

**JEE MAIN RELATIONS AND FUNCTIONS (CLASS 12) — INVERTIBLE
FUNCTIONS AND INVERSE OF A FUNCTION — PYQS**

Max. Marks: 4

Questions: 1

Section A (MCQ) — 1 question

Q.1 For the function $f: [1, \infty) \rightarrow [1, \infty)$ defined by $f(x) = (x-1)^4 + 1$, among the two statements :

(I) The set $S = \{x \in [1, \infty) : f(x) = f^{-1}(x)\}$ contains exactly two elements, and

(II) The set $S = \{x \in [1, \infty) : f(x) = f^{-1}(x+1)\}$ is an empty set,

[JEE Main 2026 (Online) 4th April Evening Shift]

- (1) only (I) is TRUE
- (2) only (II) is TRUE
- (3) both (I) and (II) are TRUE
- (4) neither (I) nor (II) is TRUE

Scan or tap for the full solution



ANSWER KEY

[illegible]