



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2017/2018 ACADEMIC**

**SECOND YEAR SECOND TRIMESTER EXAMINATION**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN PHYSIOTHERAPY**

**COURSE CODE: BSP 224**

**COURSE TITLE: GENERAL MEDICINE**

**DATE:**

**TIME:**

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**INSTRUCTIONS TO CANDIDATES**

Answer All Questions

Section A: Multiple Choice Questions (MCQ)

Section B: Short Answer Questions (SAQ)

Section C: Long Answer Question (LAQ)

TIME: 3 Hours

20 Marks.

40 Marks.

40 Marks

*JTC*

*Moderated 8/7/2018  
Jal*

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

**Section A: Multiple Choice Questions (MCQ)**

**20 Marks.**

1. A history of smoking, permanent enlargement of the alveoli, cough and dyspnea suggests
  - a. Asthma
  - b. Emphysema
  - c. Chronic bronchitis
  - d. Obstructive sleep apnea
2. The most common cause of pneumonia in children under age 5
  - a. Fungi
  - b. Viruses
  - c. Bacteria
  - d. Mycoplasmas
3. The finding on physical examination supporting a diagnosis of a pleural effusion is
  - a. Increased fremitus on the affected side
  - b. Egophony throughout the affected side
  - c. Dullness to percussion on the affected side
  - d. Crackles on the affected side
4. During pregnancy which is medical problem
  - a. Rh<sup>-</sup> mother w/Rh<sup>-</sup> baby
  - b. Rh<sup>+</sup> mother w/Rh<sup>-</sup> baby
  - c. Rh<sup>-</sup> mother w/Rh<sup>-</sup> father
  - d. Rh<sup>-</sup> mother w/Rh<sup>+</sup> baby
5. Which of the following is not a laboratory investigation to diagnose the type of anaemia
  - a. Sodium
  - b. Vitamin B
  - c. Iron
  - d. Folic acid
6. Bleeding disorder
  - a. Sickle cell disease
  - b. Leukemia
  - c. Hemophilia
  - d. Thalassemia
7. Blood pressure is usually expressed as:
  - a. Diastolic pressure over systolic pressure
  - b. Systolic pressure over diastolic pressure
  - c. Diastolic pressure over pulse pressure
  - d. Pulse pressure over diastolic pressure
8. Tetralogy of Fallot a combination of various congenital defects listed below except
  - a. Right ventricular hypertrophy
  - b. Pulmonary stenosis
  - c. Ventricular septal defect
  - d. Left ventricular hypertrophy
9. Bradycardia is
  - a. Heart beat is very slow
  - b. Heart beat is sporadic, with a quivering pattern
  - c. Heart beat is very fast in the absence of exercise
  - d. Heart beat is irregular

10. The following are inflammatory conditions of the heart except
  - a. Myocarditis
  - b. Pericarditis
  - c. Rheumatic heart disease
  - d. Epicarditis
11. The pain associated with decreased blood delivery to the hearts tissues, possibly caused by a transient spasm of the coronary arteries is termed as:
  - a. Ischemia
  - b. Myocardial infarction
  - c. Pericarditis
  - d. Angina pectoris
12. Causative bacteria for peptic ulcer
  - a. H. pullorum
  - b. H. felis
  - c. H. pylori
  - d. H. salmonis
13. The hepatitis that healthcare workers are commonly predisposed to
  - a. Hepatitis C
  - b. Hepatitis D
  - c. Hepatitis A
  - d. Hepatitis B
14. The following are bacterial infection except
  - a. Chlamydia
  - b. Herpes
  - c. Gonorrhoea
  - d. Syphilis
15. Which one will not cause envenomation
  - a. Snake bite
  - b. Scorpion bite
  - c. Bee sting
  - d. Mosquito bite
16. Vitamin C deficiency is
  - a. Marasmus
  - b. Rickets
  - c. Scurvy
  - d. Pellagra
17. Vitamin D deficiency is
  - a. Beriberi
  - b. Anemia
  - c. Rickets
  - d. Kwashiakor
18. An anthropometric method in infants
  - a. Hip/waist ratio
  - b. Head circumference
  - c. Body mass index
  - d. Skin fold thickness

19. Swyer syndrome is
  - a. Failure of sex organs to develop
  - b. Failure of pancreatic gland to develop
  - c. Failure of thyroid gland to develop
  - d. Failure of digestive organs to develop
20. Goiter is deficiency in
  - a. Mineralocorticoid
  - b. Iodine
  - c. Thymosin
  - d. Melatonin

**Section B: Short Answer Questions (SAQ's)**

**40 Marks.**

1. A. State 5 effects of valvular diseases on the body (5 marks)
2. List 5 risk factors for coronary artery disease (5 marks)
3. Explain 5 types of shock (10 marks)
4. List 5 causes of constipation (5 marks)
5. When the pituitary gland experiences disorder list 5 hormones that would be affected and name one corresponding associated endocrine disorders that may. (10 marks)
6. Explain the generalized stages of infection (5 marks)

**Section B: Long Answer Questions (LAQ)**

**40 Marks.**

1. A 75 year old woman is rushed to the medical facility, complaining of chest jaw and neck pain, shortness of breath, fatigue, cold sweat, nausea and weakness. After assessment you suspect she may have a heart disease. Discuss 10 diagnostic test and procedures that may be performed on her to form a diagnosis (20 marks)
  
2. You are the resident physiotherapist at the local medical ward. A patient has been referred to you and is recovering from pneumonia. The infection has resolved but has a lot of secretions and is experiencing fatigue. In your plan of treatment describe 4 interventions that you may perform on this patient to improve on their treatment outcomes. (20 marks)

## **BSP 224 GENERAL MEDICINE I (3 Units)**

### ***Purpose of the Course***

The student will have a general understanding of the disease the therapist would have encountered in their practice.

### ***Expected Learning Outcomes***

The student will be able to list the aetiology for various medical conditions.

Ability to discern the pathology and clinical features of medical conditions.

To understand the relationship between the medical conditions and how they impact on physiotherapy

To understand treatment methods for various medical conditions.

### ***Course Content:***

Infection: Effects of infection on the body – Pathology – source and spread of infection – vaccinations – generalized infections – rashes and infection – food poisoning and gastroenteritis – sexually transmitted diseases – HIV infections and AIDS.

Poisoning: Clinical features – general management – common agents in poisoning – pharmaceutical agents – drugs of misuse – chemical pesticides – Envenomation.

Food and Nutrition: Assessment – Nutritional and emergency requirements; Deficiency diseases – clinical features and treatment; Protein – Energy Malnutrition: Clinical features and treatment; Obesity and its related disorders; Causes – Complications – benefits of weight loss – management of Obesity – diet, exercise and medication.

Endocrine diseases: Common presenting symptoms of Endocrine disease – common classical disease presentations, clinical features and its management; Diabetes Mellitus; Aetiology and pathogenesis of diabetes – clinical manifestations of the disease – management of the disease – Complication of diabetes.

Diseases of the Blood: Examination of blood disorders – Clinical manifestations of blood disease; Anaemia – signs and symptoms – types and management; Haemophilia – Cause – clinical features severity of disease – management – complication due to repeated haemorrhages – complications due to therapy.

Diseases of Digestive System: Clinical manifestations of gastrointestinal disease – Aetiology, clinical features, diagnosis, complications and treatment of the following conditions: Reflux Oesophagitis, Achlasia Cardia, Carcinoma of Oesophagus, GI bleeding, Peptic ulcer disease, Carcinoma of Stomach, Pancreatitis, Malabsorption syndrome, Ulcerative Colitis, Peritonitis, Infection of Alimentary Tract; Clinical manifestations of Livers disease – Aetiology, clinical features, diagnosis, complications of the following conditions; Viral Hepatitis, Wilson' Disease, Alpha 1 – antitrypsin deficiency, Tumours of the Liver, Gall stones, Cholecystitis.

Cardiovascular Disease: Examination of Cardiovascular System – Investigations; ECG, Exercise Stress Testing, Radiology; Clinical manifestations of Cardiovascular disease; Definition, Aetiology, clinical features, signs and symptoms, complications, management and treatment of the following diseases and disorders of the heart: Pericarditis, Myocarditis, Endocarditis, Rheumatic

Fever – resulting in valve disorders, Ischaemic heart Disease, Coronary Valve Disease, Congenital disorders of the heart, Cardiac Arrest; Examination and Investigations of diseases of arteries and veins; Definition, causes, classification, types, assessment, investigations and management.

Respiratory Disease: Examination of the Respiratory System – Investigations; Chest Radiographs, Pulmonary Function Testing, Arterial Blood Gas analysis; Clinical manifestations of Lung Disease; Definition, Aetiology, Clinical features, signs and symptoms, complications, management and treatment of the following; Chronic Bronchitis, Emphysema, Asthma, Bronchiectasis, Cystic Fibrosis, Upper Respiratory Tract Infections, Pneumonia, Tuberculosis, Fungal Diseases, interstitial Lung Diseases, Diseases of pleura, diaphragm and chest wall; Respiratory failure – Definition, types, causes, clinical features, diagnosis and management.

### ***Mode of Delivery***

Lectures

Tutorial

Group discussions

Wall charts

### ***Instructional Material***

Field visits

Audiovisuals equipment

Flip charts

Chalkboards

Handouts

### ***Course Assessment***

Written Examination 50%

Continuous Examination 20%

Practicals 30%

### ***Core Reading Materials***

Christopher Haslet Edwin Nicholas (2006) Davidsons principles and practice of medicine. Churchill Livingstone New York ISBN 1-8531-343-5

Parvine Kumar (2005) Clinical medicine 6<sup>th</sup> Edition Elsevier London ISBN 0443-3295-3

Charles D. Forbes William Jackson (2005) Colour Atlas of Clinical Medicine Mosby ISBN 0-7234-3295-3.

### ***Recommendation Reference Materials***

Iselbacher Brauwald Wilson Martin Fauci Kasper (2005) Harrison's principles of internal medicine 13<sup>th</sup> Edition McGraw Hill New York ISBN 0-07-03237-4.