



15. always be verified \_\_\_\_\_ reference to one's own.  
1. to                    2. at                    3. by                    4. for
16. lessons of the book \_\_\_\_\_ the observation of children  
1. with                2. until                3. from                4. upon
17. suggested for \_\_\_\_\_ and introspection will  
1. observe                    2. observes  
3. observed                    4. observation
18. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.  
At large  
1. A very big opportunity.  
2. A criminal escaped or not yet captured.  
3. To have a big heart.  
4. A big appetite.
19. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.  
Head over heels  
1. To do things exactly opposite of what is expected.  
2. Madly in love.  
3. To do stupid things.  
4. To unknowingly dive into an unpleasant situation.
20. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.  
Beyond or above the range of normal or physical human experience  
1. Mundane                    2. Transcendent  
3. Ribald                    4. Coarse
21. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.  
Capable of being imagined or grasped mentally  
1. Dazzling                    2. Conceivable  
3. Stunning                    4. Spectacular
22. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence.  
In case no improvement is needed, select "no improvement".  
As he tried harder, his steps slowed, his senses (was activated).  
1. is activated                    2. were activated  
3. were activated                    4. no improvement
23. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence.  
In case no improvement is needed, select "no improvement".  
My daughter (comes running) as fast as her little feet can take her while her eyes sparkle vivaciously.  
1. comes run                    2. come running  
3. came run                    4. no improvement
24. The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.  
Leadership and  
A- team-building skills deepened  
B- for relationships                    C- a sense of value  
1. ACB                    2. ABC                    3. CBA                    4. CAB
25. In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.  
1. percoletion                    2. parcolation  
3. percolation                    4. parcoletion
26. In the following question, select the related word pair from the given alternatives.  
Pascal : Pressure :: ? : ?  
1. Hectare : Volume                    2. Speed : Temperature  
3. Joule : Work                    4. Time : Seconds
27. In the following question, select the related number from the given alternatives.  
563 : 635 :: 894 : ?  
1. 849                    2. 489                    3. 498                    4. 948
28. In the following question, select the related letter pair from the given alternatives.  
MOK : KLG :: ? : ?  
1. FIM : DFI                    2. TMA : UNB  
3. KCN : JBM                    4. FSA : IVD
29. In the following question, select the odd word pair from the given alternatives.  
1. Square – Four                    2. Pentagon – Five  
3. Rectangle – Three                    4. Triangle – Three
30. In the following question, four number pairs are given. The number on left side of (–) is related to the number of the right side of (–) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.  
1. 7 – 49                    2. 2 – 4                    3. 5 – 25                    4. 3 – 39
31. In the following question, select the odd letter/letters from the given alternatives.  
1. RTV                    2. HJL                    3. KMP                    4. BDF
32. Arrange the given words in the sequence in which they occur in the dictionary.  
1. Soften                    2. Sterilize                    3. Stick                    4. Sterile  
5. Status  
1. 15423                    2. 25134                    3. 54213                    4. 32154
33. In the following question, select the missing number from the given series.  
23, 28, 34, 41, 49, ?  
1. 59                    2. 57                    3. 58                    4. 55
34. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.  
GJT, IMR, KPP, MSN, ?  
1. PUL                    2. OVL                    3. OUK                    4. PVM
35. In a row of buses, Panjab is at 19<sup>th</sup> position from the right end. Raftaar is 23 places to the left from Panjab and is at the exact centre of row. How many buses are between Raftaar bus and bus standing at the left end?  
1. 44                    2. 42                    3. 40                    4. 43
36. From the given alternatives, select the word which CANNOT be formed using the letters of the given word.  
Government  
1. Got                    2. Over                    3. Need                    4. Norm
37. In a certain code language, "FRIED" is written as "EQHDC". How is "RUSTY" written in that code language?  
1. PAXYZ                    2. QTRSX                    3. PARSX                    4. NQVSZ
38. In a certain code language, '–' represents 'x', '÷' represents '+', '+' represents '÷' and 'x' represents '–'. Find out the answer to the following question.  
 $19 \div 2 - 35 + 10 \times 6 = ?$   
1. 20                    2. 14                    3. 32                    4. 27
39. The following equation is incorrect. Which two signs should be interchanged to correct the equation?  
 $15 \times 18 - 6 \div 20 + 4 = 29$   
1. + and  $\times$                     2.  $\div$  and –                    3. + and  $\div$                     4. – and +
40. If  $40@8 = -5$ ,  $30@3 = -10$  and  $20@5 = -4$ , then find the value of  $60@3 = ?$   
1. 45                    2. -20                    3. -5                    4. -36
41. Which of the following terms follows the trend of the given list?  
abABABAB, ABabABAB, ABABabAB, ABABABab, abABABAB, \_\_\_\_\_  
1. ABABA baB                    2. abABABAB  
3. ABabABAA                    4. ABabABAB
42. Two village women are returning home starting from the same point. The first woman walks 1 km South, then turns to her right and walks 6 km to reach her house. In the meanwhile the second woman walks 5 km West, then she turns North and

### General Intelligence

26. In the following question, select the related word pair from the given alternatives.  
Pascal : Pressure :: ? : ?  
1. Hectare : Volume                    2. Speed : Temperature  
3. Joule : Work                    4. Time : Seconds
27. In the following question, select the related number from the given alternatives.  
563 : 635 :: 894 : ?  
1. 849                    2. 489                    3. 498                    4. 948

walks 4 km, then she turns to her left and walks 1 km to reach her house. Where is the second woman's house with respect to the first woman's house?

- 1. 5 km North
- 2. 3 km North
- 3. 5 km South
- 4. 3 km South

43. In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

**Statement I:** No books are notebooks  
**Statement II:** All diaries are books  
**Conclusion I:** No notebooks are diaries  
**Conclusion II:** All diaries are notebooks

- 1. Only conclusion I follows
- 2. Only conclusion II follows
- 3. Both conclusions I and II follow
- 4. Neither conclusion I nor conclusion II follows.

44. In the following, rectangle represent Film critics, circle represent Bakers, triangle represents Divers and square represents Football players. Which set of letter represent Football players who are not Divers?
- 

- 1. ED
- 2. FD
- 3. GH
- 4. DC

45. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.  
 HPA, FMZ, DJY, BGX, ?

- 1. ZDW
- 2. ZEV
- 3. YDW
- 4. YEV

46. In the following question, select the missing number from the given series.

672, 666, 660, 654, ?

- 1. 648
- 2. 646
- 3. 650
- 4. 640

47. In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

- 1. (61, 64, 71)
- 2. (57, 60, 69)
- 3. (75, 78, 85)
- 4. (89, 92, 99)

48. If a mirror is placed on the line MN, then which of the answer figure is the right image of the given figure?
- 

- 1.
- 2.
- 3.
- 4.

49. Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?

- 
- 1.
  - 2.
  - 3.
  - 4.

50. A word is represented by only one set of number as given in any one of the alternative. The sets of number given in the alternatives are represented by two classes of alphabets as shown in the two given matrices. The column and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its rows and next by its column, for 'F' can be represented by 24, 41, etc and 'P' can be represented by 58, 87 etc. Similarly, you have to identify the set for the word 'UNIT'

Matrix-I					
	0	1	2	3	4
0	C	K	E	G	B
1	L	A	H	I	H
2	G	C	A	D	F
3	C	K	G	I	K
4	B	F	J	J	H

Matrix-II					
	5	6	7	8	9
5	S	X	T	P	W
6	T	P	N	T	P
7	Q	Z	P	X	O
8	U	Q	P	W	N
9	P	N	W	R	X

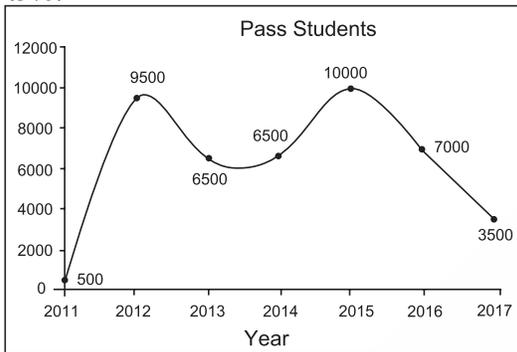
- 1. 22,78,34,69
- 2. 22,67,34,59
- 3. 14,69,24,75
- 4. 85,67,13,57

**Quantitative Aptitude**

51. What is the least number that can be multiplied to 69120 to make it a perfect cube?  
 1. 10      2. 50      3. 25      4. 5
52. Mr. Ankit is on tour to Siachin and he has Rs. 360 for his expenditure. If he exceeds his tour by 4 days, he must trim down his daily expenditure by Rs.3. For how many days is Mr. Ankit is on tour?  
 1. 20      2. 22      3. 24      4. 26
53. Determine the value of  $\left(\frac{1}{r} + \frac{1}{s}\right)$  when  $r^3 + s^3 = 0$  and  $r + s = 6$   
 1. 0      2. 0.5      3. 1      4. 6
54. What is the y – intercept of the linear equation  $59x + 14y - 112 = 0$ ?  
 1. 8      2. 14      3. 28      4. 59
55. The circumferences of two circles are touching externally. The distance between their centres is 12 cm. The radius of one circle is 7 cm. Find the diameter (in cm) of the other circle.  
 1. 12      2. 10      3. 8      4. 5
56. The length of the radius of the circumference of a triangle having sides 9 cm, 12 cm and 15 cm is  
 1. 6 cm      2. 7.5 cm      3. 4.5 cm      4. 6.5 cm
57. If  $X = 600$  and  $Y = 800$ , then X is how much percent less than Y?  
 1. 33.33      2. 25      3. 75      4. 35
58. The ratio of three numbers is 2 : 3 : 5. If the sum of the three numbers is 275, then what is the largest among the three numbers?  
 1. 142      2. 82.5      3. 137.5      4. 152
59. S, T and U started a business and their capitals are in the ratio of 3 : 4 : 6. At the end they receive the profit in the ratio of 1 : 2 : 3. What will be the respective ratio of time period for which they contributed their capitals?  
 1. 3 : 2 : 2      2. 2 : 3 : 3      3. 2 : 2 : 3      4. 4 : 5 : 3
60. What is the average of first 7 multiples of 7?  
 1. 7      2. 14      3. 21      4. 28
61. A sum of Rs 8000 is divided into two parts. The simple interest on first part at the rate of 21% per annum is equal to the simple interest on second part at the rate of 35% per annum. What is the interest (in Rs) of each part?  
 1. 1050      2. 840      3. 1400      4. 1220
62. Selling price of a glass is Rs 1965 and loss percentage is 25%. If selling price is Rs 3013, then what will be the profit percentage?  
 1. 13      2. 10.4      3. 15      4. 20
63. Ramesh marks his article at Rs 6000 and after allowing a discount of 20%, he still earns 60% profit. What is the cost price (in Rs) of the article?  
 1. 3600      2. 4800      3. 3000      4. 4200

64. What is the value of  $\sqrt{729} + \sqrt{72.9} + \sqrt{7.29}$  ?  
 1. 40.5      2. 45.6      3. 33.5      4. 38.23
65. Rohan and Mohit together can build a wall in 8 days. Mohit and Vikas build the same wall in 10 days and Vikas and Rohan can build the same wall in 12 days. In how many days can all the three complete the same wall while working together?  
 1. 240/37      2. 120/37      3. 150/37      4. 180/37
66. A boy starts from his house and walks at a speed of 5 km/hr and reaches his school 3 minutes late. Next day he starts at the same time and increases his speed by 4 km/hr and reaches 3 minutes early. What is the distance (in km) between the school and his house?  
 1. 1      2. 1.25      3. 1.125      4. 1.5

The line graph shows the number of students of a certain university who passed in the given year in their final exams. Study the diagram and answer the following questions Q. 67 to 70?



67. In which year were number of students who passed were more than those who passed in the previous year.  
 1. 2016      2. 2015      3. 2014      4. 2013
68. What was the difference in the number of students who passed between the years 2013 and 2016?  
 1. 1000      2. 500      3. 1500      4. 2000
69. Number of students who passed in 2016 were greater than that in 2017 by \_\_\_\_\_.  
 1. 150%      2. 100%      3. 50%      4. 200%
70. If students who pass are given a certificate, what is the number of certificates awarded in the last three years?  
 1. 19500      2. 20000      3. 20500      4. 19000
71. The area and the length of one of the diagonals of a rhombus is 84 cm<sup>2</sup> and 7 cm respectively. Find the length of its other diagonal (in cm).  
 1. 12      2. 24      3. 48      4. 36
72. Find the perimeter (in cm) of a semicircle of radius 28 cm.  
 1. 288      2. 144      3. 121      4. 242
73. Find the curved surface area (in cm<sup>2</sup>) of a hemisphere of diameter 28 cm.  
 1. 1152      2. 1024      3. 956      4. 1232
74. What is the value of  $(\sin 60^\circ + 2/\sqrt{3})$  ?  
 1.  $(2\sqrt{3} + 1)/\sqrt{3}$       2.  $7/2\sqrt{3}$       3. 3      4.  $2 + \sqrt{3}$
75.  $\Delta XYZ$  is right angled at Y. If  $\cos X = 3/5$ , then what is the value of  $\operatorname{cosec} Z$  ?  
 1. 3/4      2. 5/3      3. 4/5      4. 4/3

**General Awareness**

76. Sudden decrease of birth rate would cause \_\_\_\_\_.  
 1. increase in per capita income  
 2. increase in investment  
 3. increase in savings  
 4. increase in loan requests

77. In the last one decade, which one among the following sectors has attracted the highest foreign direct investment inflows into India?  
 1. Food processing  
 2. Petro - chemical  
 3. Chemicals other than fertilizers  
 4. Telecommunications
78. Harshavardhan's Vallabhi conquest is found in which of the following inscriptions?  
 1. Aihole Pillar Inscription  
 2. Junagadh Inscription  
 3. Navsari Copperplate Inscription  
 4. Damodarpur copper plate Inscription
79. What was the northwestern border of the Mughal Empire during the reign of Akbar?  
 1. Punjab      2. Hindukush  
 3. Kabul      4. Sindh
80. What is called the minimum distance from the Sun in a planet in its orbit?  
 1. perihelion      2. aphelion  
 3. Apogee      4. Perigee
81. Another name for Indira Point is: \_\_\_\_\_.  
 1. Parson point      2. La-Hi-Ching  
 3. Pygmalion point      4. All options are correct.
82. What was the real name of Swami Vivekananda?  
 1. Surendra nath Bose      2. Narendra nath Dutt  
 3. Vidyadhar Roy      4. Shyamal Bose
83. Military exercise 'Prabal Dosty' Which was held in November 2017 was conducted between \_\_\_\_\_.  
 1. India and Afghanistan      2. India and Kazakhstan  
 3. India and Uzbekistan      4. India and Turkmenistan
84. Who among the following has been awarded the "Rajiv Gandhi Khel Ratna Award" for the year 2017?  
 1. Jitu Rai      2. Jasvir Singh  
 3. Sardar Singh      4. S.V. Snil
85. Vedda is a tribe of which of the following countries?  
 1. Maldives      2. Myanmar  
 3. Sri Lanka      4. Bangladesh
86. Which of the following is natural fiber?  
 1. Silk      2. Rayon      3. Nylon      4. Polyester
87. Which of the following statement(s) is/are CORRECT?  
 1. Oxides of non-metals are basic.  
 2. Oxides of non-metals are acidic.  
 3. Oxides of metals are acidic.  
 4. All options are correct.
88. In India, which of the following body is Constitutional in nature?  
 1. NITI Aayog  
 2. National Human Rights Commission  
 3. Central Vigilance Commission  
 4. Finance Commission
89. Which part of the Indian Constitution deals with 'The Municipalities'?  
 1. Part VII      2. Part VIII      3. Part XI      4. Part IX A
90. Organisms use bio-catalyst to break down complex substances into simpler substances. These bio-catalysts are called \_\_\_\_\_.  
 1. enzymes      2. hormones  
 3. vitamins      4. No option is correct.
91. The first step of process of nutrition is the breakdown of glucose into a three-carbon molecule called \_\_\_\_\_.  
 1. pyruvate      2. propanol  
 3. propane      4. methanol
92. "Saubhagya" scheme was launched to provide which of the following?  
 1. Water connections      2. LPG connections  
 3. Electricity connections      4. Broadband connections

93. Which of the following became first Indigenously developed vaccine from India to be per-qualified by World Health Organisation?
1. Rotavac
  2. Hemophile
  3. Pentavac
  4. Pneumococca
94. In July 2017, RBI Capped how much Customer liability if they report unauthorised transactions within seven working days?
1. Rs 50,000
  2. Rs 25,000
  3. Rs 1,00,000
  4. Rs 75,000
95. On 10 April 2017, Lok Sabha passed the Motor Vehicles (Amendment) Bill, 2016. The Bill seeks to amend \_\_\_\_\_.
1. Motor Vehicles Act, 1988
  2. Motor Vehicles Act, 1998
  3. Motor Vehicles Act, 2005
  4. Motor Vehicles Act, 2010
96. What is the effective resistance (in  $\Omega$ ) of two resistors 20  $\Omega$  and 30  $\Omega$  connected in parallel?
1. 50
  2. 12
  3. 24
  4. 25
97. 1 km/hr equals \_\_\_\_\_ m/s.
1. 5/18
  2. 18/5
  3. 5/16
  4. 16/5
98. To keep warm, polar bears have a layer of \_\_\_\_\_ under their skin.
1. muscle
  2. fat
  3. cartilage
  4. hair
99. Which of the statements given below are correct?
- A. Maverick Viñales won the 2017 Qatar Motorcycle Grand Prix MotoGP.
  - B. In 2017, Zaheer Khan captained the IPL team Royal Challengers Bangalore.
  - C. In 2017, Gautam Gambhir captained the IPL team Kolkata Knight Riders.
1. Only A
  2. Only B
  3. A and C
  4. A, B and C
100. In Microsoft Word, font, font style, size, font color etc. are options of \_\_\_\_\_.
1. Character formatting
  2. Paragraph formatting
  3. Sentence for matting
  4. Font formatting

### Answer Key

1.	(2)	2.	(2)	3.	(2)	4.	(3)	5.	(1)	6.	(3)	7.	(3)	8.	(2)	9.	(2)	10.	(4)
11.	(3)	12.	(3)	13.	(3)	14.	(3)	15.	(3)	16.	(1)	17.	(4)	18.	(2)	19.	(2)	20.	(2)
21.	(2)	22.	(2)	23.	(4)	24.	(1)	25.	(3)	26.	(3)	27.	(4)	28.	(1)	29.	(3)	30.	(4)
31.	(3)	32.	(1)	33.	(3)	34.	(2)	35.	(3)	36.	(3)	37.	(2)	38.	(1)	39.	(2)	40.	(2)
41.	(4)	42.	(1)	43.	(1)	44.	(1)	45.	(1)	46.	(1)	47.	(2)	48.	(1)	49.	(3)	50.	(4)
51.	(3)	52.	(1)	53.	(2)	54.	(1)	55.	(2)	56.	(2)	57.	(2)	58.	(3)	59.	(2)	60.	(4)
61.	(1)	62.	(3)	63.	(3)	64.	(4)	65.	(1)	66.	(3)	67.	(2)	68.	(2)	69.	(2)	70.	(3)
71.	(2)	72.	(2)	73.	(4)	74.	(2)	75.	(2)	76.	(1)	77.	(4)	78.	(3)	79.	(2)	80.	(1)
81.	(4)	82.	(2)	83.	(2)	84.	(3)	85.	(3)	86.	(1)	87.	(2)	88.	(4)	89.	(4)	90.	(1)
91.	(1)	92.	(3)	93.	(1)	94.	(2)	95.	(1)	96.	(2)	97.	(1)	98.	(2)	99.	(3)	100.	(1)

### Answers with Explanations

**1. Option (2) is correct.**

We come across the mistake in part 2 where the preposition 'on' is used. We must use the preposition 'up' and not 'on'. It must have been 'she picked up the trail soon after'.

**2. Option (2) is correct.**

We come across the mistake in part 2 where the preposition 'for' is used. Instead of 'for' 'between' must have been used. The correct sentence is: Internet Service Providers (ISPs) should provide us (1)/ with open networks and should not block or discriminate between (2)/ any application or content that rides over those networks.

**3. Option (2) is correct.**

'Await' means waiting for someone or something. We normally wait for results. Depicts will not be correct as it is describing something, envision means imagining the future chances or visualizing and observe means watching. Hence the right choice is 'await'.

**4. Option (3) is correct.**

The meaning of the word dissent is opposing or discarding something; refusal means denying something or rejecting something; sustenance means nourishing something or maintaining something. Acknowledgment is the right choice as it is accepting some truth or the existence of something.

**5. Option (1) is correct.**

Misery means great unhappiness or suffering. Grief and trouble are also the state of unhappiness and suffering. So these three words cannot be the meaning of the word felicity. Felicity is intense happiness and another word for felicity is bliss which means intense happiness.

**6. Option (3) is correct.**

Chain is a series of connected things or people, safe is free from danger and joy is happiness. Chafe is a state of annoyance or irritation. Hence the meaning is 'irritate'.

**7. Option (3) is correct.**

The given word is "forgo" which means decline, skip, give up, etc. Conquer means winning something, or achieving something. Hence the opposite of the word forgo is conquer. Forfeit is losing something, neglect is disregarding something and pass is permitting something. The right answer is 'conquer'.

**8. Option (2) is correct.**

The given word is 'banter'. Teasing is making fun of someone, fun is being amused or enjoying, and gossip is talking about someone. Banter means teasing or mocking. The opposite of banter is to praise. Hence 'praise' is the right answer.

**9. Option (2) is correct.**

The given clause is 'gender inequality has' where we have a subject and a verb. The sentence remains incomplete and to complete it we require an object which is R – adverse impact on. Now we have to find what is getting impacted or on what. It has to be Q- developmental goals as, and the last part must be P- it reduces economic growth. It completes the sentence.

**10. Option (4) is correct.**

The given example for conversion is 'Who did this?'. The given example is simple past tense. The subject in the given question is who, the verb is 'did' and the object is 'this'. When we convert, the subject will become the object and as it is a question, the object has to be placed at the beginning itself and before the subject, we must use the connector 'by'. So, it must be 'By whom'. Since the question is in the past tense, we must

use the be verb 'was'. After that we have to place the subject 'this' and the verb did must be converted into past participle form and the past participle form is 'done'. So, the answer is 'By whom was this done?'.

**11. Option (3) is correct.**

The given question is: Ram said, "I have cleared the clutter." Here the reporting verb is 'said' which is in past tense and the verb to be reported is 'have cleared'. When the reporting verb is in the past tense, the verb to be reported too should be converted into past. It must be 'had cleared' instead of 'have cleared' as it is converted into past form. "I" here refers to Ram and so instead of 'I' we have to use the third-person singular pronoun 'he'. In between the reporting element and the part to be reported, we must use the connector 'that'. It must be 'Ram said that he had cleared the clutter.'

**12. Option (3) is correct.**

The meaning of the word 'bizarre' is very strange or unusual. There is no word in English called 'Beizarre', 'Bizaarre' or 'Bigarre'. So, bizarre is the right option. When we repeatedly pronounce the given words, we will be able to identify if such a word exists in the language or not.

**13. Option (3) is correct.**

The blank to be filled in is 'science and \_\_\_\_\_ a text-book subject'. The options given are nor, neither, not and none. Nor or neither or none cannot be applied here as the purpose is to negate 'a text-book subject'. When we negate something, we use not. Without the presence of 'neither' in the sentence we cannot use 'nor' and vice versa. The right option is not.

**14. Option (3) is correct.**

The blank to be filled in is 'material is to be \_\_\_\_\_ in ourselves'. The construction is in passive form. We find the 'be' verbs 'is' and 'be' in the sentence. The options given are 'find', 'finding', and 'finds'. None of these words can be used here as they make a grammatically wrong sentence as we are supposed to use only the past participle form of the verb in the sentence because of the presence of the verb 'be'. The answer is 'found'.

**15. Option (3) is correct.**

The given question where the blank to be filled in is: 'always be verified \_\_\_\_\_ reference to one's own.' The construction is in the passive form where we find the past participle form of the verb accompanied by 'be'. To, at, and for will not be fitting in the place as the construction is passive and it denotes the agent. Hence, the right answer is 'by' as the connector denotes the agent in the passive structure.

**16. Option (1) is correct.**

The given question where the blank to be filled in is: 'lessons of the book \_\_\_\_\_ the observation of children'.

Let us take a look at the complete sentence. Prospective teachers should constantly correlate the lessons of the book \_\_\_\_\_ the observation of children at work in the school. We come across the word 'correlate' in the sentence. The word 'correlate' is a verb that always takes the preposition 'with' and not any other preposition. Until and upon are totally meaningless here according to the context of the sentence. We will never say 'correlate from'. It is 'correlate with'.

**17. Option (4) is correct.**

The given question where the blank to be filled in is: suggested for \_\_\_\_\_ and introspection will...

The given options are 'observe', 'observed', 'observes', and observation. Observation is a noun and all the other three are different forms of verbs. We will never use a verb after the preposition 'for' other than the present participle form of the

verb, i.e. the -ing form of the verb. We commonly use a noun after for and since 'observation' is a noun, that is the right answer.

**18. Option (2) is correct.**

The given idiom is 'at large'. The meaning of the idiom is 'roaming free', 'not confined' etc. So, the answer is 'a criminal escaped or not yet captured'. The idiom representing 'a very big opportunity' is 'a golden opportunity'. 'To have a big heart' is an idiom meaning 'to be kind and generous' and 'a big appetite' is the meaning of the idiom 'eat like a horse'. So, the meaning is 'a criminal escaped or not yet captured'.

**19. Option (2) is correct.**

The meaning of the idiom 'head over heels' is 'completely in love with another person' and hence the right answer is 'madly in love'.

**20. Option (2) is correct.**

Mundane means lacking interest or excitement. Ribald means referring to sexual matters in an amusingly coarse or irreverent way. Coarse means rough or harsh in nature or texture. Transcendent means beyond or above the range of normal or physical human experience. So the right answer is transcendent.

**21. Option (2) is correct.**

Dazzling means to make somebody unable to see for a short time. Stunning means very attractive, impressive, or surprising. Spectacular means very impressive to see. Conceivable means possible to imagine or believe. So, the right option is conceivable.

**22. Option (2) is correct.**

The given sentence is :As he tried harder, his steps slowed, his senses (was activated). In the later part of the given sentence, the subject is 'his senses' which is in the plural form, and the entire construction is made using the past tense. But the tense is past and the subject 'senses' is in the plural form, therefore 'was' is a wrong choice of be verb and it must be 'were activated'.

**23. Option (4) is correct.**

The given sentence is My daughter (comes running) as fast as her little feet can take her while her eyes sparkle vivaciously. Here the construction is in the present tense and the subject 'my daughter' is third person singular; hence we must add-s with the verb and it must be 'comes'. No error is there in the sentence.

**24. Option (1) is correct.**

A: team-building skills deepened: Here we come across the subject 'team-building skills' and the verb 'deepened'. Hence, it must be the beginning of the sentence as a sentence must be begun using a subject and verb. An object must be used after the verb, to answer the question what. So, 'Option C: a sense of value' must be the next part of the sentence and finally, the noun phrase must be used at the end, 'B. for relationships'.

**25. Option (3) is correct.**

It means 'infiltration' 'flow' etc. All the other three words are meaningless as they are wrongly spelled and hence the right option is 'percolation'.

**26. Option (3) is correct.**

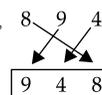
As we know that, pascal is the SI unit of pressure. Similarly, joule is the unit of work.

**27. Option (4) is correct.**

The pattern is as follows:



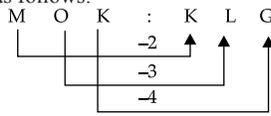
Similarly,



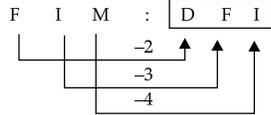
Therefore, 894 : 948.

28. Option (1) is correct.

The pattern is as follows:



Similarly,



29. Option (3) is correct.

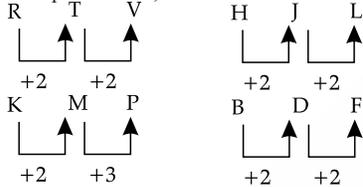
Except for Rectangle – Three, all others have the same pattern. As we know that, number of sides in the respective polygons are given. A triangle has three, square has four, and a pentagon has five sides, except a rectangle which has four sides.

30. Option (4) is correct.

- From option (1):  $7 - 49$   
 $7 - 7 \times 7 = 49$
- From option (2):  $2 - 4$   
 $2 - 2 \times 2 = 4$
- From option (3):  $5 - 25$   
 $5 - 5 \times 5 = 25$
- From option (4):  $3 - 39$   
 $3 - 3 \times 3 = 9$  which is not equal to 39.

31. Option (3) is correct.

Except for KMP, all others have the same pattern.



Therefore, KMP is different from others.

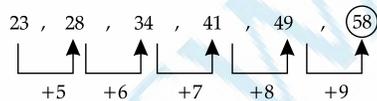
32. Option (1) is correct.

The given words in the sequence in which they occur in the dictionary is as follows:

1	5	4	2	3
Soften	Status	Sterile	Sterilize	Stick

33. Option (3) is correct.

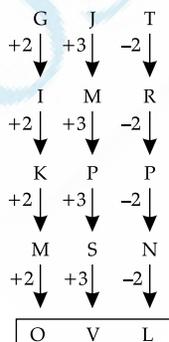
The pattern of the series is as follows:



Hence, the next term would be 58.

34. Option (2) is correct.

The pattern of the series is as follows:



Hence, the next term would be OVL.

35. Option (3) is correct.

According to the question:

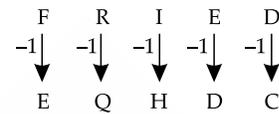
Position of Panjab's bus from the right end is 19. Position of Raftaar's bus from the right end is  $19 + 23 = 42$ . Since, Raftaar's bus is also at the center. Number of buses between Raftaar bus and bus standing at the left end that is,  $42 - 2 = 40$ .

36. Option (3) is correct.

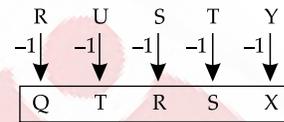
Except word Need, all other words can be formed. Government does not contain letter D.

37. Option (2) is correct.

FRIED is written as EQHDC



Similarly, RUSTY is written in the same way and we get



Hence, RUSTY is written as QTRSX.

38. Option (1) is correct.

Given expression:  $19 \div 2 - 35 + 10 \times 6 = ?$

After putting signs, we get

$$19 + 2 \times 35 \div 10 - 6 = ?$$

$$19 + 2 \times \frac{7}{2} - 6 = ?$$

$$19 + 7 - 6 = ? \Rightarrow 26 - 6 = 20$$

39. Option (2) is correct.

Given expression:  $15 \times 18 - 6 \div 20 + 4 = 29$

Upon checking option 2 and after interchanging signs, we get:

$$15 \times 18 \div 6 - 20 + 4 = 29$$

$$15 \times 3 - 20 + 4 = 29$$

$$45 - 20 + 4 = 29$$

$$49 - 20 = 29$$

$$29 = 29$$

40. Option (2) is correct.

Given that:  $40@8 = -5$ ,  $30@3 = -10$  and

$$20@5 = -4$$

Here we replace @ with  $\div$

$$40@8 = -5$$

$$(40 \div 8) \times (-1) = -5$$

$$30@3 = -10$$

$$(30 \div 3) \times (-1) = -10$$

And,

$$20@5 = -4$$

$$(20 \div 5) \times (-1) = -4$$

Similarly,

$$60@3 = ?$$

$$(60 \div 3) \times (-1) = -20$$

41. Option (4) is correct.

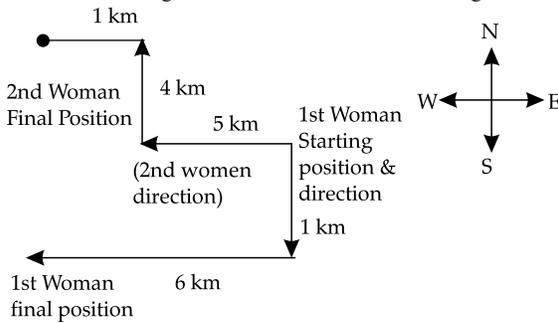
The pattern of the series is that in each term there are four combinations of AB and in each term. The first two terms in increasing order are small alphabets.

abABABAB, ABabABAB, ABABabAB, ABABABab, abABABAB, ABabABAB

Hence, the next term would be ABabABAB.

42. Option (1) is correct.

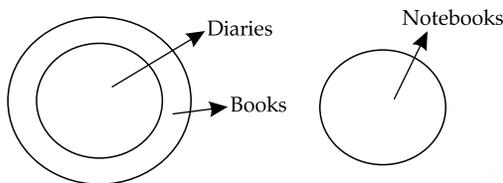
The direction diagram of two women is as following:



From the above diagram, the 2<sup>nd</sup> woman's house is towards 5 km north with respect to the 1<sup>st</sup> woman's house.

43. Option (1) is correct.

The venn diagram of the given condition is as follows:



From conclusion I: No notebooks are diaries is true.

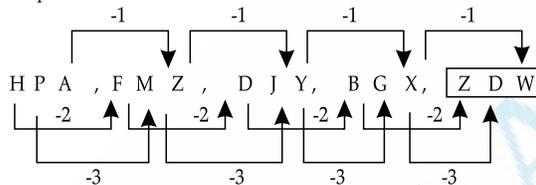
From conclusion II: All diaries are notebooks is false. Hence, only conclusion I follows.

44. Option (1) is correct.

From the given diagram, Football players who are not Divers are represented by ED.

45. Option (1) is correct.

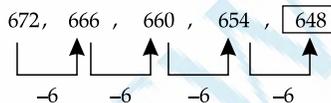
The pattern of the series is as follows:



Hence, the next term would be ZDW.

46. Option (1) is correct.

The pattern of the series is as follows:



Hence, the next term would be 648. Hence, option (1) is correct answer.

47. Option (2) is correct.

Except for option (57, 60, 69), all others have the same pattern.

From option (1): (61, 64, 71)  
(61, 61 + 3, 61 + 10)

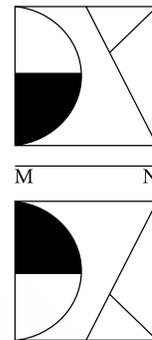
From option (2): (57, 60, 69)  
(57, 57 + 3, 57 + 12) which is not equal to the given set

From option (3): (75, 78, 85)  
(75, 75 + 3, 75 + 10)

And from option (4): (89, 92, 99)  
(89, 89 + 3, 89 + 10)

48. Option (1) is correct.

The mirror image of the given figure is as follows:



49. Option (3) is correct.

In an open cube alternate pairs are opposite to each other. Hence, the opposite sides cannot be adjacent in the cube, thus the cube in the option (3) is not possible.

50. Option (4) is correct.

From option (1): 22,78,34,69 = AXKP  
From option (2): 22,67,34,59 = ANKW  
From option (3): 14,69,24,75 = HPHQ  
From option (4): 85,67,13,57 = UNIT

51. Option (3) is correct.

2	69120
2	34560
2	17280
2	8640
2	4320
2	2160
2	1080
2	540
2	270
3	135
3	45
3	15
5	5
	1

$$\therefore 69120 = (2 \times 2 \times 2)(2 \times 2 \times 2)(2 \times 2 \times 2)(3 \times 3 \times 3) \times (5 \cdot x \cdot x)$$

If 69120 multiply by 5×5 to make triple pair. Hence, 69120 multiply by 25 to make perfect cube.

52. Option (1) is correct.

Let number days on tour is  $n$ ,  
According to the question,

$$\frac{360}{n} - \frac{360}{n+4} = 3$$

$$\Rightarrow \frac{360(n+4-n)}{n^2+4n} = 3$$

$$\Rightarrow 120(4) = n^2 + 4n$$

$$\Rightarrow n^2 + 4n - 480 = 0$$

$$\Rightarrow n^2 + 24n - 20n - 480 = 0$$

$$\Rightarrow (n+24)(n-20) = 0$$

$$\Rightarrow n = 20 \text{ or } n = -24 \text{ (Not Possible)}$$

Hence, number of days = 20 days.

**53. Option (2) is correct.**

Given that  $r + s = 6$  and  $r^3 + s^3 = 0$

We have

$$(r + s)^3 = r^3 + s^3 + 3rs(r + s)$$

$$\Rightarrow (6)^3 = 0 + 3rs(6)$$

$$\Rightarrow rs = \frac{6 \times 6 \times 6}{3 \times 6} = 12$$

$$\text{Now, } \frac{1}{r} + \frac{1}{s} = \frac{r+s}{rs} = \frac{6}{12} = \frac{1}{2} = 0.5$$

**54. Option (1) is correct.**

For y intercept put  $x = 0$

$$59(0) + 14y - 112 = 0$$

$$\Rightarrow 14y = 112 \Rightarrow y = \frac{112}{14} = 8$$

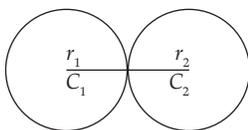
**55. Option (2) is correct.**

Here,  $C_1 C_2 = r_1 + r_2$

$$12 = 7 + r_2$$

$$r_2 = 12 - 7 = 5$$

$$\text{Diameter} = 2r_1 = 2(5) = 10 \text{ cm}$$

**56. Option (2) is correct.**

Since,  $(15)^2 = 9^2 + 12^2$

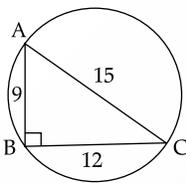
$$225 = 81 + 144$$

$$225 = 225$$

$\therefore \Delta ABC$  is right triangle

$\therefore AC$  is diameter of circle

$$\therefore \text{Radius} = \frac{AC}{2} = \frac{15}{2} = 7.5 \text{ cm.}$$

**57. Option (2) is correct.**

Given  $X = 600$  and  $Y = 800$

Less value of  $X$  than  $Y = 800 - 600 = 200$

$$\text{Less percentage} = \frac{200 \times 100}{800} = 25\%$$

**58. Option (3) is correct.**

Let numbers are  $2x$ ,  $3x$  and  $5x$

$\therefore$  sum of numbers  $= 2x + 3x + 5x = 275$

According to the question,

$$10x = 275 \Rightarrow x = \frac{275}{10} = 27.5$$

$$\text{Largest numbers} = 5x = 5(27.5) = 137.5$$

**59. Option (2) is correct.**

Let capitals ratio of  $S$ ,  $T$  and  $U$  are  $3x$ ,  $4x$  and  $6x$

Let time period to contribute in business by  $S$ ,  $T$  and  $U$  are  $n_1$ ,  $n_2$  and  $n_3$  respectively

$\therefore$  Profit ratio  $= 3xn_1 : 4xn_2 : 6xn_3 = 1 : 2 : 3$

$$3n_1 : 4n_2 : 6n_3 = 1 : 2 : 3$$

$$\Rightarrow \frac{3n_1}{4n_2} = \frac{1}{2} \Rightarrow \frac{n_1}{n_2} = \frac{1}{2} \times \frac{4}{3} = \frac{2}{3} \quad \dots (i)$$

$$\text{and } \frac{n_2}{n_3} = \frac{3}{3} \quad \dots (ii)$$

from (i) and (ii)

$$n_1 : n_2 : n_3 = 2 : 3 : 3$$

**60. Option (4) is correct.**

Multiples of 7 = 7, 14, 21, 28, 35, 42, 49

$$\text{Sum} = \frac{7}{2}(7 + 49) = \frac{7}{2} \times 56 = 7 \times 28$$

$$\text{Average} = \frac{\text{Sum of the numbers}}{\text{Total numbers}} = \frac{7 \times 28}{7} = 28$$

**61. Option (1) is correct.**

Let first part be ₹  $x$  then other part be ₹  $(8000 - x)$

According to the question,

$$x \times \frac{21}{100} = (8000 - x) \times \frac{35}{100}$$

$$\Rightarrow 21x = 8000 \times 25 - 35x$$

$$\Rightarrow 35x + 21x = 8000 \times 35$$

$$\Rightarrow 56x = 8000 \times 35$$

$$\Rightarrow x = \frac{8000 \times 35}{56} = 5000$$

$$\text{Interest} = 5000 \times \frac{21}{100} = ₹ 1050$$

**62. Option (3) is correct.**

Given that, S.P. = ₹ 1965, Loss = 25%

$$\begin{aligned} \text{C.P.} &= \frac{\text{S.P.} \times 100}{100 - \text{Loss}\%} = \frac{1965 \times 100}{100 - 25} \\ &= \frac{1965 \times 100}{75} = ₹ 2620 \end{aligned}$$

New, S.P. = 3013

$$\text{Profit} = 3013 - 2620 = 393$$

$$\text{Profit \%} = \frac{393 \times 100}{2620} = 15\%$$

**63. Option (3) is correct.**

Given that, M.P. = ₹ 6000, Discount = 20%

$$\text{S.P.} = 6000 \left(1 - \frac{20}{100}\right) = 6000 \times \frac{4}{5} = ₹ 4800$$

$$\begin{aligned} \text{C.P.} &= \frac{\text{S.P.} \times 100}{100 + \text{Profit}\%} = \frac{4800 \times 100}{100 + 60} \\ &= \frac{4800 \times 100}{160} = 3000 \end{aligned}$$

**64. Option (4) is correct.**

$$\sqrt{729} + \sqrt{72.9} + \sqrt{7.29}$$

$$= \sqrt{729} + \sqrt{729 \times 0.1} + \sqrt{729 \times 0.01}$$

$$= \sqrt{729} (1 + \sqrt{0.1} + \sqrt{0.01})$$

$$= 27(1 + 0.316 + 0.1) = 27 \times 1.416 = 38.23$$

**65. Option (1) is correct**

Since, Rohan and Mohit together build a well in 8 days

$$\therefore R + M = \frac{1}{8} \text{ part/day} \quad \dots (i)$$

Mohit and Vikas together build a well in 10 days

$$M + V = \frac{1}{10} \text{ part/day} \quad \dots (ii)$$

Vikas and Rohan together build a wall in 12 days

$$V + R = \frac{1}{12} \text{ part/day} \quad \dots(\text{iii})$$

Adding (i), (ii) and (iii)

$$2R + 2M + 2V = \frac{1}{8} + \frac{1}{10} + \frac{1}{12} = \frac{15 + 12 + 10}{120}$$

$$2(R + M + V) = \frac{37}{120}$$

$$R + M + V = \frac{37}{240} \text{ part/day}$$

$$\therefore \text{Number of days work all together} = \frac{240}{37} \text{ days}$$

**66. Option (3) is correct.**

Let distance between the school and his house be  $x$  km

$$\text{According to the question, } \frac{x}{5} - \frac{3}{60} = \frac{x}{9} + \frac{3}{60}$$

$$\Rightarrow \frac{x}{5} - \frac{x}{9} = \frac{3}{60} + \frac{3}{60} \Rightarrow \frac{9x - 5x}{45} = \frac{6}{60}$$

$$\Rightarrow \frac{4x}{45} = \frac{6}{60} \Rightarrow x = \frac{6}{60} \times \frac{45}{4} = \frac{9}{8}$$

$$\text{Distance} = \frac{9}{8} = 1.125 \text{ km}$$

**67. Option (2) is correct.**

In year 2012 and 2015 students passed more than previous year.

**68. Option (2) is correct.**

Names of students passed in year 2013 = 6500  
Number of students passed in year 2016 = 7000  
Difference = 7000 - 6500 = 500

**69. Option (2) is correct.**

Number of students passed in year 2016 = 7000  
Number of students passed in year 2017 = 3500  
More students = 7000 - 3500 = 3500

$$\text{Percentage} = \frac{3500 \times 100}{3500} = 100\%$$

**70. Option (3) is correct.**

Number of certificates awarded in the last  
Three years = 10000 + 7000 + 3500 = 20500

**71. Option (2) is correct.**

$$\text{Area of rhombus} = \frac{1}{2} \times d_1 \times d_2$$

$$84 = \frac{1}{2} \times 7 \times d_2 \Rightarrow d_2 = \frac{84 \times 2}{7} \Rightarrow d_2 = 24 \text{ cm}$$

**72. Option (2) is correct.**

$$\begin{aligned} \text{Perimeter of a semicircle} &= \pi r + 2r \\ &= \frac{22}{7} \times 28 + 2 \times 28 = 88 + 56 = 144 \text{ cm} \end{aligned}$$

**73. Option (4) is the correct answer**

$$\begin{aligned} \text{Curved surface area of a hemisphere} \\ &= 2\pi r^2 = 2 \times \frac{22}{7} \times 14 \times 14 = 1232 \text{ cm}^2 \end{aligned}$$

**74. Option (2) is the correct answer**

$$\sin 60^\circ + \frac{2}{\sqrt{3}} = \frac{\sqrt{3}}{2} + \frac{2}{\sqrt{3}} = \frac{3+4}{2\sqrt{3}} = \frac{7}{2\sqrt{3}}$$

**75. Option (2) is correct.**

$$\cos x = \frac{3}{5} = \frac{XY}{XZ}$$

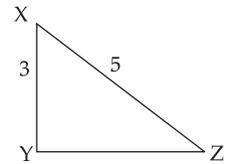
$$XY = 3, XZ = 5$$

Now,

$$YZ = \sqrt{XZ^2 - XY^2}$$

$$= \sqrt{25 - 9} = \sqrt{16} = 4$$

$$\operatorname{cosec} z = \frac{H}{P} = \frac{XZ}{XY} = \frac{5}{3}$$



**76. Option (1) is correct.**

People who earn less tend to have more children because they believe that having more children will help the family's economy. Furthermore, they are uneducated and rarely use contraception. As a result, if a sudden decrease in birth rate is discovered, per capita income may rise.

**77. Option (4) is correct.**

Foreign Direct Investment (FDI) has been a major non-debt financial resource for India's economic development. In the fiscal year 2020, the services sector in India received the highest share of FDIs totaling over 554 billion Indian rupees. Finance, banking, insurance, and other non-financial sectors such as research and development, testing, analysis, and outsourcing were all included in this sector. The computer hardware and software sector came in second, with nearly 542 billion Indian rupees in revenue that year.

Sector-wise FDI Equity Inflows from April 2000 to December 2019.

Sector	% age of Total Inflows
Service sector	17.66
Computer hardware and software	9.54
Telecommunication	8.13
Trading	5.81
Construction Development	5.55
Automobile Industry	5.23
Chemicals	3.82
Drugs and Pharmaceuticals	3.59
Construction	3.54

**78. Option (3) is correct.**

The inscription on the Nausasi (Navsari) copper plate tells us about Harsha's successful expedition against Vallabhi. According to the inscription, Harsha defeated Vallabhi ruler Dhruvasena II, who accepted the position of a feudatory vassal. His feuds with the Vallabhi kingdom were resolved through a matrimonial alliance.

**79. Option (2) is correct.**

The Mughal Empire spanned the majority of the Indian subcontinent during Akbar's reign, from the Himalayas in the north to the Vindhyas in the south, and from the Hindukush in the north-west to the Brahmaputra River in the east. During his reign, Kashmir, Sind, Baluchistan, Makran, and Kandahar (Hindukush region) all became a Mughal territory, stretching all the way up to the Persian empire under the Safavid rulers.

**80. Option (1) is correct.**

Perihelion is the point in a planet's orbit closest to the sun, and Aphelion is the point in a planet's orbit farthest from the sun. Perigee is the point in the moon's orbit closest to the Earth, and apogee is the point in the moon's orbit farthest from the Earth.

**81. Option (4) is correct.**

Indira Point is a village in the Nicobar district of the Andaman and Nicobar Islands that is home to India's southernmost point. Previously, the point was known as La-Hi-Ching, Pygmalion Point, and Parsons Point. During the mid-1980s, it was renamed Indira Gandhi Park.

**82. Option (2) is correct.**

Swami Vivekananda was born in Calcutta on January 12, 1863, as Narendranath Datta. He established Ramakrishna Mission and Ramakrishna Math. He was a key figure in the revival of Hinduism in India. He believed that serving humanity is serving God. He also introduced the western nations to the Indian philosophies of Vedanta and Yoga. He reflected on how every man can become great by doing good to others, being patient, and working hard, thus making every nation great.

**83. Option (2) is correct.**

Prabal Dostyk is an Indian-Kazakh joint military exercise. It took place in Chelyabinsk and Saryshagan. Though it began in 2016, it has been held on a regular basis since then. On the Lebanon-Israel border, a Kazakh Army company was integrated with an Indian Army battalion. The two armies also alternately hold joint exercises called "Prabal Dosti" in each other's countries, with the 2017 edition taking place in Himachal Pradesh.

**84. Option (3) is correct.**

In 2017, Sardar Singh received the Rajiv Gandhi Khel Ratna Award for Hockey. The Rajiv Gandhi Khel Ratna Award for Sports is India's highest sporting honour. The Ministry of Youth Affairs and Sports bestows it. Viswanathan Anand, the country's first chess Grandmaster, was the first recipient of the award. In 2019, Deepa Malik and Bajrang Punia receive the Rajiv Gandhi Khel Ratna award for Athletics and Wrestling, respectively.

**85. Option (3) is correct.**

Vedda is a Sri Lankan indigenous minority tribe. The Vedda are a minority indigenous group in Sri Lanka, along with other sub-communities such as the Coast Veddas, Anuradhapura Veddas, and Bintenne Veddas. Sri Lanka's Vedda minority may become completely assimilated. Most people speak Sinhala rather than their indigenous languages, which are on the verge of extinction. The Vedda are thought to be the earliest inhabitants of Sri Lanka, having lived on the island long before other ethnic groups from India arrived.

**86. Option (1) is correct.**

Jute, silk, wool, cotton, and linen are examples of natural fibers. Man-made fibres include rayon, acrylic, polyester, and nylon. Fibers are the raw materials used in the textile industry. Fibers can be synthetic or natural. The textile industry can be classified based on the raw materials used. Cloth is made from flax, jute, silk, wool, and cotton. Weaving cloth from yarn is an ancient art form. In 1818, Fort Gloster became the site of India's first textile mill. After a while, this textile mill had to be closed down. The first successful mechanised textile mill was established in Mumbai in 1854.

**87. Option (2) is correct.**

Nonmetal oxides are typically acidic in nature. It reacts with water to produce a proton and the oxyacid's conjugate base. Acid is formed when nonmetal oxides dissolve in water. For example,  $\text{CO}_2 + \text{H}_2\text{O} = \text{H}_2\text{CO}_3$ , which is a carboxylic acid. Because they react with dilute acids to form salt and water, metal oxides are basic.

**88. Option (4) is correct.**

The Finance Commission is a constitutional body mentioned in Article 280 that is in charge of defining financial relations between the central and state governments. In 2017, the 15th

Finance Commission was formed, chaired by N.K. Singh. NITI Aayog is not a statutory or constitutional body. It is a government think tank. The statutory bodies are the National Human Rights Commission and the Central Vigilance Commission.

**89. Option (4) is correct.**

Municipalities are addressed in Part IX-A of the Indian Constitution. It is made up of provisions ranging from Articles 243-P to 243-ZG. The 74th Amendment Act of 1992 added Part IX A to the Indian constitution. The act granted municipality's constitutional status.

**90. Option (1) is correct.**

Enzymes are sometimes referred to as biological catalysts because they accelerate reactions and require only trace amounts. Digestive enzymes help to break down complex foods into simpler subunits. Food is broken down in digestion by water chemically splitting the complex food molecules, a process known as hydrolysis.

**91. Option (1) is correct.**

Glycolysis is the first of the major cellular respiration metabolic pathways to produce energy in the form of ATP. Through a series of enzymatic reactions, the six-carbon ring of glucose is cleaved into two three-carbon sugars of pyruvate in two distinct phases.

**92. Option (3) is correct.**

The Pradhan Mantri Sahaj Bijli Har Ghar Yojana - 'Saubhagya' scheme was launched on September 25, 2017, by Prime Minister Narendra Modi. The government will provide free electricity to all households identified in the Socio-Economic and Caste Census under this scheme (SECC) (Data 2011).

**93. Option (1) is correct.**

Rotavac was the first indigenously developed vaccine from India to be pre-qualified by the World Health Organization (WHO) in January 2018. It means that the vaccine can be sold internationally to several South American and African countries. Bharat Biotech Limited, based in Hyderabad, conceived and developed Rotavac.

**94. Option (2) is correct.**

In a major step to protect customers from large financial losses due to fraud, the Reserve Bank of India capped customer liability at ₹ 25,000. If they reported unauthorised transactions within seven working days in July 2017. Furthermore, if the reporting delay exceeds seven working days, the customer liability will be determined in accordance with the bank's Board-approved policy. Banks must provide details of their policy on customer liability developed in accordance with these guidelines when opening accounts. Banks must also post their approved policies in the public domain for wider distribution. Existing customers must also be informed about the bank's policy on an individual basis.

**95. Option (1) is correct.**

The Lok Sabha passed the Motor Vehicles (Amendment) Bill, 2016, in April 2017, to amend the Motor Vehicles Act, 1988. It addresses issues such as third-party insurance, taxi aggregator regulation, and road safety.

**96. Option (2) is correct.**

If two resistances,  $R_1$  and  $R_2$  are connected in parallel, then the effective resistance,  $R$  is  $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$ ,

Here,  $R_1 = 20 \Omega$  and  $R_2 = 30 \Omega$

So,  $\frac{1}{R} = \frac{1}{20} + \frac{1}{30}$ , or,  $R = \frac{600}{50} = 12 \Omega$ .

**97. Option (1) is correct.**

A kilometre is a unit of length in the metric system, equal to one thousand metres. So, 1 km = 1000 metres

Similarly, an hour consists of 60 minutes which in turn consists of

$$60 \times 60 \text{ seconds} = 3600 \text{ seconds}$$

$$\text{So, } 1 \text{ km/hr} = \frac{1000 \text{ m}}{3600 \text{ sec}} \text{ or } \frac{5}{18} \text{ m/sec.}$$

**98. Option (2) is correct.**

Fat helps Polar bears withstand extreme cold during long winters. It also helps them conserve energy because they cannot go hunting in extremely cold weather. Polar bears have thick white fur on their bodies and a layer of fat under their skin. This layer of fat reduces the body's heat loss. Minimizing heat loss is critical for their survival in extremely cold conditions.

**99. Option (3) is correct.**

Virat Kohli captained the IPL team Royal Challengers Bangalore for the majority of the matches in 2017. In 2018, he captained Royal Challengers Bangalore in all of their matches. The 2017 Qatar Motorcycle Grand Prix MotoGP was won by Maverick Vinales. Gautam Gambhir captained the IPL team Kolkata Knight Riders in 2017.

**100. Option (1) is correct.**

Character formatting in Microsoft Word allows us to change the font, font style, size, colour, and so on by using the Format menu, formatting toolbar, or shortcut keys. Character formatting is the process of applying formatting properties to individual text characters in order to improve their appearance. Character formats can be applied to a single character, word, sentence, or line of text without affecting the rest of the paragraph.

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