

**JEE MAIN SEMICONDUCTOR ELECTRONICS — P-N JUNCTION
FORMATION — PYQS****Max. Marks: 4****Questions: 1****Section A (MCQ) — 1 question**

Q.1 In a semiconductor p-n diode, the doping concentrations on p-side and n-side are 10^{15} atoms/cm³ and 10^{18} atoms/cm³, respectively. Which one of the following statements is true ?

[JEE Main 2026 (Online) 5th April Evening Shift]

- (1) Widths of depletion region on either side of the interface are equal
- (2) The depletion region width is more on p-side compared to that in n-side
- (3) The depletion region width is more on n-side compared to that in p-side
- (4) No depletion region forms because of unequal doping concentrations on p and n-sides

Scan or tap for the
full solution

**ANSWER KEY**

Ques.	1											
Ans.	2											