(9)

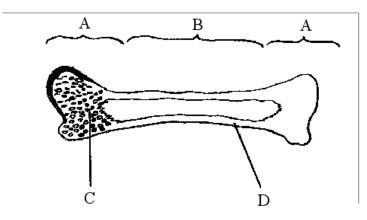
## Question 1

- 11. (a) (i) Name the type of joint shown in the diagram.
  - Name the structure labelled A, which attaches muscle to bone. (ii)
  - Explain what is meant by an antagonistic muscle pair. (iii)



## Question 2

(a) The diagram shows a longitudinal section of a long bone.



Name the parts of the diagram labelled A, B, C, D. (i)

B. \_\_\_\_\_

C.\_\_\_\_\_ D.\_\_\_

- Where are the discs in the human backbone? (ii)
- What is the function of the discs in the human backbone? (iii)
- (b) Give a role for each of the following in the human body:
- Yellow bone marrow. (i)
- (ii) Red bone marrow.

## Question 3

- (a) (i) Draw a diagram to show the structure of a synovial joint. Label three parts of the joint that you have drawn, other than bones.
  - (ii) Explain the functions of the three parts that you have labelled.
  - (iii) Name a disorder of the musculoskeletal system.
  - (iv) Give a possible cause of the disorder that you have named in (iii) and suggest a treatment for it.

(30)

## Question 4

- (a) Answer the following questions in relation to the human musculoskeletal system.
  - (i) Give three roles of the skeleton.
  - (ii) Explain what is meant by the axial skeleton.
  - (iii) Give a function for each of the following:
    - 1. Red marrow, 2. Cartilage, 3. Tendon.
  - (iv) Explain what is meant by an antagonistic muscle pair and give an example in the human body.
  - (v) Suggest a treatment for a <u>named</u> disorder of the musculoskeletal system.

(30)