

Class - VIII

Answer key.

1. The additive identity of rational number is zero
2. Addition & multiplication is commutative for rational number

So, (b) option is the answer

3. $0.\overline{6} \Rightarrow 0.6666\dots$

$$x = 0.6666\dots \quad \text{--- (1)}$$

Multiplying 10 both side

$$10x = 6.6666\dots \quad \text{--- (2)}$$

Subtract equation 1 from 2

$$10x - x = 6.6666 - 0.6666$$

$$9x = 6$$

$$x_1 = \frac{6}{9}$$

Similarly,

$$x_2 = \frac{7}{9}$$

and $n_3 = \frac{8}{9}$

so,

$$\frac{6}{9} + \frac{1}{9} + \frac{8}{9}$$

$$= \frac{15}{9} = \frac{5}{3}$$

so, (c) option is the answer.

4.

$\frac{3-2}{4}$	$\frac{2}{3}$
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$\frac{9-8}{12}$

$$\frac{1}{12}$$

so, (a) option is the answer

5. Value of $10P+1$ when $1 \leq P \leq 10$

$$P=1 = 11$$

$$P=2 = 21$$

$$P=3 = 31$$

$$P=4 = 41$$

$$P=5 = 51$$

$$P=6 = 61$$

$$P=7 = 71$$

$$P = 8 = 81$$

$$P = 9 = 91$$

$P = 10 = 101$ So, number of prime number are 6.

$$6. \quad \frac{-8}{17} + \frac{4}{5} = \frac{4}{5} + x$$

So,

$$x = \frac{-8}{17}$$

So,

(d) option is answer.

$$7. \quad 27 \times 3^{5x-2} = \frac{1}{81}$$

$$3^3 \times 3^{5x-2} = \frac{1}{3^4}$$

$$(a^m \times a^n = a^{m+n})$$

$$3^{3+5x-2} = 3^{-4}$$

$$3^{5x+1} = 3^{-4}$$

We know that,

when base are equal power are also equal when equality sign is applied.

So,

$$5n+1 = -4$$

$$5n = -5$$

$$n = \frac{-5}{5} = -1$$

So,

(b) option is the answer.

8.

We know that, $a^0 = 1$

$$\text{So, } \left\{ 5^{-1} + \left(\frac{1}{2}\right)^{-2} + 2^{-1} \right\}^0 = 1$$

So, (b) option is the answer.

$$9. \frac{5^{-3n}}{5^{n+7}} = \frac{1}{125} = \frac{1}{5^3}$$

we know that,

$$\frac{a^m}{a^n} = a^{m-n}$$

$$5^{-3n-(n+7)} = 5^{-3}$$

We know that, when base are equal then base power is also equal when equality sign is applied.

So,

$$-3n - (n+7) = -3$$

$$-3n - n - 7 = -3$$

$$-4n - 7 = -3$$

$$-4n = 4$$

$$n = \frac{4}{-4} = -1 \quad \text{So, (a) option is answer}$$

$$10. \left[\frac{x^{-1} + y^{-1}}{x^{-1}} \right]^{-1} + \left[\frac{x^{-1} + y^{-1}}{x^{-1}} \right]^{-1} = ?$$

$$\frac{2}{x} \left[\frac{x^{-1} + y^{-1}}{x^{-1}} \right]^{-1}$$

$$\frac{2}{x} \left[\frac{\frac{1}{x} + \frac{1}{y}}{\frac{1}{x}} \right]^{-1} = \frac{2}{x} \left[\frac{x+y}{xy} \cdot x \right]^{-1}$$

$$Q \left[\frac{n+y}{xy} \times \frac{x}{y} \right]^{-1}$$

$$Q \left[\frac{n+y}{y} \right]^{-1}$$

$$Q \left[\frac{y}{n+y} \right]$$

$$\frac{Qy}{n+y}$$

No option Match Bonus Question

11. $16,200 = 2^a \times 3^b \times 5^c$

16200
8100
4050
2025
405
81
27
9
3
1

$$16200 = 2^3 \times 3^4 \times 5^2$$

$$a = 3$$

$$b = 4$$

$$c = 2$$

So (a) $a=3$ $b=4$ $c=2$

12.

$$(19)^2 = 361$$

$$(24)^2 = 576$$

$$(11)^2 = 121$$

$$(13)^2 = 169$$

So,

(b) option is the answer.

13.

Let,

δ be $2m$

We know that,

the Pythagorean triplet is -

$$2m, m^2 - 1 \text{ and } m^2 + 1$$

So,

$$2m = 8$$

$$m = \frac{8}{2} = 4$$

$$\begin{aligned} \text{So, } m^2 - 1 &= 4^2 - 1 \\ &= 16 - 1 \\ &= 15 \end{aligned}$$

$$\begin{aligned}m^2 + 1 &= 4^2 + 1 \\ &= 16 + 1 \\ &= 17\end{aligned}$$

So,
the triplet is - 8, 15, 17

So,
(b) option is the answer

14.

$$\begin{aligned}&\sqrt{388 + \sqrt{127 + \sqrt{289}}} \\ &= \sqrt{388 + \sqrt{127 + 17}} \\ &= \sqrt{388 + \sqrt{144}} \\ &= \sqrt{388 + 12} \\ &= \sqrt{400} \\ &= 20\end{aligned}$$

So,
(c) option is the answer.

15.

$$\frac{1872}{\sqrt{n}} = 234$$

$$1872 = 234 \times \sqrt{n}$$

$$\sqrt{n} = \frac{1872}{234} = \frac{936}{117} = \frac{312}{39} = \frac{104}{13} = 8$$

$$\sqrt{n} = 8$$

$$n = (8)^2$$

$$n = 64$$

No,

(b) option is answer.

16.

$$\begin{array}{r|l} & .0091 \\ 9 & 0.00068281 \\ \pm 9 & -81 \\ \hline 181 & 181 \\ & -181 \\ \hline & 0. \end{array}$$

No,

(a) option is answer.

17.

The cube of an odd natural number is odd.
So, (b) option is answer.

18.

$$\sqrt[3]{\sqrt{144} + \sqrt{16} + \sqrt{4}}$$

$$\Rightarrow \sqrt[3]{12 + 4 + 2}$$

$$\Rightarrow \sqrt[3]{18}$$

$$\Rightarrow 3$$

So, (a) option is answer ~~(b)~~

19.

$$\frac{5n}{6} + \frac{3n}{4} = \frac{19}{12}$$

$$\frac{20n + 18n}{24} = \frac{19}{12}$$

$$38n = 38$$

$$n = \frac{38}{38} = 1$$

So, (c) option is answer

20.

$$5(x-3) - 4(x-2) = 0$$

$$5x - 15 - 4x + 8 = 0$$

$$x - 7 = 0$$

$$x = 7$$

So,

(a) option is answer.

21.

$$\frac{x^2 - (x+2)(x+3)}{x+3} = \frac{2}{3}$$

$$\frac{x^2 - (x^2 + 3x + 2x + 6)}{x+3} = \frac{2}{3}$$

$$5x - 3(5x + 6) = 2x + 6$$

$$-15x - 18 = 2x + 6$$

$$-17x = 24$$

$$x = -\frac{24}{17}$$

So,

(b) option is answer

22.

$$kn + a = mn + b$$

$$kn - mn = b - a$$

$$n(k - m) = b - a$$

$$n = \frac{b - a}{k - m}$$

So, (b) option is answer.

23.

$$\frac{7y + 4}{y + 2} = \frac{-4}{3}$$

$$\Rightarrow 3(7y + 4) = -4(y + 2)$$

$$\Rightarrow 21y + 12 = -4y - 8$$

$$\Rightarrow 25y = -20$$

$$\Rightarrow y = \frac{-20}{25} = \frac{-4}{5}$$

So, (b) option is answer

24.

$$(p+2)(p-3) + (p-3)(p-4) = p(2p-5)$$

$$(p^2 - 3p + 2p - 6) + (p^2 - 4p - 3p + 12) = 2p^2 - 5p$$

$$p^2 + p^2 - \cancel{1p} - 1p - 7p - 6 + 12 = 2p^2 - 5p$$

$$2p^2 - 8p + 6 = 2p^2 - 5p$$

$$6 = +3p$$

$$\frac{2 \cdot 6}{2} = p$$

$$p = 2$$

So, (a) option is answer

25.

We know that, sum of all angles of quadrilateral is 360° .

So,

$$1n + 2n + 3n + 4n = 360^\circ$$

$$10n = 360^\circ$$

$$n = \frac{360^\circ}{10} = 36^\circ$$

So,

the largest angle is $4n$

so,

the largest angle is $= 144^\circ$

So,

(d) option is answer.

Answer key with solutions.
(class- 8th.)

Q.26 - Answer - (d)

Related to - Chapter - 01
Topic :- Weeds.

Q.27 Answer - (d)

Related to - Chapter - 01
Topic :- Revolution in agricultural.

Q.28 Answer - (d)

Related to Chapter - 02
Topic :- microorganisms.

Q.29 Answer - (b)

Related to - Chapter - 02
Topic :- microorganisms.

Q.30 Answer - (b)

Related to Chapter - 02
Topic :- Food preservatives.

Q.31 Answer - (c)

Related to Chapter - 05
Topic :- Conservation of living things.

Q.32 Answer - [C]

Related to Chapter - 05
Topic :- Tiger projects.

40) Answer - (a), related to Chapter - 06
Topic:- Reproduction in animals.

41) Answer - (b), related to Chapter - 06
Topic:- Sexual Hormones.

42) Answer - (b), related to Chapter - 09
Topic:- Importance of microorganisms.

43) Answer - (A), related to Chapter - 09
Topic:- Importance of microorganisms.

44) Answer - Bonus, related to Chapter - 01
Topic:- Agriculture Management.

45) Answer - (b), related to Chapter - 04
Topic:- Combustion.

46) Answer - (b), related to Chapter - 05
Topic:- Animals protected areas.

47) Answer - (b), related to Chapter - 06
Topic:- Reproduction in Humans.

48) Answer - (c), related to Chapter - 08
Topic:- Force and pressure.

49) Answer - (a), related to Chapter - 05.
Topic:- Species -

50) Answer - (a), related to Chapter - 02
Topic:- Microbes.

Q. 33 Answer - (d)

Related to Chapter - 05

Topic:- Species of organisms.

Q. 34 Answer (d) (Bonus)

Related to Chapter - 04

Topic:- Calorific Values.

Q. 35 Answer (c)

Related to Chapter - 07

Topic:- Fuels.

Q. 36 Answer (c)

Related to Chapter - 08

Topic:- Density.

Q. 37 Answer - (d)

Related to Chapter - 08

Topic:- Force and Pressure.

Q. 38) Answer - (b)

Related to Chapter - 08

Topic:- Pressure.

Q. 39 Answer - (b)

Related to Chapter - 06

Topic:- Female Reproductive System.

Subject - English

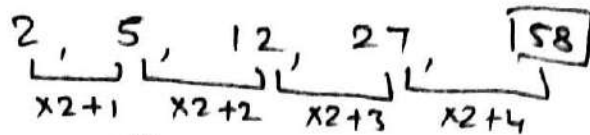
Class - 8th

Answer Key

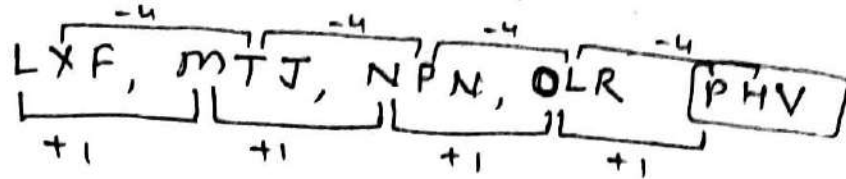
71. (A) go ('daily' is an adverb of simple present tense)
72. (C) will be cooking ('at this time tomorrow' is an adverb of future continuous tense)
73. (B) had left (Both sentences are connected with 'before', blank space will be filled with 'past perfect tense')
74. (D) became ('in 1947' shows simple past tense)
75. (C) The (before the name of river 'Ganga')
76. (C) a (due to 'noun phrase' with consonant sound)
77. (D) little (with uncountable noun in negative meaning)
78. (B) Your (other options are not matched with given sentence)
79. (A) between ('between' is used for two persons/things etc.)
80. (C) on (before 'days' and 'dates')
81. (B) into (To express conversion/change)
82. (C) at (To indicate point of time of clock)
83. (A) can ('ability/strength' has been shown in present tense in given sentence)
84. (D) may (due to 'possibility')
85. (D) must not (for 'prohibition')
86. (A) May (To take 'permission formally')
87. (B) women (gender opposite of 'men' in plural)
88. (C) Seamstress (gender opposite of 'seamster')
89. (B) king (gender opposite of 'queen')
90. (C) policies (plural number of 'policy')

CLASS-8

91. C



92. A



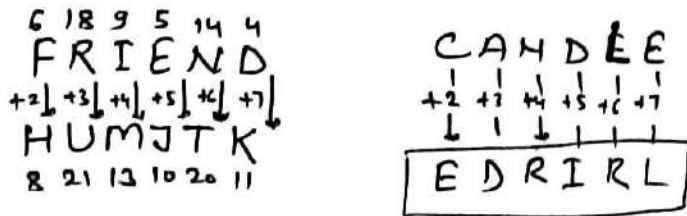
93. A

1. Quest 2. Quiet 3. Quite 4. Quite

94. C

$2+3-4=1$, $8+4-4=8$, $1+5-3=3$

95. A



96. C

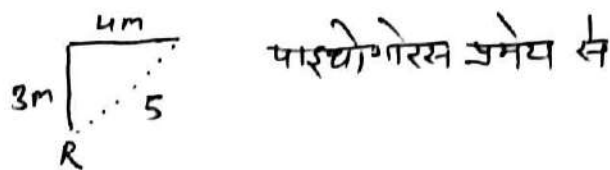
POLICE $\rightarrow 16+15+12+9+3+5 = \frac{60}{6} = 10$

MEND $\rightarrow 13+5+14+4 = \frac{36}{4} = 9$

CAT $\rightarrow 3+1+20 = \frac{24}{3} = 8$

97. A. सूर्य भी एक तारा है।

98. C



99. B

63 भाज्य है, शेष अभाज्य

100. B