophilia
 - d. Sick cell anemia
8. Heart failure cells are:
 - a. Alveolar macrophages
 - b. Alveolar epithelial cells
 - c. Endothelial cells
 - d. Phagocytosed erythrocytes
9. All of the following are components of Lyon hypothesis except:
 - a. Only one of the two X – chromosome is active
 - b. The other X – chromosome is inactive
 - c. Inactivation of same X – chromosome present throughout life
 - d. X – chromosome inactivation occurs in IInd trimester of pregnancy
10. Characteristic red blood cell seen in β – Thalassemia is:
 - a. Sick cell
 - b. Burr cell
 - c. Target cell
 - d. Pencil cell
11. Downey cells are seen in:
 - a. Hodgkins disease
 - b. Reactive lymphadenitis
 - c. Non Hodgkins Lymphoma
 - d. Infections Mononucleosis
12. Leucocytes common antigen is:
 - a. CD5
 - b. CD10
 - c. CD15
 - d. CD45
13. Malignant tumour arising from lining epithelium is called:
 - a. Sarcoma
 - b. Carcinoma
 - c. Lymphoma
 - d. Melanoma
14. Genetic defect seen in Burkitt lymphoma is:
 - a. t (9 ; 22)
 - b. t (8 ; 14)
 - c. t (15 ; 17)
 - d. inv. Of chromosomes 16
15. Anticoagulant of choice for performing coagulation studies:
 - a. EDTA
 - b. Tri sodium citrate
 - c. Heparin
 - d. Double oxalate
16. Gamma – Gandy bodies are:
 - a. Splenic macrophages
 - b. White pulp
 - c. Sidero – fibrotic nodules
 - d. Dilated sinusoids

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PATHOLOGY
PAPER SECOND

[Time allotted: Three hours]

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Note: Attempt all questions. Question should be answered as per the sequence given in the question paper.
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- Q. 1.** Multiple choice questions – separate sheet given (½ x 16=08)
- Q. 2.** Problem based question: (1+2+3+2 =08)
 A 70 years old male presented with chronic cough, hemoptysis, weight loss and right sided chest pain. X-ray showed a hilar mass.
 a. What is the clinical diagnosis?
 b. Classify the disease.
 c. Describe etiopathogenesis.
 d. Enumerate extrapulmonary manifestations.
- Q. 3.** Define and describe in short etiopathogenesis of Nephrotic syndrome. Describe commonest lesion in kidney that causes nephrotic syndrome in children and adults respectively. (2+3+3=08)
- Q. 4.** Write short notes on: (4 x 2 = 08)
 a. Morphological changes in myocardial infarction.
 b. Wilms' Tumor
- Q. 5.** Write briefly about: (2 x 4 = 08)
 a. Barrett's oesophagus
 b. Seminoma
 c. Cholelithiasis
 d. Pleomorphic adenoma
6. Dead and necrotic base seen in osteomyelitis is known as:
 a. Involucrum
 b. Sequestrum
 c. Callus
 d. Osteoid
7. Irregular spikes in Glomerular Basement membrane is seen in:
 a. MPGN
 b. Membranous GN
 c. Minimal changes disease
 d. RPGN
8. Tetralogy of Fallot is characterized by all EXCEPT:
 a. VSD
 b. Subpulmonic Stenosis
 c. RVH
 d. ASD
9. Squamous cell carcinoma
 b. Basal cell carcinoma
 c. Malignant melanoma
 d. Dermatofibroma
10. The enzyme responsible for:
 a. Alpha reductase
 b. 7 alpha reductase
 c. 3 alpha reductase
 d. 9 alpha reductase
11. Which of these is NOT a malabsorption syndrome?
 a. Whipple's disease
 b. Tropical sprue
 c. Crohn's disease
 d. Celiac's disease
12. The polyp with highest risk of malignant transformation is:
 a. Peutz-Jegher polyp
 b. Hyperplastic polyp
 c. Hamartomatous polyp
 d. Juvenile polyp
13. Gleason's Grading is used for grading carcinoma of:
 a. Breast
 b. Prostate
 c. Lung
 d. Stomach
14. Commonest malignant bone tumor is:
 a. Osteogenic sarcoma
 b. Chondrosarcoma
 c. OCT
 d. Ewing's sarcoma
15. Which of the following is NOT a pneumoconiosis:
 a. CWP
 b. Silicosis
 c. Tuberculosis
 d. Asbestosis
16. Tumor marker for yolk sac tumor is:
 a. CEA
 b. HCG
 c. EMA
 d. AFP

M.B.B.S. 2ND PROF. EXAMINATION, JUNE - 2013PATHOLOGY
PAPER SECOND- MCQTime allotted for MCQ – 15 minutes

Q. 1. Multiple Choice questions (Encircle the single best response)

(½ x 16=08)

1. Curschmann Spirals in Sputum are seen in:
 - a. Bronchial Asthma
 - b. Bronchiectasis
 - c. Emphysema
 - d. Pneumonia
2. Commonest cause of Nephrotic syndrome in adults:
 - a. MPGN
 - b. RPGN
 - c. Nephrotic Syndrome
 - d. IgA Nephropathy
3. Prion Protein is implicated in the etiology of :
 - a. Spongiform encephalopathy
 - b. Viral encephalitis
 - c. Pyogenic meningitis
 - d. Astrocytoma
4. Anitschkow cells are seen in:
 - a. Infective endocarditis
 - b. Rheumatic heart disease
 - c. Rheumatoid arthritis
 - d. Viral myocarditis
5. Hb A1c is measured in:
 - a. Nephritic syndrome
 - b. Iron deficiency anaemia
 - c. Diabetes mellitus
 - d. Hepatitis
6. Dead and necrotic bone seen in osteomyelitis is known as:
 - a. Involucrum
 - b. Osteoid
 - c. Callus
 - d. Sequestrum
7. Irregular spikes in Glomerular Basement membrane is seen in:
 - a. MPGN
 - b. Membranous GN
 - c. Minimal changes disease
 - d. RPGN
8. Tetralogy of Fallot is characterized by all EXCEPT:
 - a. VSD
 - b. Subpulmonic Stenosis
 - c. RVH
 - d. ASD
9. Peripheral palisading of nuclei in tumor sheets is a feature of:
 - a. Squamous cell carcinoma
 - b. Basal cell carcinoma
 - c. Malignant melanoma
 - d. Dermatofibroma
10. The enzyme responsible for hyperplasia in BPH is:
 - a. 5 alpha reductase
 - b. 7 alpha reductase
 - c. 3 alpha reductase
 - d. 9 alpha reductase
11. Which of these is NOT a malabsorption syndrome:
 - a. Coeliac sprue
 - b. Whipple disease
 - c. Tropical sprue
 - d. Crohn's disease
12. The polyp with highest risk of malignant transformation is:
 - a. Peutz-jegher polyp
 - b. Hyperplastic polyp
 - c. Hamartomatous polyp
 - d. Juvenile polyp
13. Gleason's Grading is used for grading carcinoma of :
 - a. Breast
 - b. Prostate
 - c. Lung
 - d. Stomach
14. Commonest malignant bone tumor is:
 - a. Osteogenic sarcoma
 - b. Chondrosarcoma
 - c. GCT
 - d. Ewing's sarcoma
15. Which of the following is NOT a pneumoconiosis:
 - a. CWP
 - b. Silicosis
 - c. Tuberculosis
 - d. Asbestosis
16. Tumor marker for yolk sac tumor is:
 - a. CEA
 - b. HCG
 - c. EMA
 - d. AFP

M.B.B.S. SECOND PROF. EXAMINATION, JUNE/JULY - 2014
PATHOLOGY
PAPER – FIRST

[Time allotted: Three hours]

Note: Attempt all Questions.

[Max Marks: 40]

Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given (½ x 16 = 08)
- Q. 2.** Give Reasons: (1 x 4 = 04)
- Site of injury is red & swollen.
 - Wound healing is delayed in patients taking corticosteroids.
 - Some tumor prefer specific organ for metastasis.
 - Workers in coal mines develop respiratory disease.
- Q. 3.** Fill in the blanks: (1 x 4 = 04)
- Caseating granulomas are seen in _____.
 - RB gene is example of _____ gene.
 - Liquifactive necrosis is seen in _____.
 - Healing by secondary intention is seen in _____.
- Q. 4.** Write in brief about: (2 x 4 = 08)
- Dystrophic calcification
 - Phagocytosis
 - Philadelphia chromosome
 - Peripheral smear and Bone marrow findings in chronic myeloid leukemia.
- Q. 5. (i)** Write in short about invasion and metastasis. (04)
- Q. 5. (ii)** Problem based question: (1 + 2 + 1 = 04)
- 15 years old boy developed sudden severe pain in the right iliac fossa with fever and local tenderness. His total leucocyte count was 15,000/ cumm. Differential count showed neutrophilia with toxic granulation.
- What is the possible diagnosis?
 - What are the gross and microscopic features of the lesion?
 - What are various complications of this disease?
- Q. 6.** Write short notes on: (2 x 4 = 08)
- Granulomatous inflammation.
 - Sickle cell anemia.
 - FAB Classification of Acute Myeloid leukemia
 - Pathogenesis of thrombosis.

M.B.B.S. SECOND PROF. EXAMINATION, JUNE/JULY - 2014

PATHOLOGY

PAPER - FIRST (MCQ)

SET - A

Time allotted for MCQ - 20 minutes

Q. 1. Multiple Choice questions (Encircle the single best response)

(0.5 x 16 = 08)

1. In Reperfusion cell injury, there is
 - a. Increased Ca^{++} in extracellular fluid
 - b. Increased Ca^{++} in the cytoplasm
 - c. Ca^{++} are equal in cytoplasm & extracellular fluid
 - d. Ca^{++} equilibrium is unaffected.
2. Class I HLA antigen is located on:
 - a. All nucleated cells of the body
 - b. B & T lymphocytes
 - c. Macrophages
 - d. Complement system
3. Calcification in necrotic tissue is called:
 - a. Metastatic calcification
 - b. Dystrophic calcification
 - c. Hyaline change
 - d. Tumoral calcinosis
4. All of the following are mediators of Inflammation except:
 - a. $\text{TNF} - \alpha$
 - b. $\text{IL} - 1$
 - c. Myeloperoxidase
 - d. Prostaglandins
5. Lines of Zahn occurs in:
 - a. Post mortem clot
 - b. Infarct
 - c. Embolus
 - d. Coralline thrombus
6. Virchow's triad includes all except:
 - a. Endothelial injury
 - b. Platelet thrombus
 - c. Stasis of Blood flow
 - d. Hypercoagulability
7. Philadelphia chromosome is an example of:
 - a. Balanced translocation
 - b. Deletion
 - c. Non-dysfunction
 - d. Duplication
8. Which of the following is not true regarding western blot?
 - a. Gel electrophoresis of proteins
 - b. DNA detection
 - c. RNA detection
 - d. Ribosome detection
9. Following cancers are common in AIDS except:
 - a. Primary CNS lymphoma
 - b. Kaposi Sarcoma
 - c. Carcinoma colon
 - d. Burkitts lymphoma
10. Which is a gatekeeper gene:
 - a. P^{53} gene
 - b. myc-proto oncogene
 - c. Erb - B1
 - d. Cyclin D
11. Hereditary spherocytosis is characterized by
 - a. Membrane skeleton abnormalities
 - b. Microtubule defect
 - c. Accumulation of intermediate filament
 - d. None of above
12. Antigen lacking in Rh-negative person is:
 - a. C
 - b. D
 - c. E
 - d. F
13. Platelet function can be assessed by:
 - a. Prothrombin time
 - b. Fibrinogen degradation products
 - c. Clotting time
 - d. Bleeding time
14. Auer rods are seen in:
 - a. AML
 - b. CML
 - c. ALL
 - d. CLL
15. Hairy cell leukemia affect:
 - a. T-Cells
 - b. B-Cells
 - c. Macrophages
 - d. Monocytes
16. Which cell is not seen in Hodgkin's lymphoma:
 - a. R. S. Cell
 - b. L & H Cell
 - c. Lacunar cell
 - d. Langerhans cell

M.B.B.S. SECOND PROF. EXAMINATION, JUNE/JULY - 2014**PATHOLOGY
PAPER - SECOND****[Time allotted: Three hours]****Note:** Attempt all Questions.**[Max Marks: 40]**

Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given (½ x 16 = 08)
- Q. 2.** Give Reasons: (1 x 4 = 04)
- Cell death occurs even after restoration of blood supply after ischemic injury in conditions such as myocardial infarction or stroke
 - Diabetes is a multisystem disease
 - Glycosylated Hemoglobin is a better indicator of diabetic control than blood glucose levels
 - Cigarette smoking is considered carcinogenic for some organs
- Q. 3.** Fill in the blanks: (1 x 4 = 04)
- Patients with Type -----Diabetes are more prone to develop Diabetic Ketoacidosis
 - Mixed salivary tumour is also called-----
 - The most common malignant ocular tumour in children is-----
 - Permanent abnormal dilatation of a blood vessel is termed-----
- Q. 4.** Write in brief about: (2 x 4 = 08)
- Carcinoid syndrome
 - Papillary carcinoma of thyroid
 - Wilm's tumor
 - Testicular tumors
- Q. 5.** (i) Discuss the etiology and pathogenesis of cirrhosis of liver. Mention the complications of cirrhosis. (04)
- Q. 5.** (ii) Problem based question: (1+1+1+1 = 04)
- A 45-year-old man was rushed to the hospital following an episode of crushing substernal chest pain with breathing difficulty. An urgent ECG was done which showed elevation of ST segment.
- What may be the possible diagnosis?
 - What other investigations will you suggest for evaluation of this case?
 - Enumerate the common complications that may arise in this case
 - What is the relation of time of treatment to prognosis?
- Q. 6.** Write short notes on: (2 x 4 = 08)
- Hydatid form mole
 - Emphysema
 - Nevus
 - Osteosarcoma

M.B.B.S. SECOND PROF. EXAMINATION, JUNE/JULY - 2014

PATHOLOGY

PAPER - SECOND (MCQ)

SET - D

Time allotted for MCQ - 20 minutes

Q. 1. Multiple Choice questions (Encircle the single best response)

(0.5 x 16 = 08)

1. A 65 year old man develops peri-umbilical pain which then shifted to the right iliac fossa. On physical examination, his temperature is 38C and his abdomen is tender. Which of the following is the most likely diagnosis?
 - a. Acute Appendicitis
 - b. Diverticulitis
 - c. Hemorrhoids
 - d. Pancreatitis
2. In an anemic patient with decreased Vitamin B₁₂ levels and antibodies to intrinsic factor, which of the following is most likely to be associated?
 - a. Duodenal ulcer
 - b. Ulcerative colitis
 - c. Dietary Vit. B₁₂ deficiency
 - d. Atrophic gastritis
3. Which type of tumour is seminoma?
 - a. Benign
 - b. Malignant
 - c. Borderline
 - d. Locally aggressive
4. Secondary hyperparathyroidism causes:
 - a. Hypercalcemia
 - b. Hypocalcemia
 - c. Normocalcemia
 - d. Normal Parathormone levels
5. Basement membrane contains which type of collagen:
 - a. Type I
 - b. Type II
 - c. Type III
 - d. Type IV
6. Which of the following laboratory test findings is most characteristic for gout?
 - a. Hyper-glycemia
 - b. Positive antinuclear antibody
 - c. Hyper-uricemia
 - d. Hyper-cholesterolemia
7. A female who has been breast feeding her baby for a month notices that her left breast has gradually become swollen and painful to touch over the past week. On physical examination her temperature is 38.2 C. Which of the following is the most likely diagnosis?
 - a. Acute mastitis
 - b. Fibrocystic disease
 - c. Fat necrosis
 - d. Galactocele
8. At autopsy, a large transmural area of coagulative necrosis was found in the anterolateral wall of the left ventricle in the heart. Which of the following microscopic findings is most likely to be present?
 - a. Fibroblasts and collagen
 - b. Granulation tissue
 - c. Necrotic muscle and neutrophils
 - d. Granulomatous inflammation
9. A thyroid neoplasm has an amyloid stroma with Congo red staining. Which of the following neoplasms is the patient most likely to have?
 - a. Anaplastic carcinoma
 - b. Medullary carcinoma
 - c. Papillary thyroid carcinoma
 - d. Metastatic renal cell carcinoma
10. Charcot Leyden crystals and Curschman's spirals are seen in :
 - a. Bronchial asthma
 - b. Chronic bronchitis
 - c. Bronchiectasis
 - d. Emphysema
11. In a patient of adenocarcinoma of prostate on regular follow-up, which serum marker will help in determining tumour recurrence:
 - a. CA 125
 - b. CEA
 - c. HCG
 - d. PSA
12. Select one diagnostic modality for screening of cervical cancer in the population:
 - a. Cervical biopsy
 - b. CT scan
 - c. Pap smear
 - d. PCR
13. C-ANCA is seen in:
 - a. PAN
 - b. Wegeners granulomatosis
 - c. Microscopic polyangiitis
 - d. Churg strauss syndrome
14. Mallory bodies are composed of :
 - a. Fat droplets
 - b. Intermediate filaments
 - c. Lysosomal enzymes
 - d. Mitochondria
15. Which germ cell tumor is positive for placental alkaline phosphatase?
 - a. Seminoma
 - b. Choriocarcinoma
 - c. Yolk sac tumor
 - d. Embryonal carcinoma
16. Struma ovarii is a monodermal teratoma composed of:
 - a. Bone
 - b. Cartilage
 - c. Thyroid tissue
 - d. Skin and appendages

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2014
PATHOLOGY
PAPER – FIRST

[Time allotted: Three hours]**[Max Marks: 40]****Note:** Attempt all Questions.

Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given ($\frac{1}{2} \times 16 = 08$)
- Q. 2.** Give Reasons of: (1 x 4 = 04)
- Atrophy
 - Ischemia/Reperfusion injury
 - Macrocytosis in megaloblastic anemia
 - Leukemoid reaction
- Q. 3.** Fill in the blanks: (1 x 4 = 04)
- The reversible change that occurs when one adult cell type is replaced by another adult cell type is known as _____.
 - The exogenous pigments are taken up by the _____.
 - In complement system _____ is a powerful chemoattractant.
 - A disorder in which only one copy of the mutant gene on one of the autosomes is necessary to cause the disease is known as _____ inheritance.
- Q. 4.** Write in brief: (2 x 4 = 08)
- Tabulate differences between Necrosis and Apoptosis.
 - Possible outcomes of acute inflammation.
 - Tabulate differences between benign and malignant tumor.
 - Draw a labeled diagram of peripheral smear found in iron deficiency anemia.
- Q. 5. (i)** Write in brief about Lab diagnosis of Megaloblastic anemia. (04)
- Q. 5. (ii)** Problem based question: (1 x 4 = 04)
- A 32-year-old woman has sudden onset of dyspnea, pleural pain, and productive cough with frothy blood tinged sputum. She had undergone cholecystectomy two days ago. Examination and investigations revealed a pulmonary pathology as cause of her symptoms.
- State the possible cause leading to her symptoms.
 - State in brief its pathogenesis.
 - Describe expected microscopic features of her lung
 - Write in brief the consequences of this pathology.
- Q. 6.** Write short notes on: (2 x 4 = 08)
- Leucocytic extravasation in inflammation
 - Granulation tissue
 - Beta Thalassemia
 - Acute myeloid leukemia

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2014
PATHOLOGY
PAPER – FIRST (MCQ)

Time allotted for MCQ – 20 minutes**Set - A****Q. 1. Multiple Choice questions ((Darken the single best response in OMR sheet) (0.5 x 16 = 08)**

1. An adaptive response of a cell consists of:
 - a. Inflammation
 - b. Hypertrophy
 - c. Dysplasia
 - d. Neoplasia
2. The hallmark of cell injury includes:
 - a. Decreased oxidative phosphorylation
 - b. Adenosine triphosphate (ATP) depletion
 - c. Cellular swelling
 - d. All of the above
3. Which of the following is not a free radical?
 - a. Singlet oxygen
 - b. Hydroxyl group
 - c. Carbon monoxide
 - d. Hydrogen peroxide
4. Under the microscope necrotic cells show:
 - a. Myelin figures
 - b. Amorphous mitochondrial densities
 - c. Increased eosinophilia
 - d. All of the above
5. The common form of necrosis related to infarcts and ischemia is:
 - a. Caseous necrosis
 - b. Liquefactive necrosis
 - c. Coagulative necrosis
 - d. Fat necrosis
6. Possible outcomes of an acute inflammation includes all EXCEPT:
 - a. Abscess formation
 - b. Atrophy
 - c. Chronic inflammation
 - d. Fibrosis
7. The granularity in cloudy swelling is NOT caused by:
 - a. Increase in size and number of mitochondria
 - b. Swelling of endoplasmic reticulum
 - c. Increased protein synthesis
 - d. Increase in size and number of lysosomes
8. During inflammation vasodilatation is caused by:
 - a. Histamine
 - b. Kinin
 - c. Prostacyclin
 - d. All of the above
9. Which of the following histological changes are considered as features of shock?
 - a. Shock lung with diffuse acute alveolar damage
 - b. Fatty liver with hepatocellular necrosis
 - c. Lipid depletion from zona fasciculate and zona reticularis of adrenals
 - d. All of the above
10. A man sustained fracture of femur in a road traffic accident, two days later suddenly he developed breathlessness, possible cause is:
 - a. Myocardial infarction
 - b. Fat embolism
 - c. Pulmonary infarction
 - d. Sepsis
11. Which of the following is an example of metastatic calcification?
 - a. Psammoma body in papillary carcinoma of thyroid gland
 - b. Calcification of a tuberculous focus in lung
 - c. Calcification in carcinoma breast
 - d. Calcification in the lung in a patient with hyperparathyroidism
12. Erythroblastosis fetalis is an example of, which of the following types of immunologically mediated cell injury:
 - a. Type I
 - b. Type II
 - c. Type III
 - d. Type V
13. Paraneoplastic syndrome is produced by:
 - a. Osteogenic sarcoma
 - b. Bronchogenic carcinoma
 - c. Seminoma
 - d. Hepatocellular carcinoma
14. Carcinoembryonic antigen is a tumor marker for:
 - a. Choriocarcinoma
 - b. Hepatocellular carcinoma
 - c. Carcinoma colon
 - d. Renal cell carcinoma
15. In case of lead poisoning, the most common site of lead accumulation is:
 - a. Bones
 - b. Red cells
 - c. Brain
 - d. Kidneys
16. Chemical mediator that aids in opsonisation in acute inflammation is:
 - a. LTB₄
 - b. C5a
 - c. IL – 1
 - d. C3b

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2014
PATHOLOGY
PAPER – SECOND

[Time allotted: Three hours]

[Max Marks: 40]

Note: Attempt all Questions.

Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given (½ x 16 = 08)
- Q. 2.** Give Reasons: (1 x 4 = 04)
- Accumulation of lipids in Fatty liver.
 - Typhoid ulcer perforate commonly.
 - Bronchopneumonia occurs in extremes of age.
 - Hyperlipidemia leads to increased risk for atherosclerosis.
- Q. 3.** Fill in the blanks: (1 x 4 = 04)
- Colonic skip lesions are seen in
 - Occupational hazard which may be associated with lung cancer is.....
 - Hepatitis A transmit through route.
 - Bence – Jones protein are demonstrated on examination.
- Q. 4.** Write in brief about: (2 x 4 = 08)
- Differentiate between nephrotic and nephritic syndrome
 - Differentiate between Type I & Type II diabetes
 - Differentiate between duodenal ulcer and gastric ulcer
 - Linitus plastica
- Q. 5.** (i) Write the Lab diagnosis and pathogenesis of complications of diabetes mellitus. (04)
- Q. 5.** (ii) Problem based question: (1 + 2 + 1 = 04)
- A 57 year old woman has had epigastric pain (which is relieved after meals) for more than 1 year. Physical examination shows no abnormal findings. Upper GI endoscopy shows small erosions along the lesser curvature of stomach.
- What is the most likely diagnosis?
 - What is the etiopathogenesis of this disease?
 - Name one common complication of the disease
- Q. 6.** Write short notes on: (2 x 4 = 08)
- Lipoid nephrosis
 - Complications of lobar pneumonia
 - Leukoplakia
 - Osteosarcoma

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2014
PATHOLOGY
PAPER – SECOND (MCQ)

Time allotted for MCQ – 20 minutes**Set-A****Q. 1. Multiple Choice questions ((Darken the single best response in OMR sheet)****(0.5 x 16 = 08)**

1. The major change in blood vessels in hypertension is:
 - a. Atherosclerosis
 - b. Hyaline arteriosclerosis
 - c. Multiple small aneurysms
 - d. Fibrinoid necrosis
2. Heart failure cells contain:
 - a. Hemosiderin
 - b. Lipofuscin
 - c. Myoglobin
 - d. Albumin
3. Aschoff cells are:
 - a. Fibroblasts
 - b. Macrophages
 - c. Neutrophils
 - d. Lymphocytes
4. Emphysema pathologically involves beyond the:
 - a. Bronchi
 - b. Terminal bronchioles
 - c. Respiratory bronchioles
 - d. Alveolar sac
5. Sputum from an asthma patient may show:
 - a. Eosinophils
 - b. Curschmann's spirals
 - c. Charcot Leyden crystals
 - d. All of the above
6. Helicobacter pylori is NOT associated with:
 - a. GI Lymphoma
 - b. Gastric cancer
 - c. Gastric leiomyoma
 - d. Gastritis
7. Which is not a premalignant condition?
 - a. Gardner's syndrome
 - b. Juvenile polyposis
 - c. Ulcerative colitis
 - d. Adenomatous polyp
8. Alkaline phosphatase is increased beyond 30KA units in:
 - a. Obstructive jaundice
 - b. Thyrotoxicosis
 - c. Polycythemia vera
 - d. Erythroblastosis foetalis
9. Onion skin lesions in the muscular layer of arteriole is seen in:
 - a. SLE
 - b. Benign nephrosclerosis
 - c. Malignant hypertension
 - d. Chronic pyelonephritis
10. Malignancy of breast is likely to be associated with:
 - a. Fibroadenoma
 - b. Epithelial hyperplasia
 - c. Duct ectasia
 - d. Fat necrosis
11. Most common carcinoma of breast is:
 - a. Infiltrating ductal carcinoma
 - b. Colloid carcinoma
 - c. Lobular carcinoma
 - d. Sarcoma phylloides
12. Kimmelstiel Wilson disease is diagnostic of:
 - a. Diabetic glomerulosclerosis
 - b. Benign hypertension
 - c. Malignant hypertension
 - d. Amyloidosis
13. Commonest type of testicular tumor is:
 - a. Teratoma
 - b. Yolk sac tumor
 - c. Seminoma
 - d. Choriocarcinoma
14. Psammoma bodies are seen in which malignancy of thyroid?
 - a. Medullary carcinoma
 - b. Papillary carcinoma
 - c. Follicular carcinoma
 - d. Anaplastic carcinoma
15. HBV is not associated with:
 - a. Chronic active hepatitis
 - b. Chronic persistent hepatitis
 - c. Postnecrotic cirrhosis
 - d. Cholangiocarcinoma
16. Toxic megacolon occurs in:
 - a. Ulcerative colitis
 - b. Crohn's disease
 - c. Whipple's disease
 - d. Reiter's disease

M.B.B.S. SECOND PROF. EXAMINATION, JUNE - 2015
PATHOLOGY
PAPER - FIRST

[Time allotted: Three hours]

[Max Marks: 40]

Note: Attempt all Questions.

Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given ($\frac{1}{2} \times 16 = 08$)
- Q. 2.** Give Reasons: (1 x 4 = 04)
- Infection in AIDS.
 - Edema in nephrotic syndrome.
 - Delayed wound healing in Diabetes
 - Why Barr body is formed.
- Q. 3.** Problem based question: (1 + 2 + 1 = 04)
- 30 Yrs Female presented in emergency with unconsciousness. She had delivered a baby at home, assisted by a Dai few days back with history of profuse bleeding following delivery:
- What is your clinical diagnosis?
 - What investigations will you like to perform to confirm the diagnosis?
 - Classify the condition she presented with in the emergency.
- Q. 4.** Write short notes on: (2 x 4 = 08)
- Metaplasia
 - Turner's syndrome
 - Stains of Amyloid
 - GVHD
- Q. 5.** (i) Enumerate some chemical carcinogens & discuss chemical carcinogenesis. (1 + 3 = 04)
- (ii) Discuss the morphological types of Hodgkin's lymphoma. (04)
- Q. 5.** Write in Brief: (2 x 4 = 08)
- Causes of delayed wound healing.
 - Draw well labeled diagram of well formed epithelioid granuloma.
 - Draw well labeled diagram of PBS of Iron deficiency anemia.
 - Fate of thrombus.

M.B.B.S. SECOND PROF. EXAMINATION, JUNE - 2015
PATHOLOGY
PAPER – FIRST (MCQ)

Time allotted for MCQ – 20 minutes**Set - B****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(0.5 x 16 = 08)**

1. Secondary amyloidosis is observed in all except:
 - a. Chronic osteomyelitis
 - b. Crohn's disease
 - c. Bronchiectasis
 - d. Carcinoid appendix
2. An 8 years old boy was stung by bees on the leg followed by swelling of the whole leg in 30 minutes. The reaction probably is mediated by:
 - a. IgG
 - b. IgM
 - c. IgE
 - d. Complement
3. Which of the following does not undergo hyperplasia?
 - a. Liver
 - b. Kidney
 - c. Heart
 - d. Skin epithelium
4. Which is false about metaplasia?
 - a. Barrett's oesophagus is an example of metaplasia
 - b. Metaplasia is reversible
 - c. Metaplasia is always a precancerous condition
 - d. In squamous metaplasia the columnar cell differentiates to the squamous cell
5. HbA2 is increased in:
 - a. Sick cell anemia
 - b. Thalassemia major
 - c. Megaloblastic anemia
 - d. Iron deficiency anemia
6. The highest value of ESR is likely to be seen in:
 - a. Multiple myeloma
 - b. Tuberculosis
 - c. Rheumatic fever
 - d. Polycythemia vera
7. Increased serum Ferritin is seen in:
 - a. Thalassemia major
 - b. Megaloblastic anemia
 - c. Iron deficiency anemia
 - d. Aplastic anemia
8. Leishman's stain contains Eosin and Methylene blue dissolved in:
 - a. Ethyl alcohol
 - b. Methyl alcohol
 - c. Buffered water
 - d. Acetone
9. M spike in multiple myeloma is usually due to:
 - a. IgM
 - b. IgG
 - c. IgE
 - d. Light Chains
10. Auer rods are characteristically seen in:
 - a. AML M₀
 - b. AML M₅
 - c. AML M₂
 - d. ALL L₂
11. Arterial thrombus is characterized by all except:
 - a. Lines of Zahn
 - b. Attachment to vessel wall
 - c. Resembles coagulated blood
 - d. May be mural
12. Smoking is causative factor in the following malignancies except:
 - a. Lung Cancer
 - b. Bladder Cancer
 - c. Laryngeal Cancer
 - d. Intestinal Cancer
13. Leukotriene B₄ causes:
 - a. Vasoconstriction
 - b. Vasodilatation
 - c. Platelet aggregation
 - d. Chemotaxis
14. Following are the components of granulation tissue except:
 - a. Capillaries
 - b. Necrotic cells
 - c. Fibroblasts
 - d. Collagen fibrils
15. Wear and tear pigment of the body is:
 - a. Hemosiderin
 - b. Melanin
 - c. Bilirubin
 - d. Lipofuscin
16. Apoptosis is inhibited by:
 - a. p53
 - b. n-myl
 - c. ras
 - d. bcl 2

M.B.B.S. SECOND PROF. EXAMINATION, JUNE - 2015
PATHOLOGY
PAPER – SECOND

[Time allotted: Three hours]

[Max Marks: 40]

Note: Attempt all Questions.

Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions- separate sheet given

($\frac{1}{2} \times 16 = 08$)

Q. 2. Give Reasons:

- a. What causes Barret's esophagus?
- b. Krukenberg Tumor
- c. Hirschsprung's disease
- d. Nutmeg liver

(1 x 4 = 04)

Q. 3. Problem based question:

(1 x 4 = 04)

A 4-year-old male child came to emergency with abrupt onset of high grade fever, shaking chills, and cough productive of mucopurulent sputum. On respiratory examination there was poor airway entry, and friction rub. TLC & DLC showed leucocytosis and neutrophilia. On X-Ray chest whole lower lobe was radio-opaque.

- a. Explain the cause of his presenting symptoms
- b. Discuss the etio-pathogenesis of his illness
- c. State another lab test that can help in the treatment.
- d. State the complications of his illness

Q. 4. Write short notes on:

(2 x 4 = 08)

- a. Pathologic changes in secondary pulmonary tuberculosis
- b. Pathogenesis of the complications of diabetes
- c. Basal cell carcinoma
- d. Cholelithiasis

Q. 5. (i) Write in brief about clinical manifestations and lab diagnosis of AIDS.

(04)

(ii) Define and describe in short etiopathogenesis of Nephrotic syndrome. Describe commonest lesion in kidney that causes nephrotic syndrome in children and adults respectively.

(2+1+1=04)

Q. 6. Write in brief about:

(2 x 4 = 08)

- a. Draw a labelled diagram showing microscopic features of an atheromatous plaque
- b. Tabulate differences between microscopic features of Crohn's Disease and Ulcerative colitis
- c. Carcinoid tumors.
- d. List the consequences and complications of myocardial infarction

M.B.B.S. SECOND PROF. EXAMINATION, JUNE - 2015**PATHOLOGY****PAPER – SECOND (MCQ)****Time allotted for MCQ – 20 minutes****Set - B****Q 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(0.5 x 16 = 08)**

1. The cells involved in the evolution of myocardial infarction include
 - a. Neutrophils
 - b. Macrophage
 - c. Fibroblast
 - d. All of the above
2. All statements are true except in Renal cell carcinoma
 - a. Can be treated effectively by chemotherapy
 - b. Is more common in young women
 - c. Arises from the glomerular epithelium
 - d. Metastasizes most commonly to lungs
3. Occupational exposure to asbestos is linked to all of the following EXCEPT
 - a. Tuberculosis
 - b. Mesothelioma
 - c. Pleural effusion
 - d. Lung carcinoma
4. H. pylori virulence is linked to
 - a. Flagella
 - b. Urease
 - c. Adhesions
 - d. All of the above
5. Alpha 1-antitrypsin deficiency
 - a. Is an autosomal recessive disorder
 - b. Leads to pulmonary fibrosis
 - c. Causes liver fibrosis
 - d. Is an autosomal dominant disorder
6. Nodular glomerulosclerosis is a characteristic feature of
 - a. Amyloidosis
 - b. SLE
 - c. Membranous glomerulonephritis
 - d. Diabetes mellitus
7. Sentinel lymph node biopsy is important in the management of
 - a. Carcinoma lung
 - b. Carcinoma cervix
 - c. Breast cancer
 - d. Oral cancer
8. Medullary carcinoma of the thyroid arises from
 - a. Follicular cells
 - b. C-cells of thyroid
 - c. Parathyroid cells
 - d. Primitive pluripotent cells in thyroid
9. Giant cell tumor arises from
 - a. Epiphysis
 - b. Diaphysis
 - c. Metaphysis
 - d. Articular cartilage
10. Ultraviolet radiation causes
 - a. Lupus erythematosus
 - b. Melanoma
 - c. Squamous cell carcinoma of skin
 - d. Basal cell carcinoma of skin
11. Gestational diabetes mellitus is screened by
 - a. Glucose tolerance test
 - b. Galactose tolerance test
 - c. Glucose challenge test
 - d. Tolbutamide challenge test
12. Hepatorenal syndrome is characterized by
 - a. Renal hypoperfusion
 - b. Oliguria, azotemia
 - c. Increased plasma creatinine level
 - d. All of the above
13. The female genital tract pathology associated with Human Immunodeficiency Virus infection is:
 - a. Endocervical polyp
 - b. Invasive cancer of the uterine cervix
 - c. Vaginal intraepithelial neoplasia.
 - d. Lichen simplex chronicus.
14. Regarding Phyllodes tumour all are true EXCEPT
 - a. It is mostly seen in the sixth decade.
 - b. The high grade type resembles fibroadenoma.
 - c. It arises from intralobular stroma.
 - d. It shows high risk of local recurrence.
15. Nephritic syndrome is NOT characterised by
 - a. Hyperlipidemia
 - b. Oliguria
 - c. Proteinuria
 - d. Hematuria
16. Arteriosclerosis
 - a. Involves radial & ulnar arteries
 - b. Is characterized by hyaline thickening and proliferative change
 - c. Results in pipestem arteries
 - d. Is characterized by calcific deposits

Regn. No.

Paper Code: 203

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2015
PATHOLOGY
PAPER - FIRST

[Time allotted: Three hours]

[Max Marks: 40]

Note: Attempt all Questions.

Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions- separate sheet given

($\frac{1}{2} \times 16 = 08$)

Q. 2. Give Reasons:

- Smoking is injurious to health?
- Oxygen derived free radicals are harmful to host.
- Delayed wound healing.
- Some cells show only Hypertrophy.

(1 x 4 = 04)

Q. 3. Problem based question:

(2+1+1 = 04)

A young man injured in road traffic accident was brought to Hospital Emergency. He was bleeding profusely, had weak pulse and very low blood pressure.

- What is he suffering from clinically? Classify this condition.
- What investigations will you suggest to confirm the diagnosis?
- His condition is 'life-threatening' - why?

Q. 4. Write in brief:

(2 x 4 = 08)

- The fate of a thrombus.
- Draw a labeled diagram of caseous granuloma.
- What are Natural Killer Cells and how do they act?
- Give the algorithm of coagulation cascade.

Q. 5. (i) Discuss similarities & differences between Benign & Malignant neoplasms and describe the mechanism of Metastasis.

(04)

(ii) Discuss etiology and morphological changes in peripheral blood smear & bone marrow in a case of megaloblastic anaemia. What other investigations are indicated in this case?

(2+2 = 04)

Q. 6. Write short notes on:

(2 x 4 = 08)

- Reperfusion Injury
- Klinefelter syndrome
- Cytokines
- Opportunistic infections in AIDS.

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2015**PATHOLOGY****PAPER – FIRST (MCQ)****Time allotted for MCQ – 20 minutes****SET- C****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(½ x 16 = 08)**

1. Venous emboli are most often lodged in :
 - a. Intestines
 - b. Kidneys
 - c. Lungs
 - d. Heart
2. Lepromin test is always positive in
 - a. Lepromatous leprosy
 - b. Borderline lepromatous leprosy
 - c. Tuberculoid leprosy
 - d. Indeterminate leprosy
3. Tubercle bacilli in caseous lesions are best demonstrated in:
 - a. Caseous centre
 - b. Margin of necrosis with viable tissue
 - c. Epithelioid cells
 - d. Langhan's giant cells
4. Formation of granuloma is:
 - a. Type I hypersensitivity reaction
 - b. Type II hypersensitivity reaction
 - c. Type III hypersensitivity reaction
 - d. Type IV hypersensitivity reaction
5. P53:
 - a. Activates cyclins
 - b. Activates BAX
 - c. Activates CDKs
 - d. Activates bcl2
6. The following malignant tumours frequently spread through haematogenous route EXCEPT?
 - a. Bronchogenic carcinoma
 - b. Renal cell carcinoma
 - c. Follicular carcinoma thyroid
 - d. Seminoma testis
7. Hypercalcaemia as a paraneoplastic syndrome is observed in the following tumours EXCEPT?
 - a. Squamous cell carcinoma lung
 - b. Small cell carcinoma lung
 - c. Renal cell carcinoma
 - d. Breast cancer
8. Mutations affecting germ cells produce:
 - a. Cancers
 - b. Inherited diseases
 - c. Congenital malformations
 - d. Aneuploidy
9. Red cell membrane defects include the following EXCEPT:
 - a. Spherocytosis
 - b. Ovalocytosis
 - c. Leptocytosis
 - d. Echinocytosis
10. ABO human blood group system was first described by:
 - a. Edward Jenner
 - b. Karl Landsteiner
 - c. Hippocrates
 - d. Laennec
11. Father of cellular pathology is:
 - a. Carl Rokitansky
 - b. Rudolf Virchow
 - c. Morgagni
 - d. FT Schwann
12. Enzyme which prevents aging is:
 - a. Catalase
 - b. Superoxide dismutase
 - c. Metalloproteinase
 - d. Telomerase
13. For metaplasia the following holds TRUE:
 - a. It is a disordered growth
 - b. It affects only epithelial tissue
 - c. It is a reversible change
 - d. It is an irreversible and progressive change.
14. In autoimmune hemolytic anemia, the following type of immunologic tissue injury is involved:
 - a. Type I (anaphylactic)
 - b. Type II (cytotoxic)
 - c. Type III (immune complex)
 - d. Type IV (cell mediated)
15. Test useful for detection of HIV during window period:
 - a. ELISA
 - b. Western blot
 - c. CD4+ cell count
 - d. p24 antigen capture assay
16. Transudate differ from exudate in having the following EXCEPT:
 - a. No inflammatory cells
 - b. Low glucose content
 - c. Low protein content
 - d. Low specific gravity

Regn. No.....

Paper Code: 202

M.B.B.S. SECOND PROF. EXAMINATION, JANUARY - 2015
PATHOLOGY
PAPER - SECOND

[Max Marks: 40]

[Time allotted: Three hours]

Note: Attempt all Questions.

Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions- separate sheet given

($\frac{1}{2} \times 16 = 08$)

Q. 2. Give Reasons:

(1 x 4 = 04)

- Sialolithiasis is more common in submandibular salivary gland
- H. pylori survives in acidic secretions.
- Creeping fat is seen in Crohn's disease.
- Pneumothorax in emphysema.

Q. 3. Problem based question:

(1+1+2 = 04)

A 68 yrs old man presented with severe anemia and weight loss. Endoscopy showed a non healing ulcer on lesser curvature.

- What is your diagnosis?
- What investigations would you advise & why?
- Discuss pathogenesis of the disease.

Q. 4. Write in brief:

(2 x 4 = 08)

- Stones found in gall bladder.
- Peptic ulcer with a labeled diagram.
- Seminoma with a labeled diagram.
- Risk factors for MI.

Q. 5. (i) Routs of transmission, pathogenesis & morphology of Hepatitis B virus.

(1+2+1 = 04)

(ii) Classify glomerular diseases and discuss its pathogenesis.

(1+3 = 04)

Q. 6. Write short notes on:

(2 x 4 = 08)

- Meningioma
- Hashimoto's thyroiditis
- Coalworker pneumoconiosis
- Fibroadenoma

Regn. No.

Paper Code MBBS203

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY - 2016

PATHOLOGY

PAPER – FIRST (SAQ)

[Time allotted: Three hours]

[Max Marks: 40]

Ncte: Attempt all Questions.
Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given (½ x 16 = 08)
- Q. 2. Give Reasons:** (1 x 4 = 04)
- 'Bends' and 'Chokes' are seen in deep sea divers.
 - Prolonged bed rest causes reduced size of muscles.
 - Ageing heart valves do not function properly.
 - Autosplenectomy is seen in sickle cell anemia.
- Q. 3. Problem based question:** (1+2+1 = 04)
- A 61 year old woman presented with increased fatigability, weight loss and a dragging sensation in the abdomen. There was no focus of underlying infection. Her TLC was 1.6 lac/cumm.
- What is your diagnosis?
 - Draw a general blood picture of this condition.
 - What is the molecular pathogenesis of this condition?
- Q. 4. Write short notes on:** (2 x 4 = 08)
- Disseminated Intravascular Coagulation.
 - Wound healing.
 - Structure of HIV with a labelled diagram.
 - Classification of amyloidosis.
- Q. 5. (i)** Write differences between Necrosis and Apoptosis. (2+2 = 04)
- (ii)** Discuss molecular basis of cancer. (2+2 = 04)
- Q. 6. Write in Brief:** (2 x 4 = 08)
- Down Syndrome
 - Alcoholic cirrhosis
 - Hypersplenism
 - Paraneoplastic Syndromes

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY - 2016**PATHOLOGY****PAPER – FIRST (MCQ)****Time allotted for MCQ – 20 minutes****Set - D****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(½ x 16 = 08)**

1. In auto immune haemolytic anemia, the following type of immunologic injury is involved:
 - a. Type I
 - b. Type II
 - c. Type III
 - d. Type IV
2. bcl2:
 - a. Activates cyclins
 - b. Promotes apoptosis
 - c. Blocks apoptosis
 - d. Causes cell cycle arrest
3. Papilloma virus causes:
 - a. Gastritis
 - b. Skin warts
 - c. Blindness
 - d. Aiopeia
4. There is physiological _____ of uterus in pregnancy:
 - a. Atrophy
 - b. Hyperplasia
 - c. Hypertrophy
 - d. Dystrophy
5. Which cytokine is considered responsible for cancer cachexia?
 - a. FGF-β
 - b. TNF
 - c. PDGF
 - d. IL-6s
6. Which of these is not an anti oxidant?
 - a. Iron
 - b. Copper
 - c. Calcium
 - d. Vit E
7. Hall mark of acute inflammation is:
 - a. Angiogenesis
 - b. Increased vascular permeability
 - c. Endothelial injury
 - d. Fibroblastic proliferation
8. Which of these is a preformed chemical mediator of inflammation?
 - a. Complement
 - b. Cytokines
 - c. Histamine
 - d. Prostaglandin
9. Type of collagen in basement membrane is:
 - a. I
 - b. II
 - c. III
 - d. IV
10. Heart failure cells are seen in:
 - a. Hyperaemia
 - b. Congestion
 - c. Edema
 - d. Infarction
11. Red infarct is seen in:
 - a. Kidney
 - b. Spleen
 - c. Lungs
 - d. Heart
12. Large Granular Lymphocytes are:
 - a. Promyelocytes
 - b. NK cells
 - c. Mast cells
 - d. B cells
13. Which of these drugs can cause aplastic anemia?
 - a. Aspirin
 - b. Chloramphenicol
 - c. Albendazole
 - d. Primaquine
14. Glanzmann's thrombasthenia is due to deficiency of:
 - a. Gp Ib-IX
 - b. Gp IIb-IIIa
 - c. ADP
 - d. vWF
15. Which test is done to monitor DIC?
 - a. APTT
 - b. FDP
 - c. TLC
 - d. FVIII
16. Mycosis Fungoides is a type of:
 - a. B cell lymphoma
 - b. T cell lymphoma
 - c. Hodgkins L ymphoma
 - d. Fungal infection

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY - 2016**PATHOLOGY****PAPER – SECOND (SAQ)****[Time allotted: Three hours]****[Max Marks: 40]****Note:** Attempt all Questions.

Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions- separate sheet given**(½ x 16 = 08)****Q. 2. Give Reasons:****(1 x 4 = 04)**

- Mantoux test is not considered confirmatory.
- Hypoproteinemia in nephrotic syndrome.
- Some people are more prone to atherosclerosis.
- H pylori can survive in acidic media.

Q. 3. Problem based question:**(1 + 2 + 1 = 04)**

A known diabetic patient aged 60 years complained of chest and neck pain since past 4 hours. Soon he started feeling dizzy and was taken to hospital. His pulse was rapid and weak and he developed progressive dyspnea. Electrocardiogram revealed ST segment changes and inverted T-wave.

- What is your possible diagnosis?
- What investigations will you order to confirm your diagnosis?
- What are the possible outcomes of this disease?

Q. 4. Write short notes on:**(2 x 4 = 08)**

- Fibroadenoma
- PAN
- Emphysema
- Glucose tolerance test

Q. 5. (i) Enumerate four causes of Proteinuria and discuss 24 hour urine protein estimation.**(04)****(ii) Discuss pathogenesis, morphology and diagnosis of carcinoma cervix.****(04)****Q. 6. Write in Brief:****(2 x 4 = 08)**

- Staghorn calculus
- Fatty liver
- Osteogenic sarcoma
- Basal cell carcinoma

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY - 2016**PATHOLOGY****PAPER – SECOND (MCQ)****Time allotted for MCQ – 20 minutes****Set - C****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(½ x 16 = 08)**

1. Which one of the following diseases characteristically causes fatty change in liver?
 - a. Hepatitis B virus infection
 - b. Wilson's disease
 - c. Hepatitis C virus infection
 - d. Chronic alcoholism
2. Aschoff's nodules are seen in:
 - a. Subacute bacterial endocarditis
 - b. Libman-Sacks endocarditis
 - c. Rheumatic carditis
 - d. Non-bacterial Thrombotic endocarditis
3. In patients with jaundice which of the following collects in the circulation and interstitial spaces:
 - a. Lymphocytes
 - b. Nitric oxide
 - c. Biliverdin
 - d. Bilirubin
4. Silicosis is most often complicated by:
 - a. Asthma
 - b. Carcinoma of lung
 - c. Mesothelioma
 - d. Tuberculosis
5. 'Skip lesions' in intestine is the term applied to lesions of:
 - a. Chronic ulcerative colitis
 - b. Crohn's disease
 - c. Typhoid ulcer
 - d. Tuberculosis
6. Ovarian homologue of seminoma of testis is:
 - a. Embryonal carcinoma
 - b. Dysgerminoma
 - c. Yolk sac tumour
 - d. Choriocarcinoma
7. Clinically, crescentic glomerulonephritis characteristically manifests as:
 - a. Rapidly progressive disease
 - b. Indolent clinical course with gradual progression to chronic renal failure
 - c. Nephrotic syndrome
 - d. Asymptomatic haematuria
8. Tuberculosis is common in all the following organ EXCEPT:
 - a. Lung
 - b. Brain
 - c. Thyroid
 - d. Intestine
9. Dead bone is termed:
 - a. Necrosis
 - b. Involucrum
 - c. Sequestrum
 - d. Debris
10. Earliest lesion in atherosclerosis is:
 - a. Fibrofatty plaque
 - b. Fatty streak
 - c. Thrombi
 - d. Fibrous cap
11. Transitional epithelium is found in:
 - a. Gall bladder
 - b. Uterus
 - c. Ureter
 - d. Epididymis
12. Helicobacter is a bacteria that causes:
 - a. Lyme disease
 - b. Gastritis and peptic ulcer
 - c. Bronchitis and Asthma
 - d. Oral ulcers and leucoplakia
13. Fever, salivary gland inflammation and orchitis are a feature of:
 - a. Infectious mononucleosis
 - b. Herpetic infection
 - c. Mumps
 - d. Measles
14. The largest cell in human body:
 - a. Lymphocytes
 - b. Fat cells
 - c. RBCs
 - d. Mature ova
15. Increased plasma levels of-----or decreased plasma levels of----- predispose a person to atherosclerosis:
 - a. LDL,HDL
 - b. PDGF,LDL
 - c. LDL,PDGF
 - d. HDL,LDL
16. Psammoma body is seen in which condition?
 - a. Papillary carcinoma of thyroid
 - b. Follicular carcinoma of thyroid
 - c. Dysgerminoma ovary
 - d. Astrocytoma

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY - 2016**PATHOLOGY****PAPER – SECOND (MCQ)****Time allotted for MCQ – 20 minutes****Set - D****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(½ x 16 = 08)**

1. 'Skip lesions' in intestine is the term applied to lesions of:
 - a. Chronic ulcerative colitis
 - b. Crohn's disease
 - c. Typhoid ulcer
 - d. Tuberculosis
2. Ovarian homologue of seminoma of testis is:
 - a. Embryonal carcinoma
 - b. Dysgerminoma
 - c. Yolk sac tumour
 - d. Choriocarcinoma
3. Clinically, crescentic glomerulonephritis characteristically manifests as:
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 - c. Nephrotic syndrome
 - d. Asymptomatic haematuria
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 - a. Lung
 - b. Brain
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 - d. Intestine
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 - b. Involucrum
 - c. Sequestrum
 - d. Debris
6. Earliest lesion in atherosclerosis is:
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 - c. Thrombi
 - d. Fibrous cap
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 - c. Ureter
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 - a. Lyme disease
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 - c. Bronchitis and Asthma
 - d. Oral ulcers and leucoplakia
9. Fever, salivary gland inflammation and orchitis are a feature of:
 - a. Infectious mononucleosis
 - b. Herpetic infection
 - c. Mumps
 - d. Measles
10. The largest cell in human body:
 - a. Lymphocytes
 - b. Fat cells
 - c. RBCs
 - d. Mature ova
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 - b. PDGF,LDL
 - c. LDL,PDGF
 - d. HDL,LDL
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 - b. Follicular carcinoma of thyroid
 - c. Dysgerminoma ovary
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 - a. Subacute bacterial endocarditis
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 - c. Rheumatic carditis
 - d. Non—bacterial Thrombotic endocarditis
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 - a. Lymphocytes
 - b. Nitric oxide
 - c. Biliverdin
 - d. Bilirubin
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 - a. Asthma
 - b. Carcinoma of lung
 - c. Mesothelioma
 - d. Tuberculosis

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, APRIL/MAY - 2016
PATHOLOGY
PAPER – FIRST (SAQ)

[Time allotted: Three hours]**[Max Marks: 40]****Note:** Attempt all Questions.

Draw suitable diagrams wherever necessary.

- Q. 1.** Multiple choice questions- separate sheet given ($\frac{1}{2} \times 16 = 08$)
- Q. 2.** Give Reasons for: (1 x 4 = 04)
- a. Bleeding in Disseminated intravascular Coagulation.
 - b. Acid fast property of Mycobacterium.
 - c. Crepitations in Gas Gangrene
 - d. Nuclear Cytoplasmic asynchrony in Megaloblastic Anemia.
- Q. 3.** Problem based question: (1 + 2 + 1 = 04)
- A 13 yr. old boy presented with breathlessness on exertion. On examination he had pallor and ova & cysts in stool.
- a. What is your clinical diagnosis?
 - b. Outline the investigations to confirm the diagnosis.
 - c. Classify the Disease.
- Q. 4.** Write short notes on: (2 x 4 = 08)
- a. Multiple Myeloma
 - b. Factors affecting wound healing.
 - c. Down's Syndrome
 - d. Classification of Acute Myeloid Leukemia.
- Q. 5.** (i) Draw labeled diagram of granuloma, write its pathogenesis & enumerate its causes. (04)
- (ii) Define Shock, classify Shock and write pathogenesis of Septic Shock. (04)
- Q. 6.** Write in Brief: (2 x 4 = 08)
- a. Differences between benign and malignant neoplasm.
 - b. Method of demonstration of amyloid.
 - c. Harmful effects of alcohol.
 - d. Type IV Hypersensitivity reaction Pathogenesis.

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, APRIL/MAY - 2016**PATHOLOGY****PAPER – FIRST (MCQ)****Time allotted for MCQ – 20 minutes****Set - B****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet) (½ x 16 = 08)**

1. Milroy's disease is:
 - a. Cerebral oedema
 - b. Pulmonary oedema
 - c. Hereditary lymphoedema
 - d. Postural oedema
2. Active hyperaemia is the result of:
 - a. Dilatation of capillaries
 - b. Dilatation of arterioles
 - c. Venous engorgement
 - d. Lymphatic obstruction
3. The following reduces the healing:
 - a. Increased vascularity
 - b. Oxygenation
 - c. Restricted movement
 - d. Diabetes mellitus
4. Turner's syndrome is:
 - a. 45-XO
 - b. 47-XXY
 - c. Trisomy 21
 - d. Trisomy 19
5. Test useful for detection of HIV during window period:
 - a. ELISA
 - b. Western Blot
 - c. CD4⁺ cell count
 - d. p24 antigen capture assay
6. The following form of ionising radiation exposure is associated with highest risk of cancer:
 - a. α-rays
 - b. β- rays
 - c. γ- rays
 - d. x-rays
7. Actin and myosin proteins are found in:
 - a. Microtubules
 - b. Microfilaments
 - c. Intermediate filaments
 - d. Ribosomes
8. Diabetic foot is an example of :
 - a. Dry gangrene
 - b. Wet gangrene
 - c. Gas gangrene
 - d. Necrotizing inflammation
9. Which of the following is proapoptotic?
 - a. p53
 - b. Bcl-2
 - c. Crma
 - d. BAX
10. Transplantation antigens are located on:
 - a. Chromosome 1
 - b. Chromosome 9
 - c. Chromosome 6
 - d. Chromosome 22
11. Graves disease is a type of :
 - a. Type I reaction
 - b. Type II reaction
 - c. Type III reaction
 - d. Type IV reaction
12. Haematoxylin body represents:
 - a. Nuclear chromatin material
 - b. RNA
 - c. Cytosolic Components
 - d. Cell membrane components
13. Prion proteins are implicated in the etiology of:
 - a. Spongiform encephalopathy
 - b. Viral encephalitis
 - c. Perivenous encephalomyelitis
 - d. Progressive multifocal leucoencephalopathy
14. An example of tumor associated antigens is:
 - a. Testis specific antigen (MAGE)
 - b. Alfa-fetoprotein (AFP)
 - c. Carcino-embryonic antigen (CEA)
 - d. Prostate Specific antigen (PSA)
15. Teratoma arises from:
 - a. Only ectoderm
 - b. Only mesoderm
 - c. Only endoderm
 - d. More than one germ layer
16. The following type of oedema is characteristically dependent oedema:
 - a. Nephrotic Oedema
 - b. Nephritic Oedema
 - c. Cardiac Oedema
 - d. Pulmonary Oedema

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, APRIL/ MAY- 2016
PATHOLOGY
PAPER – SECOND (SAQ)

[Time allotted: Three hours]**[Max Marks: 40]****Note:** Attempt all Questions.

Draw suitable diagrams wherever necessary.

Q. 1. Multiple choice questions- separate sheet given

(½ x 16 = 08)

Q. 2. Give Reasons:

(1 x 4 = 04)

- a. Gray hepatisation is seen in lobar pneumonia
- b. *H. pylori* causes chronic gastritis
- c. Exophthalmos is seen in Graves disease
- d. Pneumothorax in emphysema.

Q. 3. Problem based question:

(1+2+1 = 04)

A 42 year old obese female presented with pain in chest which was radiating to the back. ECG showed inversion of T wave.

- a. What is your diagnosis?
- b. What are the risk factors associated with this condition?
- c. What investigations will you do in this condition?

Q. 4. Write short notes on:

(2 x 4 = 08)

- a. Complications of Diabetes Mellitus
- b. Benign Prostate Hyperplasia
- c. Atherosclerosis with a labelled diagram
- d. Rheumatic Heart Disease

Q. 5. (i) Write differences between Ulcerative Colitis and Crohn's disease.

(04)

(ii) Write in brief about osteogenic sarcoma.

(04)

Q. 6. Write in Brief:

(2 x 4 = 08)

- a. Teratoma
- b. Rheumatoid arthritis
- c. Emphysema
- d. Fibroadenoma

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, APRIL/ MAY- 2016**PATHOLOGY****PAPER – SECOND (MCQ)****Time allotted for MCQ – 20 minutes****Set - B****Q. 1. Multiple Choice questions (Darken the single best response in OMR sheet)****(½ x 16 = 08)**

1. Which hepatitis virus is replication defective?
 - a. Hepatitis B virus
 - b. Hepatitis C virus
 - c. Hepatitis D virus
 - d. Hepatitis E virus
2. Which is not a risk factor for gall stones?
 - a. Pregnancy
 - b. Obesity
 - c. Lactation
 - d. Chronic haemolytic syndromes
3. Crescent formation is seen in:
 - a. Minimal Change Disease
 - b. Rapidly Progressing Glomerulonephritis
 - c. Ig A nephropathy
 - d. Membranous glomerulonephritis
4. Which of these is a germ cell tumor of ovary?
 - a. Brenner tumor
 - b. Endometrioid tumor
 - c. Mucinous cystadenoma
 - d. Yolk Sac Tumor
5. Example of breast carcinoma with good prognosis:
 - a. Medullary
 - b. Metaplastic
 - c. Sarcomatoid
 - d. Comedocarcinoma
6. The most common clinical presentation in pheochromocytoma is:
 - a. Obesity
 - b. Hirsutism
 - c. Hypertension
 - d. Pathological fracture
7. Osteoclasoma is also called:
 - a. Round cell tumor
 - b. PNET
 - c. Spindle cell tumor
 - d. Giant cell tumor
8. Basal cell carcinomas do not:
 - a. Ulcerate
 - b. Metastasize
 - c. Show stromal retraction
 - d. Show peripheral palisading
9. Goodpasture syndrome affects:
 - a. Lungs
 - b. Kidneys
 - c. Both
 - d. None
10. Kimmelsteil Wilson lesions are seen in:
 - a. Heart
 - b. Lungs
 - c. Eyes
 - d. Kidney
11. Which is not found in tobacco smoke?
 - a. Polonium-210
 - b. PAH
 - c. Acetaldehyde
 - d. NNN
12. Which of the following organism can cause vasculitis?
 - a. Schistosoma
 - b. Neisseria
 - c. Candida
 - d. Hemophilus
13. α -1 antitrypsin deficiency is associated with:
 - a. Bronchitis
 - b. Bronchiectasis
 - c. Asthma
 - d. Emphysema
14. Krukenberg tumor is usually a type of:
 - a. Signet ring adenocarcinoma
 - b. Squamous cell carcinoma
 - c. Transitional cell carcinoma
 - d. Papillary carcinoma
15. The commonest site of carcinoid tumor in GIT is:
 - a. Stomach
 - b. Ileum
 - c. Appendix
 - d. Jejunum
16. Best test to assess hepatocyte function in liver disease is:
 - a. AST
 - b. ALT
 - c. Albumin
 - d. Bilirubin

**PATHOLOGY
PAPER- FIRST**

Note: Attempt all questions
Draw suitable diagrams (wherever necessary)

- Q. 2. Give Reasons:** (1 x 4 = 04)
- Reticulocyte count is important in diagnosis of anemia.
 - Wound healing gets delayed in some cases.
 - Why is hemophilia seen mostly in males?
 - DIC presents both as a hemorrhagic as well as a thrombotic disorder.
- Q. 3. Problem based question:** (1+1+2 = 04)
- 18 years old boy, with a history of bee sting one hour back, presented in emergency with severe bronchospasm and shock.
- What is your diagnosis, why bronchospasm and shock is occurring?
 - Classify the disease.
 - Discuss its pathogenesis.
- Q. 4. Write short notes on:** (2 x 4 = 08)
- Phagocytosis
 - Embolism
 - Klinefelter's syndrome
 - Adverse effects of smoking
- Q. 5. Structured question:**
- (i) Discuss the etiological agent, pathogenesis, clinical features and lab diagnosis of AIDS. (04)
- (ii) Discuss similarities & differences between benign & malignant neoplasms and describe the mechanism of metastasis. (04)
- Q. 6. Write in brief about:** (2 x 4 = 08)
- Draw a labeled diagram depicting differences between reversible and irreversible cell injury on a cellular level.
 - Depict the cell cycle phases in a labeled flow diagram showing the three groups of body tissues classified on the basis of their proliferative capacity.
 - Give the differential diagnosis of microcytic hypochromic anemia.
 - Enumerate the causes of neutrophilic and eosinophilic leucocytosis separately.

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, FEBRUARY - 2017
PATHOLOGY
PAPER - FIRST

[Max Marks: 40]

[Time allotted: Three hours]

Q. 1. Multiple Choice questions (attempt all MCQs in the allotted first 15 minutes in the OMR sheet) ($\frac{1}{2} \times 16 = 08$)

SET - D

1. Abnormalities of blood clotting occur in:
 - a. Patients taking Ibuprofen
 - b. Thalassemia
 - c. Sickle cell disease
 - d. Aplastic anemia
2. Following phagocytosis, micro-organisms are killed by:
 - a. Lysozyme
 - b. Lymphokines
 - c. Complement system
 - d. IgG
3. Necrosis is a feature in the following type of inflammation:
 - a. Sarcoidosis
 - b. Tuberculosis
 - c. Leprosy
 - d. Rheumatoid arthritis
4. The following is true about HLA (human leucocyte antigens):
 - a. Genetically determined by Major Histocompatibility Complex (MHC)
 - b. Found only in the leukocytes
 - c. Usually two in number on the human leukocytes
 - d. Role in infections
5. The following is used in grading a tumor:
 - a. Mitotic index
 - b. Necrosis
 - c. Calcification
 - d. Location
6. Epstein-Barr virus is implicated in the following cancer:
 - a. Burkitt's lymphoma
 - b. Kaposi's sarcoma
 - c. T-cell leukemia
 - d. CML
7. Enzymatic digestion is seen in:
 - a. Coagulative necrosis
 - b. Liquefactive necrosis
 - c. Caseous necrosis
 - d. Fat necrosis
8. Enzyme which prevents aging is:
 - a. Catalase
 - b. Telomerase
 - c. SOD
 - d. Metalloproteinase
9. Cardiac amyloidosis produces which type of cardiomyopathy?
 - a. Dilated
 - b. Constrictive
 - c. Restrictive
 - d. Ischemic
10. Test used for detection of HIV in window period is:
 - a. ELISA
 - b. Western Blot
 - c. CD4 Count
 - d. P24 antigen detection
11. Venous emboli are most often lodged in:
 - a. Kidneys
 - b. Liver
 - c. Lungs
 - d. Intestines
12. Aplastic anemia is diagnosed on:
 - a. Blood counts and reticulocyte count
 - b. Bone marrow aspirate alone
 - c. Bone marrow trephine alone
 - d. Both aspirate and trephine biopsy
13. An athlete develops acute throat infection. In addition to local acute inflammatory changes he develops fever and malaise. These constitutional symptoms are mediated by:
 - a. Histamine
 - b. IL-1 & TNF
 - c. C3a
 - d. Prostacyclin
14. An abscess is:
 - a. Area of chronic inflammation with granulomas
 - b. Localized collection of transudate
 - c. Localized collection of granulation tissue
 - d. Localized collection of pus
15. Causes of localized edema include:
 - a. Obstruction of lymphatics
 - b. Loss of proteins through kidneys
 - c. Loss of proteins through gut
 - d. Congestive cardiac failure
16. Granulomas are:
 - a. Mainly composed of macrophages, epithelioid cells and lymphocytes
 - b. Always caused by infections
 - c. Mediated by CD4⁺ T lymphocytes
 - d. Always contain area of central necrosis

**PATHOLOGY
PAPER- SECOND**

Note: Attempt all Questions.
Draw suitable diagrams (wherever necessary)

Q. 2. Give reasons:

(1 x 4 = 04)

- a. Why Pneumothorax occurs in emphysema?
- b. Transitional cell carcinoma occurs in chronic smokers.
- c. H. Pylori survives in acidic pH.
- d. Breast cancer occurs more commonly in patients with positive family history.

Q. 3. Problem based question:

(1+2+1 = 04)

55 Years old female admitted to the ward with complaints of non-healing ulcer on right foot. On urine investigation Benedicts test showed red color precipitate and Blood sugar (fasting) was 180 mg/ dl:

- a. What is your diagnosis?
- b. Discuss pathogenesis of disease in detail.
- c. Discuss other complications of the disease.

Q. 4. Write short notes on:

(2 x 4 = 08)

- a. Peptic ulcer
- b. Papillary carcinoma of thyroid
- c. Rapidly progressive glomerulonephritis
- d. Osteosarcoma

Q. 5. Structured question:

(i) Define cirrhosis, discuss pathogenesis & morphological changes in cirrhosis.

(1+2+1 = 04)

(ii) Classify pneumonia, discuss etiopathogenesis and complications of pneumonia.

(1+1+2 = 04)

Q. 6. Write in brief:

(2 x 4 = 08)

- a. Gall stones
- b. Hydatidiform mole
- c. Meningioma
- d. Hashimoto's thyroiditis

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, FEBRUARY - 2017
PATHOLOGY
PAPER - SECOND

[Time allotted: Three hours]

[Max Marks: 40]

Q. 1. Multiple Choice Questions (attempt all MCQs in the allotted first 15 minutes in the OMR sheet) ($\frac{1}{2} \times 16 = 08$)

SET - B

1. Schiller duval bodies are seen in:
 - a. Choriocarcinoma
 - b. Immature teratoma
 - c. Embryonal cell carcinoma
 - d. Endodermal sinus tumor
2. Medullary carcinoma of thyroid is associated with:
 - a. $\uparrow$ Thyroglobulin level
 - b. $\uparrow$ Calcitonin level
 - c. $\uparrow$ T3 level
 - d. $\uparrow$ TSH level
3. Basal cell carcinoma commonly spreads by:
 - a. Lymphatics
 - b. Hematogenous
 - c. Direct spread
 - d. None of the above
4. Bone tumor arising from metaphysis:
 - a. Osteogenic sarcoma
 - b. Ewing's sarcoma
 - c. Osteoclastoma
 - d. Osteoid osteoma
5. MEN syndrome is associated with:
 - a. Papillary carcinoma of thyroid
 - b. Medullary carcinoma of thyroid
 - c. Follicular carcinoma
 - d. Anaplastic carcinoma
6. Diagnostic histological feature of rheumatic carditis is:
 - a. Aschoff nodule
 - b. Bread & butter pericarditis
 - c. Eosinophilic infiltration
 - d. Patchy infarction
7. Most common site of a myocardial infarct is:
 - a. Anterior wall of left ventricle
 - b. Interventricular septum
 - c. Posterior wall of left ventricle
 - d. Anterior wall of right ventricle
8. Alpha I antitrypsin deficiency occurs in:
 - a. Emphysema
 - b. Bronchiectasis
 - c. Empyema
 - d. Bronchiogenic carcinoma
9. Pleomorphic adenoma usually arises from:
 - a. Sub mandibular gland
 - b. Sub lingual gland
 - c. Parotid gland
 - d. Minor salivary gland
10. Pseudopolyps are seen in:
 - a. Benign tumor of small intestine
 - b. Ulcerative colitis
 - c. Intussusception
 - d. Volvulus
11. Linitis plastica is seen in:
 - a. Gastric lymphoma
 - b. Gastric adenocarcinoma
 - c. Leiomyosarcoma
 - d. Peptic ulcer
12. In hemolytic anaemia, gall stones are:
 - a. Cholesterol stones
 - b. Mixed stones
 - c. Pigment stones
 - d. Any type
13. Major source of collagen in cirrhosis is:
 - a. Kupffer cells
 - b. Ito cells
 - c. Hepatocyte
 - d. Canalicular cell
14. Mallory's hyaline body is seen in:
 - a. Hepatitis C infection
 - b. Amoebic liver abscess
 - c. Indian childhood cirrhosis
 - d. Autoimmune hepatitis
15. Glomerulosclerosis is a features of :
 - a. Diabetes mellitus
 - b. Hypertension
 - c. Acute glomerulonephritis
 - d. Nephrotic syndrome
16. In benign prostatic hypertrophy prostatic growth is due to:
 - a. Testosterone
 - b. 17 estradiol
 - c. Dihydrotestosterone
 - d. Estrogen

PATHOLOGY PAPER- FIRST

Note: Attempt all questions
Draw suitable diagrams (wherever necessary)

- Q. 2. Give Reasons:** (1 x 4 = 04)
- Alcohol is injurious to health.
 - Pancytopenia seen in megaloblastic anemia.
 - Ageing heart valves do not function properly.
 - Toxic injuries are more common around portal areas in liver.

- Q. 3. Problem based question:** (1+1+1+1 = 04)

A 35 yrs male presented to Medicine OPD with cough with expectoration for last one month. He gave history of fever off and on and weight loss. He had one episode of hemoptysis. Cervical lymph nodes were enlarged and matted.

- What is your diagnosis?
- Which test in sputum will help in making a diagnosis?
- Which other investigations can be done?
- Which are the organs that are rarely affected by this condition?

- Q. 4. Write differences between:** (2 x 4 = 08)

- Apoptosis and necrosis
- Exudate and transudate
- Tuberculoid and lepromatous leprosy
- Lymphoblasts and myeloblasts

- Q. 5. (i) Classify shock. Write pathogenesis of septic shock and describe the stages of shock.** (2+2 = 04)

- (ii) Write briefly about etiology and pathophysiology of AIDS.** (2+2 = 04)

- Q. 6. Write in Brief:** (2 x 4 = 08)

- Auto immunity
- Karyotyping
- Multiple myeloma
- Philadelphia chromosome

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JUNE - 2017
PATHOLOGY
PAPER - FIRST

[Time allotted: Three hours]

[Max Marks: 40]

Q. 1. Multiple Choice questions (attempt all MCQs in the allotted first 15 minutes in the OMR sheet) ($\frac{1}{2} \times 16 = 08$)**SET - B**

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Intrinsic factor deficiency causes: <ol style="list-style-type: none"> a. Fanconi's anemia b. Cooley's anemia c. Aplastic anemia d. Pernicious anemia 2. Increased RBCs seen in one of following: <ol style="list-style-type: none"> a. Polycythemia rubra vera b. Sickle cell anemia c. Multiple myeloma d. Congestive heart failure 3. Rh factor is an: <ol style="list-style-type: none"> a. Protein b. Antibody c. Mucopolysaccharide d. Fatty acid 4. Methods of hemoglobin estimation include the following except: <ol style="list-style-type: none"> a. Spectrophotometric method b. Drabkin's method-ferricyanide-cyanide c. Sahli's method d. Wintrobe's method 5. Elasticity of cornified skin is due to: <ol style="list-style-type: none"> a. Keratohistidine content of cells b. Keratin content of cells c. Keratocysteine content of cells d. Collagen content 6. Philadelphia chromosome is: <ol style="list-style-type: none"> a. Chromosome 3 b. Chromosome 9 c. Chromosome 20 d. Chromosome 22 7. FIGLU test is done for: <ol style="list-style-type: none"> a. Thiamine deficiency b. Cyanocobalamin deficiency c. Folic acid deficiency d. Riboflavin deficiency 8. Example of type I hypersensitivity is: <ol style="list-style-type: none"> a. Montoux test b. Schick test c. Lepromin test d. Casoni's test | <ol style="list-style-type: none"> 9. DIC is associated with: <ol style="list-style-type: none"> a. AML-M3 b. ITP c. CML d. Polycythemia vera 10. Paroxysmal nocturnal hemoglobinuria is due to: <ol style="list-style-type: none"> a. Autoimmune defect b. Acquired red cell defect c. Congenital red cell defect d. Lead poisoning 11. Calcification in necrotic tissue is called: <ol style="list-style-type: none"> a. Calcinosis b. Metastatic calcification c. Dystrophic calcification d. Tumoral calcinosis 12. Granulomas are observed in all except: <ol style="list-style-type: none"> a. Berryliosis b. Amoeboma c. Leprosy d. Tuberculosis 13. Epithelioid cells are modified: <ol style="list-style-type: none"> a. Lymphocytes b. Neutrophils c. Eosinophils d. Monocytes 14. Basement membrane has type ----- collagen: <ol style="list-style-type: none"> a. III b. I c. II d. IV 15. Hemophilia is: <ol style="list-style-type: none"> a. Autosomal recessive b. X linked recessive c. X linked dominant d. Autosomal dominant 16. Microangiopathic hemolytic anemia is seen in: <ol style="list-style-type: none"> a. Leukemia b. ITP c. TTP d. Polycythemia vera |
|---|---|

PATHOLOGY PAPER- SECOND

Note: Attempt all questions
Draw suitable diagrams (wherever necessary)

- Q. 2. Give reasons why:** (1 x 4 = 04)
- UTI is more common in females
 - Mantoux test is positive in nearly all Indians
 - Hypercholesterolemia is associated with high risk of MI
 - Pleomorphic adenoma recurs after surgery
- Q. 3. Problem based question:** (1+2+1 = 04)
- A 68 yrs old male developed severe iron deficiency anaemia. He gave history of black colored stools and altered bowel habits:
- What is the probable diagnosis?
 - What is the difference between right sided and left sided presentation of this condition?
 - What investigations will you do?
- Q. 4. Write short notes on:** (2 x 4 = 08)
- Kidney stones
 - Basal cell carcinoma
 - Risk factors of CA cervix
 - Diabetic nephrosclerosis
- Q. 5. (i) Discuss routes of transmission, pathogenesis and morphological changes in Hepatitis B. What investigations will you do?** (1+2+1 = 04)
- (ii) Define bronchiectasis. Give its pathogenesis, morphological changes in lungs and complications.** (1+1+2 = 04)
- Q. 6. Write in brief:** (2 x 4 = 08)
- Hashimoto's thyroiditis
 - H. Mole
 - Seminoma
 - Fibroadenoma

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JUNE - 2017**PATHOLOGY
PAPER - SECOND****[Time allotted: Three hours]****[Max Marks: 40]****Q. 1. Multiple choice questions (attempt all MCQs in the allotted first 15 minutes in the OMR sheet) (½ x 16= 08)****SET - B**

1. Commonest histological type of testicular malignancy is:
 - a. Endodermal sinus tumor
 - b. Teratoma
 - c. Choriocarcinoma
 - d. Seminoma
2. Long term assessment of diabetics is provided by the following investigation:
 - a. Glycosylated hemoglobin
 - b. Whole blood glucose estimation
 - c. Plasma glucose estimation
 - d. Capillary method of glucose estimation
3. Atherosclerosis is a disease of:
 - a. Entire vessel wall
 - b. Intima
 - c. Media
 - d. Adventitia
4. The most thrombogenic constituent of atheroma is:
 - a. Smooth muscle cells
 - b. Fibrous cap
 - c. Lipid core
 - d. Foam cells
5. Chronic ischemic heart disease is most often done to:
 - a. Stenosis of coronary ostia
 - b. Coronary atherosclerosis
 - c. Repetitive coronary vasospasm
 - d. Embolisation to coronary branches
6. Source of pulmonary surfactant is:
 - a. Capillary basement membrane
 - b. Alveolar macrophages
 - c. Type I pneumocytes
 - d. Type II pneumocytes
7. The most common causative organism for lobar pneumonia is:
 - a. Haemophilus
 - b. Staphylococci
 - c. Streptococci
 - d. Pneumococci
8. The following type of bronchogenic carcinoma has worst prognosis:
 - a. Adenocarcinoma
 - b. Squamous cell carcinoma
 - c. Small cell carcinoma
 - d. Large cell carcinoma
9. Barrett's oesophagus predisposes to development of:
 - a. Adenocarcinoma
 - b. Oesophagitis
 - c. Oesophageal varices
 - d. Squamous cell carcinoma
10. Duodenal ulcers are found most commonly at:
 - a. Second part, posterior surface
 - b. First part, anterior surface
 - c. First part, posterior surface
 - d. Second part, anterior surface
11. The following type of colorectal polyp has the maximum incidence of malignant transformation:
 - a. Tubulovillous adenoma
 - b. Hyperplastic polyp
 - c. Adenomatous
 - d. Villous adenoma
12. The following hepatotropic virus is a DNA virus:
 - a. HEV
 - b. HAV
 - c. HBV
 - d. HCV
13. The most common form of glomerulonephritis(GN) in adults is:
 - a. Focal segmental GN
 - b. Minimal change disease
 - c. Membranous GN
 - d. Membrano-proliferative GN
14. Seminoma is:
 - a. Local aggressive tumor
 - b. Benign tumor
 - c. Borderline tumor
 - d. Malignant tumor
15. The following are types of renal calculi except:
 - a. Calcium phosphate
 - b. Calcium oxide
 - c. Struvite
 - d. Uric acid
16. Risk factors implicated in the etiology of cholesterol stones includes the following except :
 - a. Oral contraceptives
 - b. Family history
 - c. Obesity
 - d. Hemolytic anemia

PATHOLOGY PAPER- FIRST

Note: Attempt all questions.

Draw suitable diagrams (wherever necessary)

- Q. 2. Give reasons why:** (1 x 4 = 04)
- O_2 dependent MPO system is the most potent microbicidal system.
 - Delayed wound healing is seen in ascorbic acid deficiency.
 - Fat embolism is seen after fracture of long bones.
 - Auto-splenectomy occurs in sickle cell anemia.
- Q. 3. Problem based question:** (1 x 4 = 04)
- A 50 years old obese male patient presented to OPD with gradual darkening and shriveling of the right toe.
- What is he likely suffering from?
 - What basic investigations will you advise?
 - Describe the morphological appearance of the toe lesion.
 - How do you differentiate the lesion from other types?
- Q. 4. Write short notes on:** (2 x 4 = 08)
- Metaplasia
 - Leukemoid reaction
 - Fat embolism
 - Chemotaxis
- Q. 5. (i) Define anemia. Classify anemia according to etiology. Describe the peripheral smear and bone marrow findings in vitamin B_{12} deficiency** (1+1+2 = 04)
- (ii) Discuss etiology, pathogenesis, course and investigations in a case of AIDS.** (1+1+1+1 = 04)
- Q. 6. Write in brief about:** (2 x 4 = 08)
- Tabulate differences between transudates and exudates
 - Oncogenes
 - Turner syndrome
 - Factors affecting wound healing

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY/FEBRUARY-2018
PATHOLOGY
PAPER - FIRST

[Time allotted: Three hours]

[Max Marks: 40]

Q. 1. Multiple Choice questions (attempt all MCQs in the allotted first 15 minutes in the OMR sheet) (½ x 16= 08)

SET - C

1. Duchenne dystrophy is a :
 - a. Autosomal dominant disease
 - b. X-linked dominant disease
 - c. Autosomal recessive disease
 - d. X-linked recessive disease
2. Which of the following is known as "Guardian of Genome"?
 - a. P53 gene
 - b. Mdm gene
 - c. Rb gene
 - d. ATM gene
3. Malignant tumor of connective tissue is called:
 - a. Carcinoma
 - b. Melanoma
 - c. Sarcoma
 - d. Seminoma
4. Which of the following type of lung cancer is most commonly associated with paraneoplastic syndrome?
 - a. Adenocarcinoma
 - b. Squamous cell carcinoma
 - c. Large cell carcinoma
 - d. Small cell carcinoma
5. Hypersegmented neutrophils are seen in:
 - a. Thalassemia
 - b. Iron deficiency anemia
 - c. Megaloblastic anemia
 - d. Hemolytic anemia
6. In sickle cell disease the defect is in:
 - a. α -Chain
 - b. β -Chain
 - c. γ -Chain
 - d. Hb formation
7. Splenomegaly is associated with all except:
 - a. CML
 - b. Polycythemia vera
 - c. Essential thrombocythemia
 - d. Primary myelofibrosis
8. Burkitt's lymphoma is associated with:
 - a. t (8:14)
 - b. t (9:22)
 - c. t (11:14)
 - d. t (8:21)
9. Lacunar cells are seen in which type of Hodgkin's disease?
 - a. Nodular sclerosis
 - b. Mixed cellularity
 - c. Lymphocytic depletion
 - d. Lymphocyte predominant
10. In ischemia reperfusion cell injury there are:
 - a. Increased Ca^{++} ions in the extracellular fluid
 - b. Increased Ca^{++} ions in the cytoplasm
 - c. Equal Ca^{++} ions in the cytoplasm and extracellular fluid
 - d. Unaffected Ca^{++} equilibrium
11. Which of the following gene is proapoptotic?
 - a. P53
 - b. Bcl2
 - c. RB
 - d. Bax
12. Coagulative necrosis is seen in all except:
 - a. Liver
 - b. Lung
 - c. Brain
 - d. Kidney
13. Oxygen dependent killing in phagocytic cell is done through:
 - a. NADPH oxidase
 - b. Superoxide dismutase
 - c. Catalase
 - d. Glutathione peroxidase
14. Histamine causes:
 - a. Hypertension
 - b. Vasoconstriction
 - c. Vasodilatation
 - d. Tachycardia
15. Virchow's triad include all except:
 - a. Injury to vein
 - b. Venous thrombosis
 - c. Venous stasis
 - d. Hypercoagulability of blood
16. Heart failure cells are found in:
 - a. Myocardium
 - b. Lung
 - c. Liver
 - d. Spleen

PATHOLOGY PAPER- SECOND

Note: Attempt all questions.
Draw suitable diagrams (wherever necessary)

(1 x 4 = 04)

Q. 2. Give reasons why:

- a. Tobacco smoking causes emphysema.
- b. Grape like vesicles are seen in hydatiform mole.
- c. Metaphyses is affected commonly in osteomyelitis.
- d. Nephrotic syndrome is associated with edema.

(1+2+1 = 04)

Q. 3. Problem based question:

An 11 year old boy presented with pain and swelling around the knee joint. X-ray showed a pathological fracture and elevation of periosteum.

- a. What is your diagnosis?
- b. What is the etiopathogenesis and pathological findings of this lesion?
- c. What are the X-ray findings in this lesion?

(2 x 4 = 08)

Q. 4. Write short notes on:

- a. Benign breast diseases
- b. Seminoma
- c. Wilms tumor
- d. Goodpasture disease

Q. 5. (i) Write differences between serous and mucinous tumors of ovary.

(04)

(ii) Write about classification, pathophysiology and complications of liver cirrhosis.

(04)

(2 x 4 = 08)

Q. 6. Write in brief about:

- a. Types of renal calculi
- b. Basal cell carcinoma
- c. Paraneoplastic syndrome in lung cancer
- d. Peptic ulcer

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, JANUARY/FEBRUARY-2018
PATHOLOGY
PAPER - SECOND

[Time allotted: Three hours]

[Max Marks: 40]

Q. 1. Multiple choice questions (attempt all MCQs in the allotted first 15 minutes in the OMR sheet) (½ x 16= 08)

SET - A

1. Ulcer associated with severe burns?
 - a. Cushings
 - b. Curlings
 - c. Marjolins
 - d. Stress ulcers
2. Which is the mixed epithelial and mesenchymal tumor of salivary gland?
 - a. Adenoid cystic carcinoma
 - b. Muco-epidermoid carcinoma
 - c. Pleomorphic adenoma
 - d. Canalicular adenoma
3. Which is **not** a cause of cirrhosis?
 - a. Hepatitis A
 - b. Hepatitis B
 - c. Hepatitis C
 - d. Hepatitis D
4. Lobular carcinoma is cancer of:
 - a. Ovary
 - b. Breast
 - c. Rectum
 - d. Appendix
5. Which mineral is accumulated in the liver in Wilsons disease:
 - a. Iron
 - b. Copper
 - c. Calcium
 - d. Silica
6. Best test to assess hepatocyte function in liver disease is:
 - a. AST
 - b. ALT
 - c. Albumin
 - d. Bilirubin
7. Which hepatitis virus is replication defective?
 - a. Hepatitis B virus
 - b. Hepatitis C virus
 - c. Hepatitis D virus
 - d. Hepatitis E virus
8. Which of the following gall stones are radioluscent?
 - a. Calcium carbonate
 - b. Cholesterol calculi
 - c. Pigment stones
 - d. Phosphate stones
9. Schiller-Duvall bodies are seen in:
 - a. Seminoma
 - b. Teratoma
 - c. Yolk sac tumor
 - d. Choriocarcinoma
10. What are the serum PSA levels suggestive of carcinoma prostate?
 - a. 1 - 2.5 ng/ml
 - b. > 1000 ng/ml
 - c. > 4 ng/ml
 - d. > 100 ng/ml
11. Carcinoma cervix usually originates from the:
 - a. Ectocervix
 - b. Transformation zone
 - c. Endocervix
 - d. Endometrium
12. An example of autoimmune thyroiditis is:
 - a. De Quervains
 - b. Hashimotos
 - c. Subacute
 - d. Reidel's
13. Sequestrum is seen in:
 - a. Chronic osteomyelitis
 - b. Ewings sarcoma
 - c. Osteoclastoma
 - d. Chondrosarcoma
14. Which thyroid carcinoma shows presence of amyloid?
 - a. Follicular
 - b. Medullary
 - c. Papillary
 - d. Anaplastic
15. Complications of diabetes mellitus are due to:
 - a. VEGF
 - b. AGEs
 - c. PDGF
 - d. TNFα
16. Pheochromocytoma is a tumor of:
 - a. Adrenal cortex
 - b. Adrenal medulla
 - c. Renal parenchyma
 - d. Aorta