QB365 Question Bank Software Study Materials

Real Numbers 50 Important 1 Marks Questions With Answers (Book Back and Creative)

9th Standard

Maths

Total Marks : 50

Multiple Choice Question

50 x 1 = 50

1) If n is a natural number then $\sqrt{n}$ is _____.

(a) always a natural number (b) always an irrational number (c) always a rational number

(d) may be rational or irrational

2) Which of the following is not true?

(a) Every rational number is a real number (b) Every integer is a rational number

(c) Every real number is an irrational number (d) Every natural number is a whole number

3) Which one of the following, regarding sum of two irrational numbers, is true?

(a) always an irrational number **(b) may be a rational or irrational number** (c) always a rational number

(d) always an integer.

4) Which one of the following has a terminating decimal expansion?

(a) $\frac{5}{64}$ (b) $\frac{8}{9}$ (c) $\frac{14}{15}$ (d) $\frac{1}{12}$

5) Which one of the following is an irrational number.

(a) $\sqrt{25}$ (b) $\sqrt{\frac{9}{4}}$ (c) $\frac{7}{11}$ **(d)** π

6) An irrational number between 2 and 2.5 is _____.

(a) $\sqrt{11}$ **(b)** $\sqrt{5}$ (c) $\sqrt{2.5}$ (d) $\sqrt{8}$

7) The smallest rational number by which $\frac{1}{3}$ should be multiplied so that its decimal expansion terminates after one place of decimal is _____.

(a) $\frac{1}{10}$ **(b)** $\frac{3}{10}$ (c) 3 (d) 30

8) if $\frac{1}{7} = 0.\overline{142857}$ then the value of $\frac{5}{7}$ _____.

(a) $0.\overline{142857}$ **(b)** $0.\overline{714285}$ (c) $0.\overline{571428}$ (d) 0.714285

9) Find the odd one out of the following.

(a) $\sqrt{32} \times \sqrt{2}$ (b) $\frac{\sqrt{27}}{\sqrt{3}}$ (c) $\sqrt{72} \times \sqrt{8}$ **(d)** $\frac{\sqrt{54}}{\sqrt{18}}$

10) $0.\overline{34} + 0.3\bar{4}$ = _____.

(a) $0.6\overline{87}$ (b) $0.\overline{68}$ (c) $0.68\bar{}$ (d) $0.687\bar{}$

11) Which of the following statement is false?

(a) The square root of 25 is 5 or −5 (b) $\sqrt{25}$ = 5 (c) $-\sqrt{25}$ = -5 **(d) $\sqrt{25}$ = ±5**

12) Which one of the following is not a rational number?

(a) $\sqrt{\frac{8}{18}}$ (b) $\frac{7}{3}$ (c) $\sqrt{0.01}$ **(d)** $\sqrt{13}$

13) $\sqrt{27}+\sqrt{12}$ = _____.

(a) $\sqrt{39}$ (b) $5\sqrt{6}$ **(c) $5\sqrt{3}$** (d) $3\sqrt{5}$

14) If $\sqrt{80} = 5\sqrt{5}$, then k= _____.

(a) 2 **(b) 4** (c) 8 (d) 16

15) $4\sqrt{7} \times 2\sqrt{3}$ = _____.

(a) $6\sqrt{10}$ **(b) $8\sqrt{21}$** (c) $8\sqrt{10}$ (d) $6\sqrt{21}$

16) When written with a rational denominator, the expression $\frac{2\sqrt{3}}{3\sqrt{2}}$ can be simplified as _____.

(a) $\frac{\sqrt{2}}{3}$ (b) $\frac{\sqrt{3}}{2}$ **(c) $\frac{\sqrt{6}}{3}$** (d) $\frac{2}{3}$

17) When $(2\sqrt{5}-\sqrt{2})^2$ is simplified, we get _____.

(a) $4\sqrt{5}+2\sqrt{2}$ **(b) $22-4\sqrt{10}$** (c) $8-4\sqrt{10}$ (d) $2\sqrt{10}-2$

18) $(0.000729)^{\frac{-3}{4}} \times (0.09)^{\frac{-3}{4}}$ = _____.

(a) $\frac{10^3}{3^3}$ (b) $\frac{10^5}{3^5}$ (c) $\frac{10^2}{3^2}$ **(d) $\frac{10^6}{3^6}$**

19) If $\sqrt{9^x} = \sqrt[3]{9^2}$, then x = _____.

(a) $\frac{2}{3}$ **(b) $\frac{4}{3}$** (c) $\frac{1}{3}$ (d) $\frac{5}{3}$

20) The length and breadth of a rectangular plot are 5×10^5 and 4×10^4 metres respectively. Its area is _____.

(a) 9×10^1 m^2 (b) 9×10^9 m^2 **(c) 2×10^{10} m^2** (d) 20×10^{20} m^2

21) The number $0.\bar{3}$ in the form $\frac{p}{q}$ where p and q are integers and $q \neq 0$

(a) $\frac{33}{100}$ (b) $\frac{3}{10}$ **(c) $\frac{1}{3}$** (d) $\frac{3}{100}$

22) The value of $0.2\bar{3} + 0.2\bar{2}$ is _____

(a) $0.4\bar{3}$ (b) 0.45 (c) $0.4\bar{5}$ **(d) $0.4\bar{5}$**

23) If a number has a non-terminating and non-recurring decimal expansion, then it is_____ .

(a) a rational number (b) a natural number **(c) an irrational number** (d) an integer

24) Which of the following are irrational numbers?

(i) $\sqrt{2+\sqrt{3}}$

(ii) $\sqrt[3]{5+\sqrt{7}}$

(iii) $\sqrt{8-\sqrt[3]{8}}$

(iv) $\sqrt{4+\sqrt{25}}$

(a) (ii), (iii) and (iv) (b) (i), (ii) and (iv) (c) (i), (ii) and (iii) **(d) (i), (iii) and (iv)**

25) Irrational number has a_____ .

(a) terminating decimal (b) no decimal part (c) non-terminating and recurring decimal

(d) non-terminating and non-recurring decimal

26) If $\frac{1}{7}$= 0.142857, then the value of is_____.

(a) 0.285741 **(b) 0.428571** (c) 0.285714 (d) 0.574128

27) The product of $2\sqrt{5}$ and $6\sqrt{5}$ is_____.

(a) $12\sqrt{5}$ **(b) 60** (c) 40 (d) $8\sqrt{5}$

28) The rational number lying between $\frac{1}{5}$ and $\frac{1}{2}$ is_____.

(a) $\frac{7}{20}$ (b) $\frac{2}{10}$ (c) $\frac{2}{7}$ (d) $\frac{3}{10}$

29) The value of $0.\bar{0}3 + 0.\bar{0}3$ is _____.

(a) $0.\bar{0}9$ (b) $0.\bar{0}9$ **(c)** $0.\bar{0}9$ (d) 0

30) Which of the following is not an irrational number?

(a) $\sqrt{2}$ (b) $\sqrt{5}$ (c) $\sqrt{3}$ **(d)** $\sqrt{25}$

31) $\sqrt[3]{192} + \sqrt[3]{24}$

(a) $3\sqrt[3]{6}$ **(b)** $6\sqrt[3]{3}$ (c) $\sqrt[3]{216}$ (d) $\sqrt[6]{216}$

32) $\frac{\sqrt[3]{27}}{\sqrt[5]{3}}$ is equal to_____

(a) $5\sqrt{9}$ (b) $5\sqrt{6}$ (c) $5\sqrt{24}$ (d) $\sqrt[5]{30}$

33) Which is the best example of a number written in scientific notation?

(a) $\mathbf{2.71 \times 10^5}$ (b) 0.6×10^4 (c) 0.9871 (d) 125.4×10^4

34) The length of a square is 1.2×10^3 m. Its area is_____

(a) 14.4×10^6 **(b)** $\mathbf{1.44 \times 10^6}$ (c) 0.144×10 (d) 1440

35) A number having non terminating and recurring decimal expansion is _____

(a) an integer **(b) a rational number** (c) an irrational number (d) a whole number

36) Decimal form of $\frac{-3}{4}$ is _____

(a) -0.75 (b) -0.50 (c) -0.25 (d) -0.125

37) The $\frac{p}{q}$ form of 0.3 is _____

(a) $\frac{1}{7}$ (b) $\frac{2}{7}$ **(c)** $\frac{1}{3}$ (d) $\frac{2}{3}$

38) Which one of the following has a terminating decimal expansion?

(a) $\frac{5}{32}$ (b) $\frac{7}{9}$ (c) $\frac{8}{15}$ (d) $\frac{1}{12}$

39) Which of the following are irrational numbers

$i)\sqrt{2+\sqrt{3}}$
$ii)\sqrt{4+\sqrt{25}}$
$iii)\sqrt[3]{5+\sqrt{7}}$
$iv)\sqrt{8-\sqrt[3]{8}}$

(a) (ii), (iii) and (iv) (b) (i), (ii) and (iv) (c) (i), (ii) and (iii) **(d) (i),(iii) and (iv)**

40) Which one of the following is not a surd?

(a) $\sqrt[3]{8}$ (b) $\sqrt[3]{30}$ (c) $\sqrt[5]{4}$ (d) $\sqrt[8]{3}$

41) The simplest form of $\sqrt{50}$ is _____

(a) $5\sqrt{10}$ **(b)** $5\sqrt{2}$ (c) $10\sqrt{5}$ (d) $25\sqrt{2}$

42) The rationalising factor of $\frac{5}{\sqrt[3]{3}}$ is _____

(a) $\sqrt[3]{6}$ (b) $\sqrt[3]{3}$ (c) $\sqrt[3]{9}$ **(d)** $\sqrt[3]{27}$

43) Which one of the following is not true?

(a) $\sqrt{2}$ is an irrational number (b) $\sqrt{17}$ is an irrational number (c) c) 0.10110011100011110... is an irrational number

(d) $\sqrt[4]{16}$ **is an irrational number**

44) The order and radical of the surd $\sqrt[8]{12}$ are respectively _____

(a) 8, 12 (b) 12, 8 (c) 12, 16 (d) 16, 12

45) $5\sqrt[3]{3}$ represents the pure surd _____

(a) $\sqrt[3]{15}$ **(b)** $\sqrt[3]{375}$ (c) $\sqrt[3]{75}$ (d) $\sqrt[3]{45}$

46) $(\sqrt{5}-2)(\sqrt{5}+2)$ is equal to _____

(a) 1 (b) 2 (c) 23 (d) 31

47) The scientific notation of 923.4 is _____

(a) 9.234×10^{-2} **(b)** 9.234×10^{2} (c) 9.234×10^{3} (d) 923.4×10^{-3}

48) The scientific notation of 0.00036 is _____

(a) 3.6×10^{-3} (b) 3.6×10^{3} **(c)** 3.6×10^{-4} (d) 3.6×10^{4}

49) The decimal form of 2.57×10^{3} is _____

(a) 257 **(b) 2570** (c) 25700 (d) 257000

50) The decimal form of 3.506×10^{-2} is _____

(a) 0.03506 (b) 0.003506 (c) 35.06 (d) 350.6