

JEE MAIN NUCLEI — BINDING ENERGY PER NUCLEON CURVE — PYQS

Max. Marks: 8

Questions: 2

Section A (MCQ) — 2 questions

Q.1 Given below are two statements :

Statement-I: For all elements, greater the mass of the nucleus, greater is the binding energy per nucleon.

Statement-II: For all elements, nuclei with less binding energy per nucleon transform to nuclei with greater binding energy per nucleon.

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

[JEE Main 2026 (Online) 24th January Morning Shift]

- (1) Statement-I is false but Statement-II is true
- (2) Both Statement-I and Statement-II are true
- (3) Both Statement-I and Statement-II are false
- (4) Statement-I is true but Statement-II is false

Scan or tap for the full solution



Q.2 Given below are two statements. One is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**.

Assertion (A): The binding energy per nucleon is found to be practically independent of the atomic number A , for nuclei with mass numbers between 30 and 170.

Reason (R): Nuclear force is long range.

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

[JEE Main 2025 (Online) 23rd January Evening Shift]

- (1) (A) is true but (R) is false
- (2) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (3) (A) is false but (R) is true
- (4) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2										
Ans.	1	1										