Q1. 23 January Shift 1

Given below are two statements: one is labelled as Assertion (A) and the other is labelled as Reason (R).
Consider a ferromagnetic material :

Assertion (A) : The individual atoms in a ferromagnetic material possess a magnetic dipole moment and interact with one another in such a way that they spontaneously align themselves forming domains.

Reason (R): At high enough temperature, the domain structure of ferromagnetic material disintegrates. Thus, magnetization will disappear at high enough temperature known as Curie temperature.

In the light of the above statements, choose the correct answer from the options given below :

(1) (A) is true but (R) is false

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

(3) (A) is false but (R) is true

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

ANSWER KEYS

1. (3)