

# EVOLUTION

**1. 1989 Q7 P1**

State the difference between Lamarckian and Darwinian theories of evolution.

**2. 1991 Q17 P1**

- (a) What is meant by natural selection
- (b) Describe the natural selection brings about adaptation of a species to its Environment

**3. 1992 Q5 P1**

Two populations of the same species of birds were separated over a long period of time by an ocean. Both populations initially fed on insects only. Later it was observed that one population fed entirely on fruits and seeds, although insects were available.

Name this type of evolutionary change.

**4. 1992 Q18 P1**

Explain how the process of evolution may result to the formation of a new species.

**5. 1995 Q8 P1**

Explain why Larmacks theory of evolution is not accepted by biologists today  
(2 marks)

**6. 1996 Q11 P1**

Give a reason why it is only mutation in genes of gametes that can influence evolution  
(1 mark)

**7. 1997 Q9 P1**

State three pieces of evidence that support the theory of evolution

**8. 1998 Q19 P1**

Discuss the various evidences, which show that evolution has taken place.

**9. 1999 Q4 P1**

State two advantages of natural selection to organisms

**10. 2000 Q7 P1**

Give reason why each of the following is important in the study of evolution:

- a) Fossils records
- b) Comparative anatomy.

**11. 2002 Q14 P1**

- a) What is organic evolution?
- b) State two ways in which Home sapiens differs from Homo habilis
- c) Distinguish between divergent and convergent evolution giving example in each case.

**12. 2003 Q6 P1**

Distinguish between analogous and homologous structures.

Analogous structures –  
Homologous structures –

**13. 2004 Q14 P1**

- a) What is the difference between Darwinian and Lamarckian theories of evolution?  
(2 marks)
- b) What is meant by the following terms? Give an example in each case.
  - i) Homologous structures
  - ii) Example

- iii) Vestigial structure (6 marks)
- 14. 2005 Q4 P1**  
 What is meant by  
 a) Organic evolution (1 mark)  
 b) Continental drift? (1 mark)
- 15. 2006 Q15 P1**  
 Explain continental drift as an evidence of evolution. (3 marks)
- 16. 2007 Q21 P1**  
 (a) What is adaptive radiation (2 marks)  
 (b) Give a reason why organisms become resistant to drugs (1 mark)
- 17. 2008 Q7 P1**  
 (a) What is fossil (1 mark)  
 (b) How does convergent evolution occur (3 marks)
- 18. 2009 Q10 P1**  
 (a) (i) What is meant by vestigial structures? (1 mark)  
 (ii) Give an example of a vestigial structure in human (1 mark)
- .....
- (b) Explain why certain drugs become ineffective in curing a disease after many years of use. (2 marks)
- 19. 2010 Q24 P1**  
 a) State **two** ideas proposed by Lamarck in his theory of evolution. (2 marks)  
 b) Why is Lamarck's theory not acceptable? (1 mark)
- 20. 2011 Q21 P1**  
 a. What is meant by convergent evolution? (1 mark)  
 b. State two limitations of fossils as an evidence of evolution (2 marks)
- 21. 2011 Q2d P2**  
 Explain how comparative embryology is an evidence for organic evolution. (2 marks)
- 22. 2012 Q22 P1**  
 State the importance of divergent evolution to organisms (2 marks)
- 23. 2012 Q26 P1**  
 (a) State the theories of evolution proposed by the following scientists. (2 marks)  
 Charles Darwin  
 Jean – Baptiste de Lamarck...
- (b) State the evidence of evolution based on (2 marks)  
 (i) Cell organelles...  
 (ii) Fossils...