

Q1 Statement I: Natural selection leads to evolution by selection of fittest individuals that reproduce more.

Statement II: Organisms better adapted to natural conditions are more likely to leave behind more offspring.

- (A) Both Statements I and II are correct.
- (B) Both Statements I and II are incorrect.
- (C) Statement I is correct, but Statement II is incorrect.
- (D) Statement I is incorrect, but Statement II is correct.

Q2 Which of the following statements would Darwin disagree with?

- (A) Individuals within a population vary in the characteristics they possess.
- (B) Natural selection is the mechanism by which biological evolution takes place.
- (C) Evolution is best viewed as a purposeful and directed change over time.
- (D) All of these

Q3 According to Charles Darwin's observations, existing life forms show:

- (A) no relationship with extinct species
- (B) similarities to varying degrees not only among themselves but also with life forms that existed millions of years ago
- (C) independent origin unrelated to past life
- (D) no evolution at all

Q4 The process by which organisms with different evolutionary history evolve similar phenotypic adaptations in response to a common environmental challenge, is called

- (A) natural selection
- (B) convergent evolution
- (C) non-random evolution
- (D) adaptive radiation

Q5 The essence of Darwin Theory about Evolution is?

- (A) Mutation
- (B) Natural selection
- (C) Competition
- (D) Sexual reproduction

Q6 Statement I: The rate of appearance of new forms is linked to the life cycle or the life span. Statement II: Microbes that divide fast have the ability to multiply and become millions of individuals within hours.

- (A) Statement I and Statement II both are correct.
- (B) Statement I is correct, but Statement II is incorrect.
- (C) Statement I is incorrect, but Statement II is correct.
- (D) Statement I and Statement II both are incorrect.

Q7 Which of the following exhibit embryological evidence of evolution?

- (A) Eyes of Octopus and mammals.
- (B) Vestigial gill slits in embryos of all vertebrates.
- (C) Fossils in different sedimentary layers.
- (D) Flippers of Penguins and Dolphins.



Q8 Statement I: All organisms are better adapted to survive in an otherwise hostile environment. Statement II: Fitness is the starting result of the ability to adapt and get selected by nature.

- (A) Statement I and Statement II both are correct.
 (B) Statement I is correct, but Statement II is incorrect.
 (C) Statement I is incorrect, but Statement II is correct.
 (D) Statement I and Statement II both are incorrect.

Q9 Match the scientist with contribution:

Scientist		Contribution	
1	Watson & Crick	P	DNA structure
2	Hershey & Chase	Q	DNA is genetic material
3	Lamarck	R	Inheritance of acquired traits
4	Darwin	S	Natural selection

- (A) 1-Q, 2-P, 3-S, 4-R
 (B) 1-P, 2-Q, 3-S, 4-R
 (C) 1-R, 2-P, 3-Q, 4-S
 (D) 1-P, 2-Q, 3-R, 4-S

Q10 State true or false and select the correct option.

I. The ship used by Charles Darwin during his sea voyages was HMS Beagle.

II. Alfred Wallace worked in Malay Archipelago.

III. According to modern scientific views, the first cellular life appeared about 4.5 billion years ago.

- (A) I-T, II-T, III-F
 (B) I-F, II-T, III-T
 (C) I-F, II-F, III-T
 (D) I-T, II-F, III-F



Answer Key

Q1 A
Q2 C
Q3 B
Q4 B
Q5 B

Q6 A
Q7 B
Q8 D
Q9 D
Q10 A



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Hints & Solutions

Note: scan the QR code to watch video solution

Q1 Text Solution:

Both Statements I and II are correct.

Video Solution:**Q2 Text Solution:**

Evolution is best viewed as a purposeful and directed change over time.

Video Solution:**Q3 Text Solution:**

similarities to varying degrees not only among themselves but also with life forms that existed millions of years ago

Video Solution:**Q4 Text Solution:**

Convergent evolution occurs in unrelated group of organisms. It is the development of similar functional structures but in unrelated groups.

Video Solution:**Q5 Text Solution:**

The essence of Darwin Theory about Evolution is natural selection.

Video Solution:

Q6 Text Solution:

(1)

The rate of appearance of new forms is linked to the life cycle or the life span. Microbes that divide fast have the ability to multiply and become millions of individuals within hours. A colony of bacteria (say A) growing on a given medium has built-in variation in terms of ability to utilise a feed component. A change in the medium composition would bring out only that part of the population (say B) that can survive under the new conditions.

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Video Solution:**Q7 Text Solution:**

(2)

- Embryological support for evolution was proposed by Ernst Haeckel.
- He observed that the embryos of all vertebrates including human develop a row of vestigial gill slit just behind the head but it is a functional organ only in fish and not found in any other adult vertebrates.

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Video Solution:**Q8 Text Solution:**

(4)

Some organisms are better adapted to survive in an otherwise hostile environment. Fitness is the end result of the ability to adapt and get selected by nature.

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Video Solution:**Q9 Text Solution:**

1-P, 2-Q, 3-R, 4-S

Video Solution:**Q10 Text Solution:**

I-T, II-T, III-F

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