

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI
SCHOOL OF HEALTH TECHNOLOGY
DEPARTMENT OF PROSTHETICS AND ORTHOTICS
RAIN SEMESTER EXAMINATION 2018/2019 SESSION

POT 502: ORTHOPAEDIC PATHOLOGY 3

TIME: 2hr 30 mins

SECTION A: Answer four (4) questions, question 1 is compulsory (20 marks)

1. A boy was born in 2015 to Yoruba parents. In 2018, the mother brought her to the hospital with complain that the boy's health has been deteriorating gradually with difficulty getting up from sitting position on the floor, couldn't run or jump. On further examination, it was observed that the child has muscle weakness, especially at pelvis, upper arms, and legs, had a lot of fat deposits at the calf, waddling gait, and also neuromuscular scoliosis. (i) What is the name of this type of progressive degeneration of muscular tissue? 1 mark (ii) Briefly describe the pathogenesis of this disorder. 3 marks (iii) why is this disorder affects boys more than girls? Explain with an aid of a diagram (3marks)
(b) Mucopolysaccharidoses (MPS) is a genetic/metabolic disorder of musculoskeletal system.
(i) List out at least 4 skeletal abnormalities caused by this metabolic bone disorder. 2 marks (ii) Which type of this disorder is X-linked (1 mark) and diagrammatically demonstrate the inheritance among first filial generation if the father has MPS and the mother is healthy. 2 marks
(c) Women within the age bracket of 50-60 years suffer osteoporosis more than their men counterpart. Explain 3 marks
(d) State two advantages of a rehabilitative knee orthosis over knee casts 2marks
(e) Briefly discuss the mechanism of force application in functional and off loading knee orthoses in achieving joint stability 3marks
2. Discuss four causes of Oseoarthritis

b) Describe five modalities of treatment for osteoarthritis
3. Define Septic arthritis
b) List five risk factors for septic arthritis
c) Describe the treatment options for septic arthritis
4. Gait is a powerful tool in predicting health - related consequences and the development of future physical cognitive decline; discuss
5. Write on the causes of gait and balance problems.