

KISII UNIVERSITY SPECIAL/SUPPLEMENTARY EXAMINATIONS

CIMS 0227: CLINICAL PATHOLOGY

CARDIOVASCULAR, RESPIRATORY AND RENAL PATHOLOGY.

SECTION A: SHORT ANSWER QUESTIONS

ANSWER ALL QUESTION (60 MARKS)

- 1) Draw a well labeled diagram of the basic and functional unit of the kidney (10 marks)
- 2) Briefly describe congenital abnormalities of the kidney (10marks)
- 3) Briefly discuss acute glomerulonephritis under the following headings ;
 - a) Definition (2 marks)
 - b) Aetiopathogenesis (4 marks)
 - c) Laboratory investigations and their significance in the condition (4 marks)
- 4) Discuss congestive cardiac failure under the following
 - a) Definition (2 marks)
 - b) Causes (2 marks)
 - c) Cardinal features/signs of congestive cardiac failure (3 marks)
 - d) Give a detailed account of New York Heart Association(NYHA) classification of heart failure (3 marks)
- 5)
 - (a) Define the term varicosities (1 mark)
 - (b) List three most common varicose veins (3 marks)
 - (c) State the greatest risk of varicose veins (2 marks)
 - (d) List predisposing factors to the development of varicose veins (4marks)
- 6)
 - (a) Define bronchiectasis (1 mark)
 - (b) List the aetiology of bronchiectasis (3 marks)
 - (c) Outline the clinical presentation of bronchiectasis (4marks)
 - (d) Outline how to diagnose bronchiectasis (2 marks)

SECTION B: LONG ESSAY QUESTION

ANSWER ANY TWO QUESTION ONLY (40 MARKS)

- 1) Discuss asthma under the following
 - a) Definition (2 marks)
 - b) List allergens responsible for asthmatic attacks (4marks)

- c) Pathophysiology of asthma (6 marks)
 - d) Clinical presentation (signs and symptoms) of asthma (4 marks)
 - e) Define status asthmaticus (4 marks)
- 2) Describe hypertension under the following
- a) Definition (2 marks)
 - b) Discuss two broad classes of hypertension (2 marks)
 - c) Discuss aetiology of the classes above c (6 marks)
 - d) Outline laboratory investigations and their significance (5 marks)
 - e) List complications of hypertension (5 marks)
- 3) Discuss chronic renal failure under the following
- (a) Definition (1mark)
 - (b) Enumerate causes of chronic renal failure (5marks)
 - (c) Discuss aetiopathogenesis of chronic renal failure (5 marks)
 - (d) Enumerate the effects of chronic renal failure in the body (5 marks)
 - (e) List stages of chronic renal failure (4marks)

SECTION C: CHOOSE ONE MOST CORRECT ANSWER, THERE IS NO PENALTY FOR WRONG RESPONSES

- 1) About left to right shunts in congenital heart diseases;
- a) Are cyanotic heart diseases
 - b) Include TOF
 - c) Include truncus arteriosus
 - d) Are acyanotic heart diseases
 - e) Include tricuspid atresia
- 2) About right to left shunts in congenital heart diseases;
- a) Are cyanotic heart diseases
 - b) Include ASD
 - c) Include VSD
 - d) Include PDA
 - e) Include AVSD
- 3) Principal mechanisms of cardiovascular disease are
- a) Pump failure
 - b) Blood flow obstruction
 - c) Blood regurgitation
 - d) Cardiac conduction disorder
 - e) All the above
- 4) Risk factors of developing coronary artery disease are the following except?
- a) Positive family history
 - b) Cigarette smoking

- c) Diabetes insipidus
 - d) Diabetes mellitus
 - e) Hyperlipidaemia
- 5) The following are the components of Duckett Jones' major criteria for diagnosis of acute rheumatic fever except
- a) Pancarditis
 - b) chorea
 - c) Erythema marginatum
 - d) Arthritis
 - e) C-reactive proteins
- 6) The following are systemic causes of epistaxis except
- a) Anticoagulants example –warfarin
 - b) Hypertension
 - c) Blood dyscrasias –eg leukemia
 - d) Hereditary coagulopathies-eg haemophilia
 - e) Trauma to the nostril
- 7) Not a cause of atelectasis
- a) Failure of respiratory centre
 - b) Prematurity
 - c) Hyaline membrane disease
 - d) Laryngeal dysfunction
 - e) Rhinitis
- 8) The following are disorders of airflow obstruction except
- a) Acute bronchitis
 - b) Chronic bronchitis
 - c) Bronchiectasis
 - d) Asthma
 - e) Emphysema
- 9) Predisposing factors to lung cancer are the following except :
- a) Tobacco smoking
 - b) Asbestosis exposures
 - c) Genetic factors
 - d) Pulmonary edema
 - e) Air pollution e.g petrochemical industries
- 10) The most common causative organism of tuberculosis is?
- a) *Mycobacterium tuberculosis*
 - b) *Mycobacterium africanum*
 - c) *Mycobacterium canetti*
 - d) *Mycobacterium microti*
 - e) *Mycobacterium bovis*

- 11) All the following are functions of the kidney except?
- a) Spermatogenesis
 - b) Acid base balance
 - c) Erythropoietin production
 - d) Rennin production
 - e) Regulation of electrolytes
- 12) The following are types of hypospadias except
- a) Phimosis
 - b) Glandular
 - c) Coronal
 - d) Penile
 - e) Peno-scrotal
- 13) The following are pre-renal causes of acute renal failure except?
- a) Hemorrhage
 - b) Diarrhea
 - c) Vomiting
 - d) Severe burns
 - e) Renal artery disease
- 14) The following are effects of chronic renal failure except?
- a) Acid base balance disturbance
 - b) Hormonal abnormalities
 - c) Hypertension
 - d) Uraemia
 - e) None
- 15) True facts about hydronephrosis except?
- a) Pressure effects from tumours cause it.
 - b) Can result following calculus
 - c) Can result from inflammatory strictures
 - d) Can lead to benign prostatic hypertrophy
 - e) Congenital abnormalities can be a cause

SECTION D: TRUE/FALSE QUESTIONS, THERE IS A PENALTY OF ONE MARK FOR EVERY WRONG RESPONSE

- 1) Congenital malpositions of the heart include;
 - a) Bradycardia
 - b) Tachycardia
 - c) Dextrocardia
 - d) Tetralogy of Fallot
 - e) Cardiomyopathy
- 2) Angina pectoris is relieved by?
 - a) Exertion
 - b) Cold
 - c) Rest
 - d) Emotional stress
 - e) Strenuous activity
- 3) Cardiac rhythm disorders
 - a) Bradycardia
 - b) Tachycardia
 - c) Atrial flutter
 - d) Atrial fibrillation
 - e) Ectopia cordis
- 4) True about neonatal respiratory distress syndrome
 - a) Due to deficient surfactant
 - b) Due to sufficient surfactant
 - c) Primary disease of premature infants
 - d) Seen in infants of diabetic mothers
 - e) Mortality is high in infants born below 28weeks gestation
- 5) All the following are Neuromuscular disorders which cause respiratory failure except one, which one is it?
 - a) Gullain barre syndrome
 - b) Myasthenia gravis
 - c) Muscular dystrophy
 - d) Cervical cord injury
 - e) Drug overdose e.g sedatives
- 6) All the following are conditions which cause airflow obstruction
 - a) Chronic bronchitis
 - b) Bronchiectasis
 - c) Asthma

- d) Atelectasis
 - e) Emphysema
- 7) True about pathologic changes in the lung parenchyma following lobar pneumonia
- a) Congestion
 - b) Red hepatisation
 - c) Grey hepatisation
 - d) Cavitation
 - e) Resolution
- 8) Not a predisposing factor to pulmonary embolism
- a) Immobility and bed rest
 - b) Severe burns
 - c) Oestrogen containing pills
 - d) Early mobility after surgery
 - e) Nephrotic syndrome
- 9) All are true About hypospadias except
- a) Is a developmental defects of the ureter
 - b) Is a developmental defect of the urethra
 - c) May be a cause of infertility
 - d) May be glandular
 - e) May be peno-scrotal
- 10) Urinary tract infections includes the following except
- a) Pyelonephritis
 - b) Cystitis
 - c) Ureteritis
 - d) Urethritis
 - e) Vaginitis
- 11) All the following are true about nephroblastoma except
- a) Is the commonest abdominal tumour of young children
 - b) Abdominal mass progresses rapidly
 - c) Associated with hypertension
 - d) Is also called Wilm's tumour
 - e) Is also called phaeochromocytoma
- 12) Risk factors for urinary bladder cancer are?
- a) Industrial dyes
 - b) Schistosoma haematobium infection
 - c) Smoking
 - d) Immunosuppressive therapy e.g cyclophosphamide
 - e) Schistosoma mansoni infection
- 13) Main features of acute glomerulonephritis (AGN) include the following except
- a) Proteinuria

- b) Haematuria
 - c) Hypertension
 - d) Reduction in renal function
 - e) Normal glomerular filtration rate (GFR)
- 14) Not a mechanism which controls cardiac output in a normally functioning heart
- a) Heart rate
 - b) Ventricular filling pressure
 - c) Ventricular distensibility
 - d) Transposition of great blood vessels
 - e) Ventricular contractility
- 15) Which of the following are congenital obstructive cardiac anomalies?
- a) Coarctation of aorta
 - b) Tetralogy of Fallot
 - c) Atrial septal defect
 - d) Ventricular septal defect
 - e) Truncus arteriosus