## SOLUTIONS

1. Ans. D.

Since the author said," we shall defend our island whatever the cost may be" made clear that the speaker is a patriot urging the defense of his motherland.
2. Ans. C.

The makes his sentiments very clear by saying - on the struggle, until the New World steps forth to the rescue and the liberation of the Old.
3. Ans. A.

The statement "Go on to the end" and " shall never surrender" show the pstriotism and determination of the author.
4. Ans. D.

The effect of repetitive pattern used in the passage is that it reinforces the speaker's basic intention.
5. Ans. B.

The tone of the speaker is inspiring and encouraging.
6. Ans. C.

MEDDLE means interfere in something that is no one's concern.
7. Ans. A.

ABJURE means solemnly renounce (a belief, cause, or claim).
8. Ans. D.

ESTRANGE means cause (someone) to be no longer on friendly terms with someone. Alienate also means same - make (someone) feel isolated or estranged.
9. Ans. C.

Derogatory means showing a critical or disrespectful attitude and, Praising means express warm approval. Both words are opposite in nature.
10. Ans. A.

WANE means (of a state or feeling) decrease in vigour or extent. And widen means broaden, increase. Both are nearly opposite in meaning.
11. Ans. D.

No Error
12. Ans. C.

The spelling of rouge is misspelt as rogue.
13. Ans. A.

Could is used in hypothetical situation, where we want to express ability except willingness. So, 'could' should be replaced with should.
14. Ans. A.
'has' should be replaced with 'have'.
15. Ans. A.

Here 'vacations' should be singular as 'vacation'.
16. Ans. D.

Weather is always forecasted.
17. Ans. A.

Protested is used because here the villagers express their feeling by making an objection to what has been done.
18. Ans. B.
'Burst' is break open or apart suddenly and violently, especially as a result of an impact or internal pressure. So Burst is the most appropriate word.
19. Ans. D.
'Nominal' is most appropriate word.
20. Ans. C.
'Incensed is the most appropriate word.
21. Ans. D.

Rabindranath Tagore accorded the title Mahatma to MK Gandhi.
22. Ans. B.

Non-cooperation movement was started by
Mahatma Gandhi in 1920 to drive the British out of the country.
23. Ans. B.

During the Middle Ages education was confined only to Brahmins.
24. Ans. A.

Buddhism was introduced into Sri Lanka in the third century BCE after the Third Buddhist council by Mahinda Bhikkhu, son of Emperor Ashoka.
25. Ans. C.

Oxidizing and reducing agents depend upon the reactant. Oxidizing and reducing agents are key terms used in describing the reactants in redox reactions that transfer electrons between reactants to form products.
26. Ans. D.

Wayne Rooney was born on October 24, 1985, in Croxteth, Liverpool, England.
27. Ans. C.
"Waka Waka (This Time for Africa, is a song by Colombian singer Shakira was released on 7 May2010 by Epic Records as the official song of the 2010 FIFA World Cup, which was held in South Africa.
28. Ans. B.

In the year 2011, Saina was selected for the prestigious Rajiv Gandhi Khel Ratna award, the country's sporting honour, for her outstanding achievements in badminton.
29. Ans. C.

Visible Horizon is the circle of contract, with the earth, of the cone of visual rays passing through the point of observation.
30. Ans. B.

National Rural Employment Guarantee Act 2005
(NREGA later renamed as the "Mahatma Gandhi
National Rural Employment Guarantee Act",
MGNREGA), is an Indian labour law and social security measure that aims to guarantee the 'right to work'.
31. Ans. C.

The origin of the Sutlej River is located close to Lake Rakhastal in Tibet in the vicinity of the Kailash Mountain Range. The Sutlej River usually runs according to a west to southwest itinerary moving into India via the Shipki La Pass located in Himachal Pradesh
32. Ans. A.

Limonite is one of the two principal iron ores, the other being hematite, and has been mined for the production of iron.
33. Ans. C.

Black revolution relates to petroleum production.
34. Ans. B.

The Karrar unmanned combat air vehicle produced for the military of Iran.
35. Ans. D.

Somnath Chatterjee is the author of book 'Keeping the Faith: Memoirs of a Parliamentarian'.
36. Ans. A.

Calcitonin is 32 -amino acid linear polypeptide hormone that is produced in humans primarily by the parafollicular cells of the thyroid, and in many other animals in the ultimopharyngeal body. It acts to reduce blood calcium, opposing the effects of parathyroid hormone.
37. Ans. C.

Plasmodesmata are interrupted by narrow pores carrying fine strands of cytoplasm, which interlink the contents of the cells.
38. Ans. B.

Kapil Dev is the first Indian cricketer to get this honorary rank from Territorial Army.
39. Ans. C.

The transport phenomenon occurs only in equilibrium state of a gas and is irreversible.
40. Ans. D.

The acid and the nitrite form nitrous acid which then reacts with the amine.
41. Ans. B.
$37^{2}-23^{2}=840$
Required number $=\sqrt{840}=28.98$
42. Ans. B.

Let the average of 8 men be $x$. Age of new man be $N$.
Total age of 8 men $=8 x$
$\Rightarrow x+4=((8 x-30)+N) / 8$
$\Rightarrow 8 x+32=8 x-30+N$
$\Rightarrow \mathrm{N}=32+30$
$\Rightarrow N=62$
43. Ans. A.

Let the weight of vessel be x
Weight of water $=24-x$
$\Rightarrow(24-x) / 4+x=9$
$\Rightarrow 24-x+4 x=36$
$\Rightarrow 3 x=12$
$\Rightarrow \mathrm{x}=4 \mathrm{~kg}$
44. Ans. A.
$(a-b)^{2}=a^{2}+b^{2}-2 a b$
$\Rightarrow 16=a^{2}+b^{2}-90$
$\Rightarrow a^{2}+b^{2}=106$
$a^{3}-b^{3}=(a-b)\left(a^{2}+b^{2}+a b\right)$
$\Rightarrow a^{3}-b^{3}=4 \times(106+45)$
$\Rightarrow a^{3}-b^{3}=4 \times 151$
$\Rightarrow a^{3}-b^{3}=604$
45. Ans. D.
$a /(a+b)=15 / 21 \rightarrow a=15, a+b=21 \rightarrow b=21$
$-15=6$
$\Rightarrow \mathrm{a}-\mathrm{b}=15-6=9$
$\Rightarrow(a+b) /(a-b)=21 / 9$
46. Ans. C.

This can easily be solved by using $(a+b)^{2}$ and $(a-$
b) ${ }^{2}$ formula
$\Rightarrow\left[(798)^{2}+(579)^{2}+2(798 \times 579)-(798)^{2}-\right.$
$\left.(579)^{2}+2(798 \times 579)\right] /(798 \times 579)$
$\Rightarrow 4(798 \times 579) /(798 \times 579)$
$\Rightarrow 4$
47. Ans. C.

A man's average monthly expenditure for the first four months of the year = Rs.231.25.
For four month $=231.25$ * $4=$ Rs. 925
For next five month he spend $=231.25+22.75$ for one month.
In five month he spend $=(231.25+22.75) \times 5=$ 1270
If the person spent Rs. 605 in all during the
remaining three months of the year,
Total expense $=925+1270+605=2800$
Saving $=3500-2800=700$
\% saving $=700 / 3500 * 100=20 \%$
48. Ans. B.

Let the ratio be x : y
Total boys $=16.4 \times x$
Total girls $=15.4 \times$ y
Total number of students in class $=16.4 x+15.4 y$
The average age of all students is 15.8
The total age of boys is 15.8 x
The total age of girls is 15.8 y
$16.4 x+15.4 y=15.8 x+15.8 y$
$0.6 x=0.4 y$
$x / y=0.4 / 0.6=2 / 3$
49. Ans. A.

Capacity of tank $=(8 \times 18)=144$ litres
If the capacity of each bucket $=12$ litres
Then, Nunber of buckets needed $=144 / 12=12$
buckets
50. Ans. C.

Let the sum invested be x .
$\Rightarrow 8 x / 100+12 x / 100=1500$
$\Rightarrow 20 x=150000$
$\Rightarrow x=7500$
51. Ans. B.

Let principal be $x$.
Simple interest $=x / 5$
Time $=4$ years
Rate of interest $=100 \times \mathrm{SI} /(\mathrm{P} \times$ Time $)$
$R=100 \times x / 5 /(x \times 4)$
$R=20 / 4=5 \%$
52. Ans. A.

Money lent at $9 \%=x$
Money lent at $7 \%=(2600-x)$
$\Rightarrow 9 x / 100+(2600-x) \times 7 / 100=206$
$\Rightarrow 9 x+18200-7 x=20600$
$\Rightarrow 2 x=2400$
$\Rightarrow x=1200$
Money lent at $7 \%=2600-1200=1400$
53. Ans. B.

Let total number of votes enrolled $=x$
No. of voted cast $=70 \%$ of $x=0.7 x$
Valid votes $=98 \%$ of $0.7 x$
$\Rightarrow 60 \%$ of total valid votes $=7203=60 \%$ of $98 \%$
of $0.7 x$
$\Rightarrow 0.6 \times 0.98 \times 0.7 x=7203$
$\Rightarrow x=7203 /(0.6 \times 0.98 \times 0.7)$
$\Rightarrow x=17500$
54. Ans. B.

Let the price of kerosene be $x$ and household consumption be $y$.
Expenditure $=x y$
New cost of kerosene $=1.1 x$, let new household consumption be $z$.
In order to not to increase expenditure,
$x y=1.1 x * a$
$\Rightarrow a=10 y / 11$
$\Rightarrow$ consumption should decrease by $=1 / 11 \times 100=$ 9.09\%
55. Ans. D.
no of pupils pupil from first school for examination= 75
No. of pupil passed $=80 \%$ of $75=60$
No. of pupil from second school $=85$
No .of pupil passed from $2^{\text {nd }}$ school $=55$
Pass \% from second school $=55 / 85 \times 100=$
64.70\%
56. Ans. B.
$3 / 16 \times 80,6 / 16 \times 80,7 / 16 \times 80$
$\Rightarrow 15,30,35$
57. Ans. D.

Amount $=P(1+r / 100)^{t}$
Amount $=1875(1+4 / 100)^{2}$
Amount $=1875(104 / 100)(104 / 100)$
Amount $=2028$
58. Ans. D.
$x: y=8: 15$
If $y=10, x=8 / 15 \times 10$
$y=16 / 3$
59. Ans. C.

Ratio of milk and water $=2: 1$
Quantity of milk $=60 \times 2 / 3=40$ litre
Quantity of water $=20$ litre
To make ratio, 1: 2, we have to double the water that of milk
So, water should be 80 litre.
That means $80-20=60$ litre water to be added.
60. Ans. A.

Let the amount at 6\% be $x$
Amount at $10 \%$ be ( $10000-x$ )
At 9.2 \% interest, SI = $10000 \times 9.2 \times 1 / 100=$
920
Amount $=10920$
$\Rightarrow 6 x / 100+(10000-x) 10 / 100=920$
$\Rightarrow 6 x-10 x+100000=92000$
$\Rightarrow 4 x=8000$
$\Rightarrow x=2000$
Money lent at $10 \%=10000-2000=8000$
61. Ans. C.

All except Kangra is a hill. Kangra is a valley.
62. Ans. D.

Virgo, Pisces and Cancer are zodiac sign but Orion is not.
63. Ans. B.

All except foot are part of hands.
64. Ans. D.

Canoe, Dingy, Yatch are the type of boats while igloo is a type of houses.
65. Ans. B.

Inn, Hostel, Motel are the places for stay. But Club is not.
66. Ans. B.

Liquor is a type of drink same as tea is a type of beverages.
67. Ans. D.

Due to evaporation cloud forms. Similarly, Due to tension breakdown cause.
68. Ans. A.

Second is the bigger form of first.
69. Ans. D.

Creams belong to cosmetics class. Similarly teak is kind of wood so Teak:wood is correct options.
70. Ans. A.

Flesh eating animals are carnivore and plant eating animals are herbivores.
71. Ans. C.

They are characters from various dramas.
72. Ans. A.

These are sites of volcanoes.
73. Ans. D.

They are units of measurement.
The knot is a unit of speed equal to one nautical mile ( 1.852 km ) per hour, approximately.
The Watt is a unit of power.
A fathom is a unit of length in the imperial and the U.S. customary systems equal to 6 feet (1.8288 metres).
74. Ans. A.

They are famous for oil fields.
75. Ans. C.

All these are the pieces in the game of chess.
76. Ans. D.

All these late silver screen personalities belonged to Bengal.
77. Ans. B.

They are terms connected with black magic.
78. Ans. A.

They have steel plants.
79. Ans. D.

These are leafy vegetables.
80. Ans. B.

They were famous poets.
81. Ans. C.

Option C suits best and will continue the same series. Because of the Sign of opposite of $\wedge$ will in 2 and 4 is opposite thus if we follow the same sequence then we get 6 and at this same as $C$ and A, but in fig $c$ both elements have some distance in vice verse Fig.a doesn't contain this. So ans is C
82. Ans. D.

The upper arrow will in upper direction and the lower arrow will also be in upper direction.
83. Ans. D.

Option D suits best and will be continue in the series.
84. Ans. C.

Option $C$ fits best in the series.
85. Ans. C.

The position of middle dots changes its position in clockwise. And option C suits best in the series.
86. Ans. D.

The position of dots is enclosed in the same geometric region.
87. Ans. B.

The dots position is enclosed in same geometric position as in question.
88. Ans. C.

In fig. $(X)$ the dot is placed in the region common to the circle and the triangle, amongst the four alternatives, only in fig. (3) , we have a region common to circle and triangle only. Hence, fig (3) is the answer.
89. Ans. B.

The dots position is enclosed in same geometric position as in question.
90. Ans. B.

The dots position is enclosed in same geometric position as in question.
91. Ans. B.

The original figure is embedded in option $B$.
92. Ans. D.

The original figure is embedded in option $D$.
93. Ans. B.

The original figure is embedded into the option $B$.
94. Ans. D.

The original figure fits in option $D$
95. Ans. B.

The original figure lies within the option $B$ figure. 96. Ans. C.

The option $C$ fits in the original figure perfectly. 97. Ans. D.

Option $D$ fits perfectly in the original figure.
98. Ans. B.

Option B fits in the original figure perfectly.
99. Ans. B.

Option $B$ fits the original figure perfectly.
because of if put $B$ in fig. $X$ then inner circle is complete and inner two small circle is also in sequence. so option $b$ is correct.
100. Ans. A.

Option A fits the original figure perfectly.

