



PHYMATH SOLUTIONS

madipakkam,chennai-91

EVEN DAY TEST (26/07/2023) TOPIC :UNIT 1 (REVISITING IRRATIONAL NUMBERS)

Class 10 - Mathematics

Time Allowed: 30 minutes

Maximum Marks: 15

Section A

1. $(1 + \sqrt{2}) + (1 - \sqrt{2})$ is [1]
- | | |
|----------------------|------------------------------|
| a) a rational number | b) a non-terminating decimal |
| c) None of these | d) an irrational number |

Section B

2. **Assertion (A):** \sqrt{a} is an irrational number, where a is a prime number. [1]
Reason (R): Square root of any prime number is an irrational number.
- | | |
|---|---|
| a) Both A and R are true and R is the correct explanation of A. | b) Both A and R are true but R is not the correct explanation of A. |
| c) A is true but R is false. | d) A is false but R is true. |

Section C

3. **State True or False:** [1]
 (i) 4.795831523... is not an irrational number. [1]

Section D

4. Classify $\sqrt{21}$ as rational or irrational. [1]
 5. Is 0.5918 a rational number? [1]
 6. Prove that $\frac{2}{\sqrt{7}}$ is irrational. [2]
 7. Show that $(2 + \sqrt{3})$ is an irrational number. [3]
 8. Prove that $\frac{2\sqrt{3}}{5}$ is irrational. [5]