

Science Department.

Paper Biology 1F 8464/B/1F

The format/structure of the papers remains unchanged. For each paper the list shows the major focus of the content of the exam. Each paper may cover some, or all, of the content in the listed topic. Another list shows which required practical activities will be assessed. Topics not assessed either directly or through 'linked' content have also been listed. Assessment of practical skills, maths skills, and Working Scientifically skills will occur throughout all the papers. Topics not explicitly given in any list may appear in low tariff questions or via 'linked' questions. Linked questions are those that bring together knowledge, skills and understanding from across the specification. Students will still be expected to apply their knowledge to unfamiliar contexts

For this paper, the following list shows the <u>major focus</u> of the content of the exam:

- 4.1.2 Cell division
- 4.2.2 Animal tissues, organs and organ systems
- 4.3.1 Communicable diseases
- 4.4.1 Photosynthesis

Required practical activities that will be assessed:

- Required practical activity 1: use of a light microscope.
- Required practical activity 3: use qualitative reagents to test for a range of carbohydrates, lipids and proteins.
- Required practical activity 5: investigate the effect of light on the rate of photosynthesis of an aquatic plant such as pondweed.

Topics not assessed in this paper:

- 4.1.3.2 Osmosis
- 4.1.3.3 Active transport
- 4.2.2.4 Coronary heart disease: a non-communicable disease
- 4.4.1.3 Uses of glucose from photosynthesis
- 4.4.2 Respiration



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For this paper, the following list shows the <u>major focus</u> of the content of the exam:

- 4.1.2 Cell division
- 4.2.2 Animal tissues, organs and organ systems
- 4.4.1 Photosynthesis

Required practical activities that will be assessed:

- Required practical activity 3: use qualitative reagents to test for a range of carbohydrates, lipids and proteins.
- Required practical activity 4: investigate the effect of pH on the rate of reaction of amylase enzyme.
- Required practical activity 5: investigate the effect of light on the rate of photosynthesis of an aquatic plant such as pondweed.

Topics not assessed in this paper:

- 4.1.1.5 Microscopy
- 4.1.3 Transport in cells
- 4.2.3 Plant tissues, organs and systems
- 4.3.1.2 Viral diseases
- 4.3.1.4 Fungal diseases
- 4.3.1.5 Protist diseases
- 4.3.1.6 Human defence systems
- 4.4.1.3 Uses of glucose from photosynthesis
- 4.4.2.2 Response to exercise