

Assertion and Reason Questions and Answers Pdf

Question: 1

Assertion (A) : Passengers in a boat are not allowed to stand.

Reason (R) : This may raise the centre of gravity of the boat .

- (A) A is true but R is false.
- (B) A is false but R is true.
- (C) Both A and R are false.
- (D) Both A and R are true but R is not the correct explanation of A.
- (E) Both A and R are true and R is the correct explanation of A.

Ans: E

R fully explains A.

Question: 2

Assertion (A) : Graphite is slippery and used as a lubricant.

Reason (R) : Graphite has free electrons.

- (A) Both A and R are true but R is not the correct explanation of A.
- (B) Both A and R are true and R is the correct explanation of A.
- (C) A is false but R is true.
- (D) A is true but R is false.
- (E) Both A and R are false.

Ans: A

Graphite possesses a layer structure with two successive layers held by weak forces and able to slide over one another.

So, graphite is slippery and this property finds its use as a lubricant.

In graphite, each carbon atom is linked to three carbon atoms while one electron in the carbon atom is delocalized. So, graphite has free electrons.

Question: 3

Assertion (A) : Telephone wires sag more in summer.

Reason (R) : They expand due to summer heat.

(A) A is true but R is false.

(B) A is false but R is true.

(C) Both A and R are false.

(D) Both A and R are true and R is the correct explanation of A.

(E) Both A and R are true but R is not the correct explanation of A.

Ans: E

The metal of telephone wires expands in summer and the wires become loose. So, they sag.

Question: 4

Assertion (A) : There is no vaccine for AIDS.

Reason (R) : The AIDS virus changes its genetic code.

(A) A is true but R is false.

(B) A is false but R is true.

(C) Both A and R are false.

(D) Both A and R are true and R is the correct explanation of A.

(E) Both A and R are true but R is not the correct explanation of A.

Ans: D

A vaccine contains the inactivated germs of the disease.

But the AIDS virus changes its genetic code and so on vaccine has been invented for it.

Question: 5

Assertion (A) : Bronze is used for making statues.

Reason (R) : Bronze is an alloy of copper and tin.

(A) Both A and R are true but R is not the correct explanation of A.

(B) Both A and R are true and R is the correct explanation of A.

(C) A is true but R is false.

(D) A is false but R is true.

(E) Both A and R are false.

Ans: A

Bronze is an alloy of copper and tin. It is resistant to corrosion and so it is used to make statues.

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