Closed book examination.

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This paper consists of 3 pages

Answer ALL questions
### SECTION A

**QUESTION 1**

1.1 Compare the cell structure of a prokaryotic cell with a eukaryotic cell

1.2 Name the similarities between plants and green algae

**QUESTION 2**

2.1 Compare parenchyma and collenchyma with regards to
   a) Structure and composition of the cell wall
   b) Functions
   c) Positions in plants

2.2 Explain how a photosystem harvests light

**QUESTION 3**

3.1 Explain the mechanism by which water moves in the plant to reach the leaves

3.2 By means of a diagram explain the process of double fertilization flowering plants

### SECTION B

**QUESTION 4**

4.1 Distinguish between radial and bilateral symmetry.

4.2 Name the three subphyla of the phylum Chordata and give examples of each

**QUESTION 5**

5.1 Distinguish between open and closed circulatory systems and give an example of animal in which each occurs. Also name the three basic components common to both systems

5.2 Describe pulmonary and systemic circuits

[TURN OVER]
QUESTION 6

Name the hormones of

6.1 Gonads
6.2 Adrenal gland
6.3 Pineal gland

[8]

QUESTION 7

7.1 Discuss the process of homeostasis

7.2 Describe and compare the process of conduction, convection, radiation and evaporation

TOTAL: 100 marks