



NC-2106000102010101

Second Year M. B. B. S. Examination

January - 2022

Pathology : Paper-I

(CBME New Course)

Time : 2 Hrs. 40 Minutes]

[Total Marks : 80

Instruction :

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
Second Year M. B. B. S.	<input type="text"/>
Name of the Subject :	<input type="text"/>
Pathology : Paper-I	<input type="text"/>
Subject Code No. :	Section No. (1, 2,.....): 2
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SECTION- II (40 marks)

2 long Essay Questions: 20+10+10

(1. Compulsory to answer. Write 2 out of remaining 3)

- (1) 65-year-old female presented with black discoloration 20  
of foot and numbness in lower leg. She was known case  
of type 2 diabetes mellitus and on oral hypoglycemic  
drug since 2 years. On examination there was ulcer  
on foot and blackish discoloration of skin with sharp  
line of demarcation between the normal and affected  
part of the limb. Limb Pulasations were not palpable.  
Blood report showed leucocytos and RBS was 280 mg/  
dl.
- (i) Give the most probable diagnosis. 2  
(ii) Write etiology & pathogenesis of this condition. 5  
(iii) Write morphologicalchanges in this condition. 5  
(iv) Describe different types of tissue necrosis. 5  
(v) Which other tests you will advise to this 3  
patient to support your diagnosis?

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Long essay questions: (Attempt any 2 out of 3) (10+ 10) 20

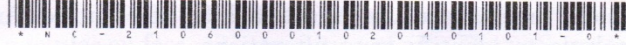
- (2) Define and classify shock. Describe pathogenesis 3+3+4 & morphological changes in various organs in septic shock.
- (3) Define and classify neoplasia. Write about various 3+3+4 routes of metastasis and their molecular mechanisms.
- (4) Define granuloma & write classification of 2+2+6 granulomatous condition, Discuss etiology, pathogenesis & sequel of primary pulmonary tuberculosis.

### SECTION 3 (40 Marks)

3 Write short notes. (Attempt 8 out of 10) (5 marks each)

- (1) Para neoplastic syndrome
- (2) What is Membrane attack complex (MAC)?
- (3) Types of infarct.
- (4) Turner's syndrome.
- (5) Exfoliative cytology.
- (6) Metaplasia.
- (7) Factors affecting granulation tissue formation in wound repair.
- (8) Opportunistic infection in AIDS
- (9) Blood component therapy.
- (10) Coomb's test.





Date of issue :  Centre :   
Sup. Sign. :  Seat No. :

**NC-2106000102010101-O**

**Second Year M. B. B. S. Examination**

**January - 2022**

**Pathology : Paper-I**

**(CBME New Course)**

Time : 20 Minutes]

[Total Marks : 20

**Instruction :**

नीचे दृष्टवित्त निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book. Name of the Examination : Second Year M. B. B. S. Name of the Subject : Pathology : Paper-I Subject Code No. : 2 1 0 6 0 0 0 1 0 2 0 1 0 1 0 1 Section No. (1, 2,.....) : 1	Seat No. : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Student's Signature
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**SECTION - I**

1 Multiple choice questions. (\*no negative markings) 20

Instruction- Encircle the correct answer

- (1) Thromboxane A<sub>2</sub> plays a role in inflammation by causing:
- (a) Transmigration of leucocytes
  - (b) Vasoconstriction
  - (c) Opsonization
  - (d) Chemotaxis
- (2) Which of the following does not have Chemotaxis action:
- (a) C<sub>5a</sub>
  - (b) Prostaglandins
  - (c) IL-8
  - (d) Leulcotriene B 4



- (3) Which investigation is most helpful for molecular analysis to identify gene alteration:
- (a) Immunohistochemistry
  - (b) Florescence in situ hybridization
  - (c) Flow cytometry
  - (d) Tumor markers
- (4) Edema of nephrotic syndrome is due to:
- (a) Increased hydrostatic pressure
  - (b) Decreased plasma osmotic pressure
  - (c) Lymphatic obstruction
  - (d) Increased plasma osmotic pressure
- (5) The process of wound repair shows the following Except:
- (a) Neovascularization
  - (b) Necrosis
  - (c) Fibroblast
  - (d) Synthesis of extracellular matrix
- (6) A ten years old boy presented with tenderness in right iliac fossa for the last 2 days, with fever. The predominant cells infiltrating his excised appendix will be:
- (a) Neutrophils
  - (b) Eosinophils
  - (c) Macrophages
  - (d) Plasma cells
- (7) Caisson disease is due to:
- (a) Fat embolism
  - (b) Thromboembolism
  - (c) Air embolism
  - (d) Amniotic fluid embolism
- (8) Anticoagulant suitable for storing blood for transfusion is:
- (a) Heparin, dextrose and citrate
  - (b) Phosphate, dextrose and citrate
  - (c) EDTA, dextrose and saline
  - (d) Oxalate, phosphate and glucose

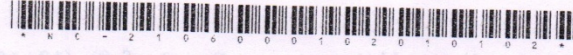


- (9) An adolescent girl gives history of repeated painful pustules on face with exudation of pus. The pathogenesis of disease is:
- (a) Acute inflammation
  - (b) Chronic inflammation
  - (c) Sunburn
  - (d) Cosmetics allergy
- (10) All of the following are responsible for a low value of glucose: CSF Except:
- (a) Leucocytes
  - (b) Bacteria
  - (c) Neoplastic cells
  - (d) Herpes virus
- (11) Pleural effusion rich in protein concentration occurs in :
- (a) Cardiac failure
  - (b) Myxedema
  - (c) Lung Carcinoma
  - (d) Pulmonary Infarction
- (12) Labile cells include the following Except:
- (a) Hemopoietic cells
  - (b) Surface epithelial cells of skin
  - (c) Cells of lymph nodes
  - (d) Parenchymal cells of liver
- (13) Pulmonary edema is encountered in:
- (a) Right ventricular failure
  - (b) Left ventricular failure
  - (c) Hepatic failure
  - (d) High fever
- (14) Apoptosis occurs in the following Except:
- (a) Embryogenesis
  - (b) Aging
  - (c) Menstrual cycle
  - (d) Hyperplasia
- (15) Metastatic calcification occurs in which of the following conditions :
- (a) Hyperparathyroidism
  - (b) Tuberculous lymphadenitis
  - (c) Nodular Goitre
  - (d) Atherosclerosis



- (16) Nut meg liver is seen in.:
- (a) Cirrhosis of liver
  - (b) Chronic passive congestion of liver
  - (c) Hepatoma
  - (d) Fatty liver
- (17) Which of the following blood components has the shortest shelf life:
- (a) Red Blood cells
  - (b) Platelets
  - (c) Fresh frozen Plasma
  - (d) Cryoprecipitate
- (18) Helper function is a feature of :
- (a) T<sub>4</sub> lymphocytes
  - (b) T<sub>8</sub> lymphocytes
  - (c) Macrophages
  - (d) Natural killer cells
- (19) Amyloidosis in long term hemodialysis is due to:
- (a) Transthyretin
  - (b) B<sub>2</sub> microglobulin
  - (c) Amyloid associated protein
  - (d) B amyloid protein
- (20) The major compatibility test before blood transfusion of cross-matching of:
- (a) Donor's red cells and recipients serum
  - (b) Donor's serum and recipients red cells
  - (c) Donor's serum and recipients serum
  - (d) Donor's red cells and recipients red cells





NC-2106000102010102

Second Year M. B. B. S. Examination

December - 2021

Pathology : Paper-II

(CBME New Course)

Time : 2 Hrs 40 Minutes]

[Total Marks : 80

Instruction :

नीचे दशांशकेल निशानीवाणी विगतो उत्तरवडी पर अवश्य बपनी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
Second Year M. B. B. S.

Name of the Subject :  
Pathology : Paper-II

Subject Code No. : Section No. (1, 2,.....) : Nil

2 1 0 6 0 0 0 1 0 2 0 1 0 1 0 2

Seat No. :

Student's Signature

SECTION - II (40 Marks)

- 2 Long Essay Questions : 20+10+10
- (1 Compulsory to answer. Write 2 out of remaining 3)
- (1) A 30 years female, pure vegetarian since birth, having 2 children, presented with easy fatigability, dyspnea on exertion for last one and half months along with tingling & numbness in feet & moderate fever since 20 days. On examination tongue was bald With loss of papiila.
- (i) What is your diagnosis? 2
- (ii) What is etiology & pathophysiology of this condition ? 6
- (iii) Enumerate various clinical features 2
- (iv) Describe peripheral smear & bone marrow findings. 6
- (v) Enumerate the salient biochemical tests useful for the diagnosis of this disease. 4

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Long essay questions: (Attempt any 2 out of 3) (10+10) 20

- (2) Define Rheumatic heart diseases (RHD). Write 2+2+3+3 etiology, pathogenesis & morphology of major cardiac lesions.
- (3) Define & Classify Chronic obstructive Pulmonary 2+2+3+3 Diseases. Discuss etio- pathogenesis & morphology of Bronchiectasis.
- (4) Classify Glomerular diseases of kidney and write 4+6 in detail about pathogenesis of glomerular injury.

**SECTION - III (40 Marks)**

3 Write short notes. (Attempt 8 out of 10) (5 marks each)

- (1) Morphology of lobar Pneumonia.
- (2) Serological markers of hepatitis-B
- (3) Lab diagnosis of Thrombocytopenia
- (4) Morphologic features of Teratoma
- (5) Helicobacter pylori
- (6) Lab diagnosis of Chronic myeloid leukemia
- (7) Causes of Splenomegaly
- (8) Classification of Hodgkin's Lymphoma
- (9) Enumerate occupational lung disease and their causative agents.
- (10) Define & classify Aneurysm





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Pathology : Paper-II	<input type="text"/>
Subject Code No. :	Section No. (1, 2,.....) :
2 1 0 6 0 0 0 1 0 2 0 1 0 1 0 2	Nil
	Student's Signature

**SECTION - I**

1 Multiple choice questions. (\*no negative markings)

Instruction- Encircle the correct answer

(1) A 35, years old male present with h/o bleeding, peripheral smear shows leucocytosis, platelet count 50,000/mm<sup>3</sup>, blast 28%, and band form, myelocyte & metamyelocyte is seen, t(8:21) is positive. What is the diagnosis?

- (a) CLL (b) CML  
(c) AML (d) MDS

(2) Patient having history of smoking, abnormal permanent enlargement of the alveoli cough & dyspnea suggest:

- (a) Pneumonia (b) Asthma  
(c) Chronic bronchitis (d) Emphysema

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- (3) A 16 years old boy complain of weakness, pallor since childhood, leg pain and ulcers on the legs. Blood examination revealed anemia. He is probably suffering from:
- (a) Sicklecell anemia      (b) Megaloblastic anemia  
(c) Sideroblastic Anemia   (d) Iron deficiency anemia
- (4) Paediatric patients having minimal change disease commonly presents as prominent periorbital edema Which of the following urinalysis test findings is most likely to have been consistently present in these subjects?
- (a) Hematuria with >10 RBC/hpf  
(b) Proteinuria >3.5 gm/24 hours  
(c) Calcium oxalate crystals  
(d) Renal tubular epithelial cells and casts
- (5) Tree bark appearance of intimal surface of Arch of Aorta with nodular lesion on skin likely cause :
- (a) Syphilis                      (b) Atherosclerosis  
(c) Marfans syndrome      (d) Cystic medial necrosis
- (6) 55 year female patient having gastric carcinoma diagnosed as signet ring cell carcinoma. Patient developed metastasis to ovaries, which type of tumor develop in ovaries?
- (a) Mucinous cystadenoma  
(b) Serous cystadenoma  
(c) Krukenberg tumor  
(d) carcinoid
- (7) Which of the following tests is the gold standard to diagnose a case of Paroxysmal Nocturnal Haemoglobinemia (PNH ):
- (a) HAMS test                      (b) Sucrose lysine test  
(c) Flow cytometry              (d) Bone marrow



- (8) The characteristic diagnostic findings of acute respiratory distress syndrome is
- (a) Accumulation of proteinaceous material within alveoli
  - (b) Hyaline membrane lining the alveolar wall
  - (c) Enlargement of air spaces
  - (d) Diffuse interstitial fibrosis
- (9) All are causes of contracted kidney except:
- (a) Benign nephrosclerosis
  - (b) Chronic pyelonephritis
  - (c) Amyloidosis
  - (d) Chronic glomerulonephritis
- (10) Maximum frequency as outcome of hepatitis B infection occurs as :
- (a) Viral hepatitis
  - (b) Hepatocellular carcinoma
  - (c) Subclinical case
  - (d) Cirrhosis
- (11) The most common source of pulmonary embolism is:
- (a) Amniotic fluid embolism
  - (b) Renal artery embolism
  - (c) Large veins of lower limbs
  - (d) Cardiothoracic surgery
- (12) The most common non-Hodgkin's lymphoma in India is:
- (a) Burkitt's lymphoma
  - (b) Diffuse large B cell lymphoma
  - (c) Mantle cell lymphoma
  - (d) Marginal zone lymphoma
- (13) Barret's esophagus characterized by all Except :
- (a) Lower esophagus is lined by columnar epithelium
  - (b) Caused by helicobacter pylori
  - (c) Predisposition to adenocarcinoma
  - (d) Patient complains of reflux
- (14) Most common tumor of major salivary glands is :
- (a) Warthin's tumor
  - (b) Pleomorphic adenoma
  - (c) Mucoepidermoid carcinoma
  - (d) Adenoid cystic carcinoma



- (15) In which of the following vegetation are large, typically friable and easily detachable from the cardiac valves :
- (a) Non Bacterial thrombotic
  - (b) Rheumatic
  - (c) Libman-Sacks
  - (d) Infective
- (16) Reticulocytes are stained with :
- (a) Brilliant cresyl blue
  - (b) Sudan black
  - (c) Warthin starry
  - (d) Hemotoxylin-eosin stain
- (17) 30-year-old female with complain of fever & periorbital edema Findings: protein: ++. Microscopic findings: 30 to 40 RBCs per high power field along with RBC cast. What is the diagnosis?
- (a) Benign Nephrosclerosis
  - (b) Nephrotic syndrome
  - (c) Nephritic syndrome
  - (d) Multiple myeloma
- (18) Renal cell carcinoma has been more commonly associated with which of the following disorders ?
- (a) Down syndrome
  - (b) Von Hippel -Lindau disease
  - (c) Williams syndrome
  - (d) Multiple endocrine neoplasia type-2
- (19) Which of the following is not seen in DIC ?
- (a) Prolonged PT/APTT
  - (b) Thrombocytopenia with schistocytes in peripheral blood
  - (c) High levels of FDP/D-dimer
  - (d) Increased fibrinogen levels
- (20) The commonest histological type of carcinoma testis is :
- (a) Teratoma
  - (b) Yolk sac tumor
  - (c) Seminoma
  - (d) Chorio carcinoma