PATHOLOGY
PAPER - FIRST

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

Q. 2. Give reasons: **(1 x 4 = 04)**

a. Metaplasia is both beneficial and harmful
b. Thrombosis is a result of many related influences
c. Delayed wound healing
d. Reperfusion injury

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

A 21-year-old female was brought to OPD with chief complaint of mild fever, more in the evenings since 15 days, along with complaint of cervical swelling. On examination, enlarged cervical lymph nodes were present, measuring 6 x 4 cms. All the lymph nodes were matted, firm, mobile and non-tender.

a. What is your diagnosis?
b. Enlist salient lab investigations that can help in confirmation of diagnosis.
c. If the lymph nodes were to be excised, describe the expected gross and microscopic appearance based on your diagnosis. Draw a well labelled diagram of the microscopic appearance.

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

a. Cross matching
b. Rh antigen
c. Hemophilia
d. Granuloma formation

Q. 5. (i) Discuss the pathogenesis of septic shock and its stages. **(2+2 = 04)**

(ii) Discuss the lab diagnosis of cancer and chemical carcinogenesis. **(2+2 = 04)**

Q. 6. Write in brief on: **(2 x 4 = 08)**

a. Fate of thrombus
b. T lymphocyte
c. Angiogenesis
d. Turner syndrome

Regn. No. ..... Paper Code MBBS203

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, FEBRUARY/ MARCH - 2019
PATHOLOGY
PAPER - FIRST

[Time allotted: Three hours] **SET-C** **[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)**

1. Blood group antigens are present on the surface of:
   a. Platelets
   b. Lymphocytes
   c. RBC
   d. Neutrophils
2. The cell undergoes duplication of its nuclear DNA at:
   a. Synthesis (S) stage of interphase
   b. Meiosis
   c. Gap one (G1) stage of interphase
   d. Metaphase stage of mitosis
3. Which of these leukocytes is an agranulocyte?
   a. Basophil
   b. Eosinophil
   c. Neutrophil
   d. Lymphocyte
4. Cells in the red bone marrow that give rise to all the formed elements of the blood are called:
   a. Fibrinogens
   b. Stem cells
   c. Megakaryoblasts.
   d. Proerythroblasts
5. Which of these is **not** found in erythrocytes?
   a. Lipids
   b. ATP
   c. Hemoglobin
   d. Ribosomes
6. Which of these conditions occur in a normal individual living at a high altitude?
   a. Anemia
   b. Hemophilia
   c. Leukemia
   d. Secondary polycythemia
7. Sickle cell gene offers protection against:
   a. Cholera
   b. Shigella
   c. Malaria
   d. Salmonella
8. Patients of Blood group O can receive blood from which group donors?
   a. A, B and O
   b. O
   c. A
   d. AB
9. One of the following stains is specific for amyloid:
   a. Periodic acid Schiff (PAS)
   b. Alizarin red
   c. Congo red
   d. Von-Kossa
10. Acid fastness of tubercle bacilli is due to:
    a. Cord factor
    b. Mycolic acid
    c. Tubule protein
    d. Wax
11. Plasma cell is derived from which cell?
    a. T lymphocyte
    b. B lymphocyte
    c. Platelet
    d. Natural killer cell
12. Which of the following is a marker of inflammation?
    a. P reactive protein
    b. C reactive protein
    c. D reactive protein
    d. P reactive proton
13. Ankylosing spondylitis occurs in individuals with which haplotype?
    a. HLA B26
    b. HLA B27
    c. HLA B28
    d. HLA B29
14. Normal percentage of neutrophils in a blood sample is
    a. 40-75
    b. 1-6
    c. 7-10
    d. 0-1
15. Fixation of fresh tissue is essential to:
    a. Remove water
    b. Prevent autolysis
    c. Replace alcohol
    d. Keep the cells alive
16. Hemoglobin estimation is done by:
    a. Drabkin`s method
    b. Mantoux test
    c. Benedict`s test
    d. Heat coagulation method

PATHOLOGY
PAPER - SECOND

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

Q. 2. Give reasons why : **(1 x 4 = 04)**

a. Polydipsia is seen in diabetes mellitus.
b. Typhoid ulcer perforates commonly.
c. Bronchopneumonia occurs in extremes of age.
d. Hyperlipidemia leads to increased risk for atherosclerosis.

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

A 57 year old woman has had burning epigastric pain after meals for more than 1 year. Physical examination shows no abnormal findings. Upper GI endoscopy shows an erythematous patch in the lower esophageal mucosa. A biopsy specimen shows basal squamous epithelial hyperplasia, elongation of lamina propria papillae, and scattered intraepithelial neutrophils with some eosinophils.

a. What is the most likely diagnosis?
b. What are the two common causes of the disease?
c. Write one common complication of the disease.

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

a. Primary tuberculosis
b. Meningioma
c. Complications of diabetes mellitus
d. Kidney stones

Q. 5. (i) Enumerate ulcerative lesions of GIT. Write differences between Ulcerative Colitis and Crohn's disease. **(04)**

(ii) Discuss alcoholic liver disease. **(04)**

Q. 6. Write in brief on: **(2 x 4 = 08)**

a. Differentiate between nephrotic and nephritic syndrome
b. CSF findings in pyogenic meningitis
c. Seminoma
d. Pleomorphic adenoma

Regn. No. .....

Paper Code MBBS203

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, FEBRUARY/ MARCH - 2019
PATHOLOGY
PAPER - SECOND
SET-C

[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)**

1. In Hashimoto's disease, serum antibodies are mainly against:
   a. Thyroid follicles
   b. Thyroxine
   c. Thyroglobulins
   d. Iodine
2. HCG is raised in all **except**:
   a. Choriocarcinoma
   b. Hepatocellular carcinoma
   c. Squamous cell carcinoma
   d. Astrocytoma
3. Councilman bodies in viral hepatitis is a form of apoptosis seen commonly at the following site:
   a. Submassive
   b. Centrilobular
   c. Midzonal
   d. Periportal
4. Hepatitis B surface antigen (HBsAg) is present at the following structures **except**:
   a. Viral spheres
   b. Viral tubule
   c. Surface envelop of Dane particle
   d. Inner core of Dane particle
5. The most progressive form of chronic hepatitis is caused by:
   a. Hepatitis A
   b. Hepatitis B
   c. Hepatitis C
   d. Hepatitis D
6. Pancreatic carcinoma of the following site more often produces obstructive jaundice:
   a. Head
   b. Body
   c. Tail
   d. Uncinate process
7. Bronchogenic carcinoma has increased incidence in the following pneumoconiosis:
   a. Coal worker pneumoconiosis
   b. Silicosis
   c. Asbestosis
   d. Berylliosis
8. The major change in blood vessels in hypertension is:
   a. Atherosclerosis
   b. Hyaline arteriosclerosis
   c. Multiple small aneurysms
   d. Fibrinoid necrosis
9. Heart failure cells contain:
   a. Hemosiderin
   b. Lipofuscin
   c. Myoglobulin
   d. Albumin
10. Aschoff cells are:
    a. Fibroblasts
    b. Macrophages
    c. Neutrophils
    d. Lymphocytes
11. Emphysema pathologically involves beyond the:
    a. Bronchi
    b. Terminal bronchioles
    c. Respiratory bronchioles
    d. Alveolar sac
12. Sputum from an asthma patient may show:
    a. Eosinophils
    b. Curschmann's spirals
    c. Charcot Leyden crystals
    d. All of the above
13. Helicobacter pylori is **not** associated with:
    a. GI lymphoma
    b. Gastric cancer
    c. Gastric leiomyoma
    d. Gastritis
14. Common side of leiomyoma in female is:
    a. Stomach
    b. Intestine
    c. Uterus
    d. Oesophagus
15. The most common cytogenetic abnormality seen in complete hydatidiform mole is:
    a. 46 XXY
    b. 82 XXXY
    c. 46 XX
    d. 23 XY
16. Most sensitive and specific investigation for carcinoma breast is:
    a. CT scan
    b. Thermography
    c. USG
    d. Mammography

Paper Code: MBBS203

PATHOLOGY
PAPER- FIRST

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

Q. 2. Give reasons: **(1 x 4 = 04)**

a. A paralyzed limb becomes smaller in size
b. Formation of wheel and flare in tuberculin reaction
c. Nuclear cytoplasmic asynchrony in megaloblastic anemia
d. Increased ESR in multiple myeloma.

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

A 12 years old boy presented with difficulty in breathing following a bee sting.

a. What is your clinical diagnosis?
b. Classify the disease.
c. What is the pathogenesis of the disease?

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

a. Effects of smoking on human health
b. Klinefelter's syndrome
c. Stains of amyloid
d. Classification of acute myeloid leukemia

Q. 5. (i) Define neoplasia and tabulate differences between benign and malignant tumors. **(1+3 = 04)**

(ii) Discuss healing by primary and secondary intention and enumerate factors affecting healing and repair. **(2+2 =04)**

Q. 6. Write in brief about: **(2 x 4 = 08)**

a. Mechanisms of apoptosis
b. Stages of HIV infection
c. Morphological patterns of acute inflammation
d. Pathogenesis of edema

Regn. No. ..... Paper Code: MBBS203

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, MAY/JUNE-2019
PATHOLOGY
PAPER - FIRST

[Time allotted: Three hours] **SET - B** **[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)**

1. The epithelioid cell in a granuloma is a/an:
   a. Modified epithelial cell
   b. Activated macrophage
   c. Small lymphocyte
   d. None of the above
2. All are laboratory findings in iron deficiency anemia **except**:
   a. Decreased serum iron
   b. Increased total iron binding capacity
   c. Decrease serum ferritin
   d. Increased MCV
3. Pancytopenia is seen all **except**:
   a. Megaloblastic anemia
   b. Aplastic anemia
   c. Leukemoid reaction
   d. Subleukemic leukemia
4. A peripheral smear with increased neutrophils, basophils and platelets is highly suggestive of:
   a. AML
   b. ALL
   c. CML
   d. MDS
5. MCHC is increased in:
   a. Iron deficiency anemia
   b. Thalassemia
   c. Spherocytosis
   d. All of the above
6. One of the following is **not** a feature of hemolytic anemia:
   a. Hemoglobinuria
   b. Jaundice
   c. Increased haptoglobin
   d. Haemosiderinuria
7. Which of the following does **not** undergo hyperplasia?
   a. Liver
   b. Kidney
   c. Heart
   d. Skin epithelium
8. Reversible ischemic changes include all **except**:
   a. Cell swelling
   b. Lysosomal swelling
   c. Blebs at cell surface
   d. Dissociation of polysomes to monosomes
9. First to be damaged in ischemia and chemical injury respectively:
   a. ER & Mitochondria
   b. Russell's bodies
   c. Councilman's bodies
   d. Brown atrophy
10. Necrosis in brain is:
    a. Liquefactive
    b. Coagulative
    c. Caseous
    d. Enzymic
11. Specific gravity of a transudate is:
    a. < 1.020
    b. > 1.020
    c. > 1.013
    d. < 1.012
12. Tumor with more than one germ layer is:
    a. Hamartoma
    b. Sarcoma
    c. Carcinoma
    d. Teratoma
13. Delayed hypersensitivity is mediated by which cells?
    a. CD3+
    b. CD4+
    c. CD8+
    d. CD10+
14. M. tubercuolsis colonies form in cultures within:
    a. 4-6 days
    b. 2-3 weeks
    c. 4-6 weeks
    d. 3-4 weeks
15. Graft Vs Host disease usually occurs in:
    a. Kidney transplant
    b. Heart transplant
    c. Bone marrow transplant
    d. Lung transplant
16. The hallmark of inflammation is:
    a. Transient vasoconstriction
    b. Leukocyte margination
    c. Phagocytosis
    d. Increased vascular permeability

PATHOLOGY
PAPER- SECOND

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

Q. 2. Give reasons: **(1 x 4 = 04)**

a. Cases of gastric reflux have difficulty in passage of food through lower esophagus.
b. At times 'leather bottle' stomach is encountered in Ca. stomach patients.
c. Skin cancers are more common in Australian region.
d. Orchidectomy was used as a treatment modality for Ca. Prostate in old times.

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

A 48 year old man known diabetic man was brought to hospital emergency in unconscious state.

a. What is the cause of his unconscious state? What would you like to rule out before doing further management?
b. Which investigations would you like to do, to confirm your diagnosis?
c. What future health risks are there with the disease?

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

a. Hydatidiform mole
b. Hepatitis C
c. Teratoma
d. Cholelithiasis

Q. 5. (i) What is pneumoconiosis? Give its classification. Discuss diseases causes by inhalation of silica particles. **(1+1+2 = 04)**

(ii) Discuss etiopathogenesis, risk factors and morphology of atherosclerosis. **(1+2+1 = 04)**

Q. 6. Write in brief about: **(2 x 4 = 08)**

a. Differences between adult and childhood polycystic kidney disease.
b. The sequence of events in development of nephrotic syndrome.
c. Differences between peptic ulcer and malignant gastric ulcer.
d. What are the different morphological patterns of emphysema?

Regn. No. ..... Paper Code: MBBS203

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, MAY/JUNE-2019
PATHOLOGY
PAPER - SECOND

[Time allotted: Three hours] **SET - B** **[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)**

1. In rheumatic heart disease, which of the following is true:
   a. Vegetations are seen on either surfaces of valves
   b. Vegetations are seen along line of closure
   c. Vegetations extend onto chordae tendinae
   d. No vegetations are seen
2. Clinical risk factors in the development of carcinoma breast include all of the following **except**:
   a. Early menarche
   b. Obesity
   c. Nulliparity
   d. Early menopause
3. The most frequent cause of aortic valve incompetence and regurgitation is:
   a. Collagen vascular disease
   b. Pulmonary hypertension
   c. Rheumatic fever
   d. Infective endocarditis
4. HPV types associated with high risk of cervical carcinoma include:
   a. Types 16, 42, 44, 11
   b. Types 11, 42, 44, 06
   c. Types 16, 18, 31, 44
   d. Types 16, 18, 31, 33
5. H. pylori produces:
   a. Acute gastritis
   b. Chronic gastritis
   c. Gastric ulcer
   d. Recurrent esophagitis
6. All the following are used in diagnosis of carcinoma of breast **except**:
   a. FNAC
   b. Biopsy
   c. Mammography
   d. Hemogram
7. The following is feco-orally transmitted:
   a. Hepatitis A
   b. Hepatitis B
   c. Hepatitis C
   d. All of the above
8. Red hepatization of lung is a pathological term characterizing:
   a. Fibroblast proliferation
   b. WBCs, RBCs and fibrin filled alveoli
   c. Hyaline membrane formation
   d. Congestion of hepatic sinusoids
9. Thickening of glomerular basement membrane is seen in:
   a. IgA nephropathy
   b. Membranoproliferative glomerulonephritis
   c. Lipoid nephrosis
   d. Post streptococcal glomerulonephritis
10. Mucin producing glands are present in all **except**:
    a. Vagina
    b. Oesophagus
    c. Cervix
    d. Duodenum
11. Most common organism causing lower UTI is:
    a. Salmonella
    b. Streptococcus
    c. Staphylococcus
    d. E. Coli
12. The most common cardio-vascular lesion is:
    a. Mitral regurgitation
    b. Mitral valve prolapse
    c. Aortic regurgitation
    d. Aortic dissection
13. Kimmelstiel Wilson disease is diagnostic of :
    a. Diabetic glomerulosclerosis
    b. Benign hypertension
    c. Malignant hypertension
    d. Amyloidosis
14. Most common tumor in women is:
    a. Breast fibroadenoma
    b. Lipoma
    c. Leiomyoma of uterus
    d. Rhabdomyoma
15. Which of the following is multi-nucleated?
    a. Osteoblasts
    b. Osteoclasts
    c. Both a and b
    d. None of the above
16. Calcification is common in:
    a. Acute pancreatitis
    b. Chronic pancreatitis
    c. Both a & b
    d. None of the above