

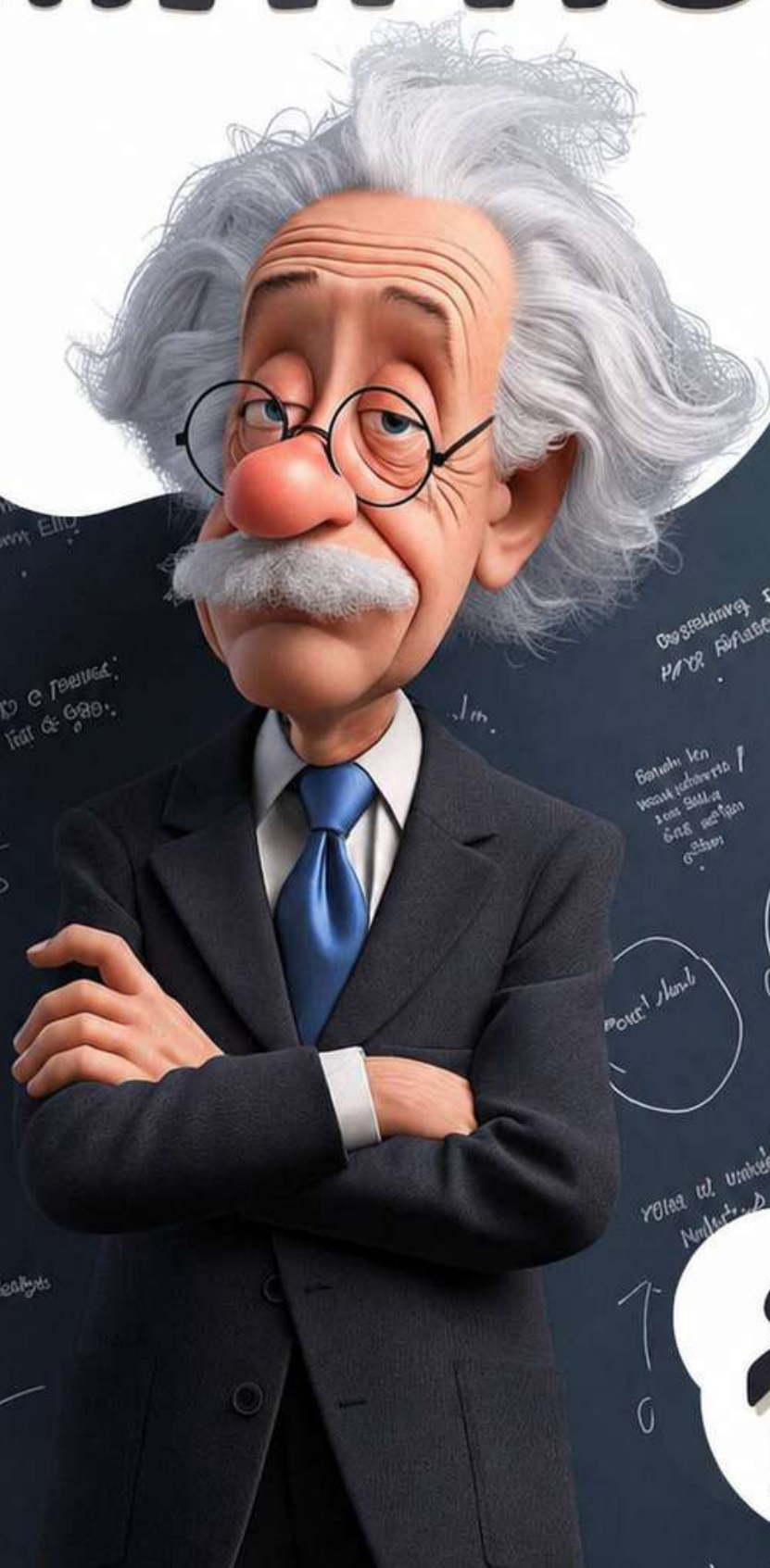


RBSE

CHAPTERWISE PYQ

MATHS

2013 - 2026



Class
10

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01

REAL NUMBERS

[Section-A]

Multiple Choice Questions :-

1. Which of the following is an irrational number? [1M]
(A) 2
(B) 2.232425....
(C) $2.\overline{23}$
(D) 2.23 (RBSE 2022)
2. The sum of the powers of the prime factors of 196 is- [1M]
(A) 1
(B) 2
(C) 4
(D) 6 (RBSE 2023)
3. The Highest Common Factor of two numbers is 27 and their Least Common Multiple is 162 . If one number is 54 , then the other number is : [1M]
(A) 81
(B) 27
(C) 54
(D) 18 (RBSE 2024)
4. The sum of powers of prime factors of 400 is [1M]
(A) 4
(B) 9
(C) 6
(D) 8 (RBSE 2025)
5. If $HCF = LCM$ for two rational numbers, then numbers always should be
(A) Composite
(B) Equal
(C) Prime

(D) Co-prime

[1M]

(RBSE 2025)

6. HCF of numbers 16 and 20 will be:

- (A) 2
- (B) 4
- (C) 8
- (D) 80

[1M]

(RBSE 2026)

7. Which of the following is an irrational number?

- (A) 0.5
- (B) $0.5\bar{7}$
- (C) 0.53261....
- (D) 5

[1M]

(RBSE 2026)

Very Short Answer Type Questions:-

8. Find the H.C.F. of numbers 44 and 99.

[1M]

(RBSE 2013)

9. Find the HCF of 96 and 404 by the Prime Factorization Method.

[1M]

(RBSE 2015)

10. Find the HCF of integers 375 and 675 by the prime factorization method.

[1M]

(RBSE 2016)

11. HCF and LCM of two integers are 12 and 336 respectively. If one integer is 48, then find another integer.

[1M]

(RBSE 2017)

12. Write the sum of powers of prime factors of 196.

[1M]

(RBSE 2018)

13. Find the HCF of 68 and 119.

[1M]

(RBSE 2019)

14. If product of two numbers is 12960 and HCF is 18 then find their LCM.

[1M]

(RBSE 2020)

15. Find the least common multiple (LCM) of numbers 72 and 120.

[1M]

(RBSE 2022)

16. Highest Common Factor (HCF) of 95 and 152 is. [1M]
(RBSE 2023,2024)
17. If $x = 2^3 \times 3^2$ and $y = 2^2 \times 3^2$, then find the Least Common Multiple (L.C.M.) of x and y . [1M]
(RBSE 2024)
18. Consider the number 4^n , where n is a natural number. Whether there is any value of n for which 4^n ends with the digit zero (0)? [1M]
(RBSE 2026)
19. Express the number 144 as a product of its prime factors. [1M]
(RBSE 2026)

[Section-B]

Short Answer Type Questions:-

20. Find the highest common factor (HCF) of two numbers 616 and 32. [2M]
(RBSE 2022)
21. Prove that $\sqrt{5}$ is an irrational number. [2M]
(RBSE 2024)
22. Find the HCF and LCM of 12,15 and 21 using the prime factorisation method. [2M]
(RBSE 2024)

[Section-C]

Long Answer Type Questions:-

23. Find the highest positive integer by which dividing the numbers 396, 436 and 542 remainders are 5,11 and 15 respectively. [3M]
(RBSE 2013)
24. Find the H.C.F. and L.C.M. of the numbers 180, 72 and 252. [3M]
(RBSE 2014)
25. Prove that $\sqrt{2}$ is an irrational number. [3M]
(RBSE 2015)
26. Prove that $\sqrt{6}$ is an irrational number. [3M]
(RBSE 2016)
27. Prove that $\sqrt{3}$ is an irrational number. [3M]
(RBSE 2017)
28. If the product of two numbers is 525 and their H.C.F. is 5, then find their L.C.M. [3M]
(RBSE 2018)
29. Prove that $7\sqrt{5}$ is an irrational number. [3M]
(RBSE 2019)

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