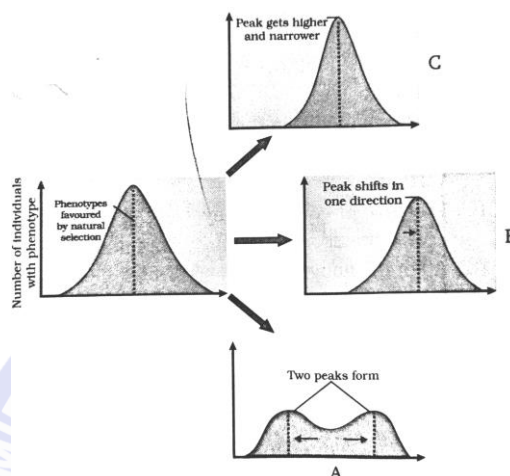# TOPIC: EVOLUTION

1. The original feature of Darwin's finches in Galapagos island were adapted for:

   (1) Honey collecting   (2) Insect eating   (3) Seed eating   (4) Fish eating

2. The diagrammatic representation of operation of natural selection on different traits shown. Identify A, B and C.

	A	B	C
(1)	Disruption	Stabilisation	Directional change
(2)	Directional change	Stabilisation	Disruption
(3)	Stabilisation	Directional change	Disruption
(4)	Disruption	Directional change	Stabilisaton

3. The first 'human –being like' (hominid creature was:

   (1) Dryopithecus   (2) Ramapithecus   (3) Australopithecus   (4) Homo habilis

4. The correct sequence of stage in evolution of modern man (Homo sapiens sapiens) is:

   (I) Homo erectus   (II) Neanderthal man

   (III) Modern man   (IV) Australopithecus

   (V) Cro-Magnon ma

   (1) IV → II → I → III → I   (2) IV → I → II → V → III

   (3) IV → II → III → I → V   (4) IV → V → III → I → II

5. The cranial capacity of Neanderthal man was:

   (1) 1300 – 1400 cc   (2) 1100 cc   (3) 1200 cc   (4) 850 cc

6. A population is in Hardy-Weinberg equilibrium for a gene with only two alleles. If the gene frequency of an allele A is 0.7, the genotype frequency of Aa is

   (1) 0.21   (2) 0.42   (3) 0.36   (4) 0.7

7. Match column-I with column-II and select the correct option.

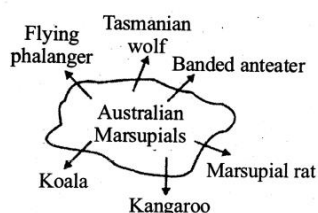|	Column–I		Column-II
A	Saltation	I	Darwin
B	Formation of life was preceded	II	Louis Pasteur
C	Reproductive fitness	III	de Vries
D	Life comes from pre-existing life	IV	Oparin and haldane

(1) A-III, B-IV, C-I, D-II

(2) A-IV, B-III, C-II, D-I

(3) A-II, B-III, C-I, D-IV

(4) A-I, B-IV, C-III, D-II

8. The given diagram of masrsupials of Australia provides an example of

(1) convergent evolution

(2) Parallel evolution

(3) recapitulation

(4) divergent evolution

9. Hardy-Weinberg Equilibrium is based on which of the following equation?

(1) p + pq + q =1

(2) p + 2Pq + q = 1

(3) $p + p^2q^2 + q = 1$

(4) $p^2 + 2pq + q^2 = 1$

10. Which one of the following are analogous structures

(1) Wings of bat & wings of pigeon

(2) Gills of prawn & lungs of man

(3) Thorns of Bouganvillia & tendrils of cucurbita

(4) Flippers of dolphin & legs of horse

11. Appearance of antibiotic resistant bacteria is an example of

(1) Adaptive radiation

(2) Transduction

(3) Pre-existing variation in the population

(4) Divergent evolution

12. Match column I with column II and choose the correct options from the given codes.

	COLUMN I		COLUMN II
A	15 mya	I	Dryopithecus existed
B	1.5 mya	II	Dinosaurs disappeared
C	65 mya	III	Java man existed
D	2.0 mya	IV	*Australopithecus* probably lived in East African grasslands

(1) A-IV, B-III, C-II, D-I

(2) A-I, B-III, C-II, D-IV

(3) A-IV, B-I, C-II, D-III

(4) A-II, B-IV, C-III, D-I

13. Stanley Miller performed the first successful experiment to assess the validity of the claim for origin of organic molecules in the primitive earth condition. The control apparatus contained every arrangement except that it was devoid of

(1) Ammonia

(2) Methane

(3) Oxygen

(4) H_2O

14. Chance elimination of alleles from small population is

(1) Adaptation (2) Genetic drift (3) Speciation (4) Selection pressure

15. Darwin's finches are good example of

(1) Connecting link (2) Adaptive radiation

(3) Convergent evolution (4) Industrial melanism.