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|-------|------------------------|----------|
| (i) | Homologous structures. | (1 mark) |
| | Example. | (1 mark) |
| (ii) | Analogous structures. | (1 mark) |
| | Example. | (1 mark) |
| (iii) | Vestigial structures. | (1 mark) |
| | Example. | (1 mark) |

Candidates were required to bring out the differences between Darwinian and Lamarckian theories of evolution. They were also expected to know the terms Analogous, Homologous and Vestigial structures.

Weaknesses

Distinction between the theories proved difficult. Description of analogous, homologous and vestigial was equally difficult to the candidates.

Expected Response

- a) Lamarckian - inheritance of acquired characteristics;
 Darwinian - inheritance of genetically acquired characteristics;
- i) Homologous structures have a common (embryonic) origin but are modified to perform different functions;
 Vertebrate fore limb;
- ii) Analogous structures have different (embryonic) origins but have evolved to perform similar functions; wings of insects and birds/eye structure in humans/octopus;
- iii) Vestigial structures have ceased to function and are thus greatly reduced in size; Human appendix/Kiwi (flightless bird) with reduced wings/vestigial tail in human/absence of hind limb in python and whale;

Question 15

- (a) Give the differences between the following structures in wind and insect pollinated flowers. (3 marks)
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|------|----------------|
| (i) | Anther. |
| (ii) | Pollen grains. |
| iii) | Stigma. |
- (b) What is the importance of cross pollination? (1 mark)