BYJU'S EXAM PREP

CMAT 2020 Question Paper and Solution

1.In how many ways a committee consisting of 5 men and 6 women can be formed from 8 men and 10 women ?
A. 5041
B. 5040
C. 11670
D. 11760

2.What is the farthest distance between two points on a cylinder of : HEIGHT 8 units and RADIUS 8 units ?
A. $8\sqrt{5}$
B. $16\sqrt{5}$
C. $8\sqrt{2}$
D. $8\sqrt{3}$

3.Find the smallest number by which 2400 should be divided to make it a perfect cube.
A. 220
B. 385
C. 260
D. 300

4.In a certain town, 40% of people have brown hair, 30% of people have brown eyes and 12% have both brown hair and brown eyes.
How many people in town have neither brown hair nor brown eyes ?
A. 44%
B. 43%
C. 41%
D. 42%

5.A company publishes to its customers that at a certain compound interest rate, a sum of money deposited by anyone will become 8 times in 3 years. If the same amount is deposited at the same compound rate of interest, then in how many years will it become 16 times ?
A. 4 years
B. 3.5 years
C. 3 years
D. 4.5 years

6.The sum of two numbers is 135 and their HCF is 9. How many such pairs of numbers can be formed ?
A. 2
B. 5
C. 4
D. 6

7.Simplify the following: $\frac{0.3\ x\ 0.3+0.3\ x\ 0.3-0.6\ x\ 0.03}{0.54}$
A. 0.03
B. 0.135
C. 0.982
D. 9.37

8.The LCM and HCF of two number are 84 and21 respectively. If the ratio of two numbers is 1 : 4, then the larger among two numbers is:
A. 28
B. 48
C. 88
D. 84

9.If x : y = 2 : 3, the value of (3x + 2y) : (2x + 5y) is:
A. 12/25
B. 11/27
C. 11/15
D. 12/19

10.The work done by a man, woman and child are in the ratio 3: 2:1. If daily wages of 20 men, 30 women and 36 children amount to 78/-, what will be the wages of 15 men, 21 women and 30 children for 18 weeks ?
A. 7371/-
B. 8645/-
C. 7532/-
D. 9000/-

11.X and Y are running towards each other from their houses. X can reach Y's house in 25 minutes which is half the time taken by Y to run from his house to X's house. If the two start to run towards each othe rat the same time, then how much more time it will be required by Y to reach the middle of houses ?
A. 18 min.
B. 25 min.
C. 50 min.
D. 12.5 min.

12.25,000/- is borrowed at compound interest at the rate of 3% for first year, 4% for 2nd year and 5% for 3rd year. Find the amount to be paid after 3 years
A. 28,117/-
B. 28,118/-
C. 28,120/-
D. 28,119/-

13.Two successive discounts of 8% and 12% are equal to a single discount of:
A. 22%
B. 19.04%
C. 20%
D. 20.96%

14.A shopkeeper marks his books at 25% above the cost price. Due to slump in the market, his cost reduces by 5%. And then, to boost his sale, he offered a discount of 8% due to which sales goes up by 25%. Compute the change in the shopkeepers profit.
A. No change
B. 7% change
C. 2.5% change
D. 8% change

15.Brother and Sister both appear for an interview. The probability of the selection of brother is 1/8 while the probability of rejection of sister is 4/5 . What is the probability that only one of them is selected ?
A. 11/40
B. 7/40
C. 5/13
D. 1/10

16.Tom's salary is 150% of John's salary. John's salary is 80% of Steve's salary. What is the ratio of Steve's salary to Tom's salary ?
A. 4 : 5
B. 5 : 4
C. 6 : 5
D. 5 : 6

17.There are six teachers. Out of them, two teach physics, other two teach Chemistry and the rest two teach Mathematics. They have to stand in a row such that Physics, Chemistry and Mathematics teachers are always in a set. The number of ways in which they can do, is :
A. 24
B. 48
C. 36
D. 12

18.Five years ago, the average age of A,B,C and D was 45 years. By including X in the present lot their present average changes to 49 years. What is the percentage of X?
A. 40 years
B. 45 years
C. 49 years
D. 48 years

19.Which of the following sets of numbers can be used as the lengths of the sides of a triangle ?
A. [5, 7, 12]
B. [5, 7, 9]
C. [7, 9, 17]
D. [2, 4, 10]

20.In how many different ways, can the letters of the words EXTRA be arranged so that the vowels are never together ?
A. 168
B. 48
C. 120
D. 72

21.A city has an average demand of water of 33,000 Lts. of water which lasts for 50 days. But if some people enter the city, then the demand increases to 37,000 Lts. of water for which supply will lasts 35 days. Give an estimation of how much minimum water should be used daily so that it could last 50 days ?
A. 24,253.00 Lts.
B. 23,666.66 Lts.
C. 23,662.34 Lts.
D. 24,123.72 Lts.

Direction: Number of Boys and Girls (in hundreds) in six different years in 5 different schools data is given below :

School →	A		B		C		D		D	
Year ↓	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
2014	3.3	3.6	5.2	3.1	5.5	4.5	2.4	1.4	6.5	6.6
2015	6.6	4.2	4.9	2.2	6.9	3.3	4.4	2.3	5.5	3.6
2016	9.3	6.9	4.7	4.2	5.8	4.9	6.4	3.3	2.7	2.4
2017	5.4	9.6	6.3	5.4	6.6	5.2	5.3	5.4	5.4	5.7
2018	8.4	12.9	7.5	5.9	8.7	6.6	12.1	5.2	6.8	6.5
2019	12.3	14.4	9.8	4.4	11.7	4.2	12.2	9.4	10.8	12.7

22.
What is the approximate percentage decrease in the numberof boys in school D in the year 2017 as compared to the previous year ?
A. 17%
B. 5%
C. 9%

D. 12%

23.The number of girls in school B in the year 2018 is approximately what percent of the total number of students in school E in the year 2015 ?
A. 52%
B. 65%
C. 58%
D. 46%

24.What is the average number of girls in school A in all years taken together ?
A. 860
B. 600
C. 760
D. 800

25.What is the ratio of the number of boys in school C in the year 2018 to the number of girls in school A in the year 2018 ?
A. 29 : 43
B. 36 : 11
C. 36 : 13
D. 29 : 41

26.In the following, choose the pair/ group of words having same relationship as given in question.
Elevated : Exalted :: ..... : .....
A. Disorderly : Unfaithful
B. Raise : Commensurate
C. Promoted : Excellence
D. Dirty : Filthy

27.The question given below consists of a statement, followed by 3 arguments numbered I, II and III. You should decide which of the arguments is/are 'strong' argument(s) and which is/are 'weak' argument(s) and accordingly choose your answer from given options.
Statement:
Should religion be taught in schools ?
Arguments:
I. No, ours is a secular state.
II. Yes, teaching religion helps inculcate moral values among children.
III. No, how can one dream of such a step when we want the young generation to fulfill its role in the 21% century.
A. All are strong
B. Only I and III are strong
C. Only II is strong
D. Only I is strong

28.Find the missing letters.
_ _ a b a _ _ b a _ a b
A. a b b a b
B. b a a b b
C. a b b a
D. b b a b a

29.What comes next ?
3, 12, 27, 48, 75, 108, ...
A. 183
B. 147
C. 192
D. 162

30.From the given alternatives find the correct relationship that holds between two terms :
FJUL : BOQQ :: LHRX : .....
A. HCMM
B. HMNC
C. HMCM
D. HMCC

31.Should all the factories in the cities be shifted to outskirts far away from the main city ?
Arguments:
I. Yes, this is essential step for controlling pollution in the city.
II. No, such step will lead to lot of inconvenience to the employees of the factories and their families as well.
A. If both I and II are strong.
B. If neither I nor II is strong.
C. If only II is strong.
D. If only argument I is strong.

32.A man wears gloves of two colours - Red and Green. He has altogether 30 Red Gloves and 10 Green Gloves. Supposing he has to take out Gloves in dark, how many must he take out to be sure that he has a matching pair?
A. 4
B. 5
C. 6
D. 3

33.In a certain code language, RUSTICATE is written as QTTUIDBSD. How would STATISTIC be written in that code ?
A. RSBUITUHB
B. RSBUJTUHB
C. TUBUITUMB
D. RSBUIRSJD

34.The following question is given by 2 statements and 2 conclusions numbered I and II. Choose the right answer from given option.
Statements:
All huts are bunglows.
All bunglows are churches.
Conclusions:
I. Some churches are huts.
II. Some churches are mansions.
A. If only conclusion II follows.
B. If either conclusion I or II follows.
C. If only conclusion I follows.
D. If both conclusion I and II follow.

35.Choose the right answer, based on the relationship given in question.
Clasp: Bracelet
A. Hook : Coat
B. Cuff : Trousers
C. Wrist : Watch
D. Buckle : Belt

36.Identify the odd man out.
A. Brinjal
B. Cabbage
C. Papaya
D. Cucumber

37.In the following question, select one alternative in which the third statement is implied by the first two statements.
A. All wolve's are wild. All tiger's are wild. So,all tigers are wolves.
B. All buses are boxes. All hens are buses. So, all boxes are hens.
C. All POR can run. All ABC are POR. So, all ABC can run.
D. All oranges are red. Somepeaches are strawberries. So, all peaches are red.

Direction: Mr. Ravi Reddy has three children - Swarna, Kamal and Avinash. Avinash married Madhuri, the eldest daughter of Mr. and Mrs. Chowdhry. The Chowdhry's married their youngest daughter to the eldest son of Mr. and Mrs. Patel, and they had two children named Arun and Sharada. The Chowdhry's have two more children Ratan and Varsha, both elder to Veeksha. Sameer and Ajay are sons of Avinash and Madhuri. Rohini is the daughter of Arun.
38.
What is the surname of Rohini ?
A. Arora
B. Reddy
C. Chowdhry
D. Patel

39.How is Sameer related to Madhuri's father ?
A. Grandson
B. Son-in-Law
C. Son
D. Father-in-Law

40.What is the surname of Sameer ?
A. Chowdhry
B. Cannot be determined
C. Patel
D. Reddy

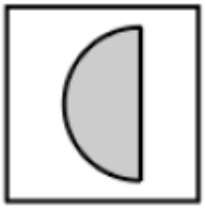
41.How is Mrs. Chowdhry related to Avinash ?
A. Aunt
B. Sister-in-Law
C. Mother-in-Law
D. Mother

42.In the following alphabets, which letter is eight to the right of the fourteenth letter from the right end ?
ZABCDEFGHIJKLMNOPQRSTUVWXY
A. S
B. H
C. R
D. T

43.Saritha went 15 km to the West from her house, then turned left and walked 20 km. She then turned East and walked 25 km and
finally turning left covered 20 km. Howfar is she from her house ?
A. 80 km
B. 40 km
C. 5 km
D. 10 km

44.Choose the correct order.
(A) Yarn (B) Silkworm (C) Saree (D) Silk (E) Cloth
A. (C), (D), (A), (B), (E)
B. (B), (D), (A), (E), (C)
C. (B), (D), (E), (A), (C)
D. (B), (D), (C), (E), (A)

45.What comes next ?

A. 

B.

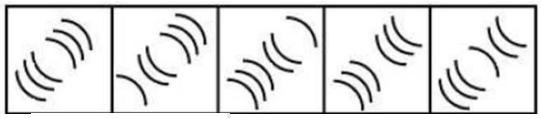
C.

D.

46.Standing near a bus stop, Ayush told Smitha that Koti was more than ten kilometres but less than 15 kilometres from there. Smitha know that it was more than 12 kilometres but less than fourteen kilometres from there. If both of them were correct, which of the following could be the distance to Koti from the bus stop ?

A. 14 km
B. 12 km
C. 11 km
D. 13 km

47.What comes next ?



A.

B.

C.

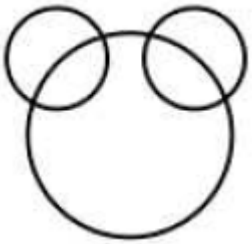
D.

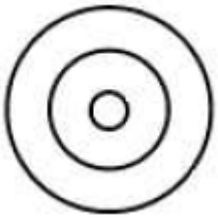
48.Identify the missing numbers.

9	11	13
13	15	17
10	12	14
10	12	14
14	16	?
11	13	?

A. 22, 20
B. 14, 18
C. 12, 13
D. 18, 15

49.How is this represented using a Venn diagram ?
Shirt, Collar, Pocket

A. 

B. 

C.

Choose the most suitable word for the given expression.

54.

One who cannot die.

A. Invulnerable
B. Perpetual
C. Mortal
D. Immortal

Fill in the blank(s) with appropriate word/ words.

55.

As ..... head of the organisation, he attended social functions andcivil meetings, but had no ..... in the formulation of company policy.

A. hypothetical, vote
B. former, pride
C. nominal, competition
D. titular, voice

Select the word or phrase which is closest to the opposite in meaning to the underlined word.

56.

You are advised to show **clemency** to the defeated enemy.

A. Mercy
B. Cruelty
C. Kindness
D. Leniency

57.What do you understand by - FRATRICIDE ?

A. murder of a foetus
B. murder of oneself
C. murder of father
D. murder of brother

Form a meaningful sentence from the given sentences.

58.

(A) It results from a carefully revised plan
(B) Men work togetherfor a cause or purpose
(C) Team work doesnotjust happen
(D) It must be clearly known to them

A. (C), (A), (B), (D)
B. (B), (C), (D), (A)
C. (B), (C), (A), (D)
D. (C), (B), (D), (A)

59.What does the underlined word mean ?

Rajiv's utopian idea was entertaining, but not acceptable.

A. imaginary idea
B. classic idea
C. big idea
D. unworthy idea

The question has a group of sentences marked A, B, C, D and E . Arrange these to form a logical sequence.

60.

(A) butthere is some meritin it
(B) as distinct from consumption
(C) the bifurcation of plan and non-plan funds
(D) in so far as it focuses attention on developmentexpenses
(E) in the budgetin artificial

A. (D), (C), (A), (B), (E)
B. (D), (E), (A), (C), (B)
C. (C), (E), (A), (B),(D)
D. (C), (D), (B), (E), (A)

In this question, you are given a sentence, a part of which is underlined. This is followed by four ways of phrasing the underlined part. Select the version that best rephrases the underlined part.

61.

We want the teacher to be him who has the best rapport with the students.

A. We want him to be the teacher.
B. We want the teacher to be he.
C. We anticipate the teacher to be him.
D. We desire the teacher to be him.

In this question, a word is underlined in the given sentence. For the underlined word, four words are listed below. Choose the word nearest in meaning to the underlined word.

62.

The football coach had a sympathetic presence, **albeit** a commanding one.

A. Although
B. Further more
C. Because
D. Not only

Fill in the blank(s) with appropriate word/ words.

63.

Confused and ..... Shyam fumbled to make sense of seemingly inconsistent statements, ... the impatience of his listeners.
A. prostrate, listening to
B. philosophical, overlooking
C. incoherent, oblivious to
D. tired, hearing

Fill in the blank with appropriate word(s).
64.
One who believes in no Government and the refore incites disorder in a state is called .....
A. a Naxalite
B. an Autocrate
C. a Monarchist
D. an Anarchist

65.What is the opposite of the underlined word ?

New Metro Rail Project was **commissioned** yesterday at Hyderabad by the State Railway Minister.
A. Closed
B. Started
C. Finished
D. Terminated

66.The appropriate meaning of stir up a hornet's nest would be .....
A. to create trouble
B. to quicken an action
C. to destroy homes and settlements
D. to mix the good and the bad

67.Radha **keeps an open house** every weekend to teach yoga.
What does the underlined word mean ?
A. Welcomes all those who are interested
B. Keeps the doors of her house open
C. Welcomes selected group of people
D. Welcomes yoga practioners

In the following sentence, choose the nearest similar meaning word so that the meaning of sentence may not change.
68.
Ritu asked Rashmi not a **meddle** in her affairs.
A. enthuse
B. impose
C. interfere
D. cross

69.Choose the correctly spelt word.
A. Foreign
B. Fariegn
C. Foriegn
D. Forein

70.In the context of the passage, which of the following statements about Tilak and the reformers is true ?
A. They were moralin privatelife but lack in public life
B. Very few people used to read the newspapers even from inside the jail
C. They were allowed to edit their newspapers even from inside the jail
D. Their influence on people was negligible

71.Which of the following types of writers can be moral in their personal life and lack in public life ?
A. Those who want to reform people
B. Those whose writing is an extension of their exemplary lives
C. Those who lead an authentic life
D. Those who want to entertain people

Read the following passage and answer the question that follows :
The reformer must know that what movespeopleis the authentic life, not mere writing. The news paper and journals that Tilak and other reformers ran, the books they wrote, sold little, but had enormous effect. Their writing was known to reflect and be just an extension of, their exemplary lives. It was the authenticity of their lives which lent weight to their message, to their example. All knew that their lives were an integral whole - they were not moral in public life and lack in private, not vice versa. They were not full of pious thoughts and sacred resolutions within the walls of a temple.
A writer who is merely entertaining his readers, even one who is merely informing them, can do what he wants with the rest of his life. But the writer, who sets out to use his pen to reform public life, cannot afford such dualities. Here is the testimony of one great man – about the influence of another, Lok manya Tilak.
"To believe that an editor who has anything worth saying and who commandsa clientiele cannot easily be hushed. He delivered his finished

Message as soon as he is put underdress. Tilak spoke more eloquently from the Mandalay fortress than through columns of the printed Kesari. His influence was multiplied thousand fold by his imprisonment and his speech and his pen had acquired much greater power after he was discharged than before his imprisonment. By his death we have been editing his paper without pen and speech through the sacred resolution of the people to realize his life's dream.
He could possibly have done more if he were today in flesh preaching his view. Critics like me would perhaps be still finding fault in the expression of this or that. Today, his message rules millions of hearts which are determined to raise permanent living memorial by the fulfilment of his ambition in their lives".

72. In the context of the passage, a reformer becomes effective if :
A. he is a journalist with an objective view point
B. he is an author with an excellent style of writing
C. he is good critic of social practices
D. he is a person with consistency in his writing and life style

73.Which of the following is the general tendency of critics according to the passage ?
A. To condemn one and all the reformer writers
B. To justify their criticism
C. To praise only those writers who they like
D. To find fault with oneor the other expression of a writer

74.Which of the following is the result of Lokmanya Tilak's exemplary life ?
A. People resolvedto fulfil his life's dreams
B. The newspapers edited by him did not incur monetary loss
C. He was put in jail at Mandalay
D. The books written by him are useful

75.
Complete the following sentence:
Tilak's messages were most effective .....
A. when he delivered them through editorials
B. after his death
C. before his imprisonment
D. when delivered in speeches

76.'Siamese Fighting Fish'is the national aquatic animal of which country ?
A. Australia
B. New Zealand
C. Thailand
D. Singapore

77.The longest circle which can be drawn onthe Earth's surface passes through :
A. Tropic of Capricorn
B. Tropic of Cancer
C. Arctic circle
D. Equator

78.Who won the Miss Universe Australia title in 2019 ?
A. Sushmitha Rao
B. Preethi Lamba
C. Priya Serrao
D. Kalpana Chawla

79.What strait divides Moracco and Spain ?
A. Strait of Malacca
B. Strait of Hormuz
C. Strait of Bosporus
D. Strait of Gibraltar

80.The famous hill station 'Kodaikanal' is in .....
A. Nilgiri Hills
B. Palani Hills
C. Javadi Hills
D. Cardomom Hills

81..... is gained when a bullet is fired upwards vertically.
A. Synergy
B. Kinetic Energy
C. Energy
D. Potential Energy

82.Which city is known for its 'Chicken embroidery' ?
A. Surat
B. Pune
C. Indore
D. Lucknow

83.The bank which merged with Capital First was .....
A. IDBI
B. ICICI
C. IDFC

D. SBI

84.To which field of literature is the 'Booker Prize' awarded every year ?
A. Fiction
B. Autobiography
C. Religion
D. Philosophy

85.Who is the only batsman to score five centuries in a single edition of ICC World Cup ?
A. Rohit Sharma
B. Hardik Pandya
C. Clive Loyd
D. Virat Kohli

86.Which is the oldest Veda ?
A. Atharveda
B. Samveda
C. Rigveda
D. Yajurveda

87.The country which is also known as Persia is .....
A. Iran
B. Iraq
C. Qatar
D. Kuwait

88.Which city houses the headquarters of International Atomic Energy Agency (IAEA), the World's 'Atoms for Peace' organisation set-up
in 1957 within the United Nations family ?
A. Vienna (Austria)
B. NewYork (USA)
C. Tokyo (Japan)
D. Geneva (Switzerland)

89.MDMK is Political Party, what does it stand for ?
A. Makkal Dravida Munnetra Kazhagam
B. Munnetra Dravida Marumalarchi Kazhagam
C. Marumalarchi Dravida Munnetra Kazhagam
D. Madras Dravida Munnetra Kazhagam

90.The length of the longest railway platform in India is .....
A. 4483 ft.
B. 4412 ft.
C. 4492 ft.
D. 4432 ft.

91.Birla Industrial and Technological Museum is located in the state .....
A. Maharashtra
B. West-Bengal
C. Bihar
D. Karnataka

92.'Grapevine' is the term used in relation to .....
A. E-mail Communication
B. Group Communication
C. Formal Communication
D. Informal Communication

93.What do you call the study of inscriptions ?
A. Palaeography
B. Archaeology
C. Numismatics
D. Epigraphy

94.Which Indian has becomethe first woman in the world to be awarded with the International Maritime Organisation (IMO) award for
Exceptional Bravery at sea ?
A. P.V. Sindhu
B. Radhika Menon
C. Bhawana Kanth
D. Avani Chaturvedi

95.EXIM Policy of India is prepared by .....
A. SEBI
B. Ministry of Finance
C. Ministry of Commerce
D. RBI

96.In India, how many banks were nationalised during Second Round of Nationalization in 1980 ?
A. 7 Banks
B. 6 Banks
C. 8 Banks
D. 5 Banks

97.Who is the founding member of Muslim League?
A. Md.Ali Jinnah
B. Aga Khan
C. Shaukat Ali
D. Nawab Khwaja

98.How many overs were allowed per side in the inaugural 1975 Cricket World Cup ?
A. 60

B. 50
C. 25
D. 40

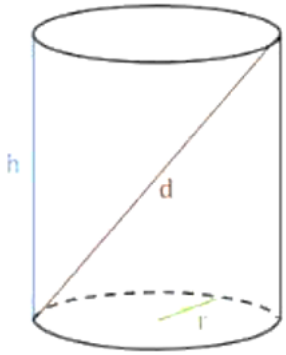
99.VAIO is the product of which company ?
A. Dell
B. Verizon Associates
C. Sony
D. Compac

100.Who wrote the book "The Paradoxical Prime Minister" ?
A. Khushwant Singh
B. Shashi Tharoor
C. Arundhati Roy
D. Vikram Seth

###ANSWERS###

1. Ans. D.
Number of ways a committee consisting of 5 men and 6 women can be formed from 8 men and 10 women
$= C_6^{10} \times C_5^8$
$= C_4^{10} \times C_3^8$
= 11760
⇒ Ans - (D)

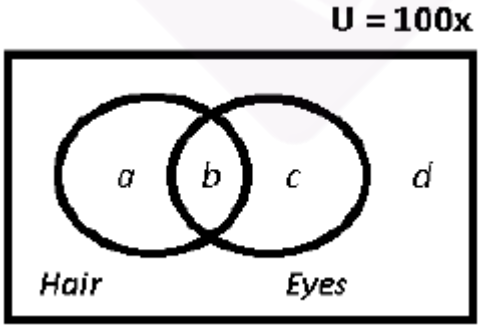
2. Ans. C.



Height of cylinder = 8 units and radius = 8 units
⇒ Farthest distance = hypotenuse
$= \sqrt{(8)^2 + (8)^2}$
$= 8\sqrt{2}$ units
⇒ Ans - (C)

3. Ans. D.
Prime factorization of :
$2400 = (2)^5 \times (3) \times (5)^2$
Now, to make it a perfect cube, we need to make the powers multiple of 3, and thus we need to divide it by = $(2)^2 \times 3 \times (5)^2 = 300$
⇒ Ans - (D)

4. Ans. D.



Let total number of people in the town = 100x
People who have both brown hair and eyes = b = 12x
⇒ People who have brown hair = a + b = 40x
⇒ a = 28x
Similarly, c = 18x
∴ People who have neither brown hair nor brown eyes = 100x − (12x + 18x + 28x) = 42%
⇒ Ans - (D)

5. Ans. A.
If a sum of money becomes x times in a years, it will become y times in years
$x^{\frac{1}{a}} = y^{\frac{1}{b}}$
$8^{\frac{1}{3}} = 16^{\frac{1}{t}}$
$\Rightarrow t = 4$ year
⇒ Ans - (A)

6. Ans. C.
Let the two numbers be 9x and 9y, where and are co-prime numbers.
⇒ 9x + 9y = 135
x + y = 15
Now, pairs of natural numbers having sum 15 and co prime are = (1,14), (2,13), (4,11), (7,8)
Thus, 4 such pairs can be formed.
⇒ Ans - (C)

7. Ans. D.

8. Ans. D.
Let the two numbers be x and 4x
⇒ x × 4x = 84 × 21
⇒$x^2 = (21)^2$
⇒ x = 21
∴ Larger number = 4 × 21 = 84
⇒ Ans - (D)

9. Ans. D.
Let x = 2 and y = 3
To find : (3x+2y)/(2x+5y)
= [3(2)+2(3)]/[2(2) + 5(3)]
=12/19
⇒ Ans - (D)

10. Ans. A.
Let the efficiency of a man, woman and child be 3x, 2x, x espectively.
Thus, 1 day wage =(3x × 20) + (2x × 30) + (x × 36) = 78
⇒ 156x = 78
⇒ x = 1/2
∴ Wages of 15 men, 21 women and 30 children for 18 weeks = [(15 × 3x) + (21 × 2x) + (30 × x)] × 18 × 7
= 117 × 63 = Rs. 7, 371
⇒ Ans - (A)

11. Ans. B.
Time taken by X to reach Y's house = 25 minutes and by Y to reach X's house = 50 min

Ratio of time taken = 1 : 2
∵ speed is inversely proportional to time, let speed of X = 2x km/min and speed of Y = km/min and distance between their houses = 2d km
Using, speed = distance/time
X= 2d/50 = d/25
d/x = 25
Now, time taken by Y to travel km, i.e. mid way =d/x
= 25 minutes
⇒ Ans - (B)
12. Ans. D.
Principal sum to be borrower = Rs. 25,000
Amount when compounded annually = $P\left(1+\frac{R}{100}\right)^{T}$
⇒ Amount to be paid after 3 years = 25, 000 (1 + 3/100)(1+4/100)(1+5/100)
=250 x 103 x 26/25 x 21/20
$=103\times13\times21=\text{Rs. }25,119$
⇒ Ans - (D)
13. Ans. B.
Two successive discounts of x and y ≡ x + y – xy/100
= 12 + 8 – 12 x 8 /100
=20 - 0.96 = 19.04%
⇒ Ans - (B)
14. Ans. A.
Let cost price of each article = Rs. 100 and number of articles sold be x
⇒ Original selling price price = Rs. 125
⇒ Original profit = Rs (125 – 100)x = Rs. 25x
After offering discount of 8%, ⇒ New selling price = 92/100 x 125 = 115
Also, new cost price = 95/100 x 100 = 95
∵ Sale increases by 25%, ⇒ Number of articles now sold = 1.25 x
⇒ New profit = Rs (115 – 95) × 1.25x = Rs. 25x
∴ There is no change in profit.
⇒ Ans - (A)
15. Ans. A.
Probability of brother's selection = 1/8 and probability of brother's rejection = 4/5
Probability of sister's selection = 1/5 and probability of sister's rejection = 4/5
Probability that only one of them is selected = (prob. that brother is selected) × (prob. that sister is not selected) + (Prob. that brother is not selected) × (Prob. that sister is selected)
=(1/8)(4/5) + (7/8)(1/5)
= 11/40
⇒ Ans - (A)
16. Ans. D.
Let Steve's salary = Rs. 10
⇒ John's salary = (80/100) x 10 = 8
⇒ Tom's salary = 150/100 x 8 = 12
∴ Ratio of Steve's salary to Tom's salary = 10/12 = 5 : 6
⇒ Ans - (D)
17. Ans. B.
There are 2 physics teacher. They can stand in a row in P (2, 2) = 2! = 2 × 1 = 2 ways
Similarly, the two Chemistry and Mathematics teacher can stand in 2 ways each.
These three sets can be arranged in themselves in 3! = 3 × 2 × 1 = 6 ways
⇒ Required number of ways = 2 × 2 × 2 × 6 = 48
⇒ Ans - (B)
18. Ans. B.
Sum of ages of A, B, C and D five years ago = 45 × 4 = 180
Sum of their present ages = 180 + (5 × 4) = 200
Sum of present ages of all five (including X) = 49 × 5 = 245
⇒ Present age of X = 245 – 200 = 45 years
⇒ Ans - (B)
19. Ans. B.
In a triangle, the sum of two sides is always greater than the third side.
In the last two options, sum of first two sides is less than third side, and in first two options sum is equal to third side, hence these three are not possible.
Thus, possible lengths of triangle = [5,7,9]
⇒ Ans - (B)
20. Ans. D.
Taking the vowels (EA) as one letter, the given word has the letters XTR (EA), i.e., 4 letters.
These letters can be arranged in 4! = 24 ways
The letters EA may be arranged amongst themselves in 2! = 2 ways.
Number of arrangements having vowels together = (24 × 2) = 48 ways
Total arrangements of all letters = ways
⇒ Number of arrangements not having vowels together = ways
⇒ Ans - (D)
21. Ans. C.
22. Ans. A.

Number of boys in school D in the year 2017 = 530
Number of boys in school D in the year 2016 = 640
⇒ Required percent decrease (640 – 530)/640 x 100
= 17 (approx..)
⇒ Ans - (A)
23. Ans. B.
The number of girls in school B in the year 2018 = 590
Total number of students in school E in the year 2015 = 550+360 = 910
⇒ Required % = 590/910 x 100 = 65%
⇒ Ans - (B)
24. Ans. A.
Total number of girls in school A in all years taken together = 360+420+690+960+1290+1440 = 5160
⇒ Required average = 5160/ 6 = 860
⇒ Ans - (A)
25. Ans. D.
Number of boys in school C in the year 2018 = 870
Number of girls in school A in the year 2018 = 1290
⇒ Required ratio = 870/1290 = 29 : 41
⇒ Ans - (D)
26. Ans. D.
The two words given are synonyms, meaning at a higher level, similarly only pairs of synonyms in the options are Dirty : Filthy
⇒ Ans - (D)
27. Ans. C.
28. Ans. A.
The pattern followed after filling all the blanks.
(A) : a b ab a b a b a b a b
(B) : b a a b a a b b a b a b
(D) : b b a b a a b b a a a b
If we look carefully, we can find only first option making a pattern, ab/ab/ab/ab/ab/ab
⇒ Ans - (A)
29. Ans. B.
The pattern followed is that odd multiples of 3 (starting from 9 are added).
3 + 9 = 12
12 + 15 = 27
27 + 21 = 48
48 + 27 = 75
75 + 33 = 108
108 + 39 = 147
⇒ Ans - (B)
30. Ans. B.
Expression = FJUL : BOQQ :: LHRX :
The pattern followed is :

$F \xrightarrow{-4} B$

$J \xrightarrow{+5} O$

$U \xrightarrow{-4} Q$

$L \xrightarrow{-5} Q$

Similarly, LHRX : HMNC

$L \xrightarrow{-4} H$

$H \xrightarrow{+5} M$

$R \xrightarrow{-4} N$

$X \xrightarrow{-5} C$

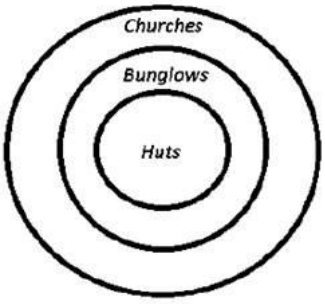
⇒ Ans - (B)
31. Ans. D.
The given statement begs a question whether the factories should be shifted to outskirts away from the main crowded cities, if we look at the hindsight, it will definitely help curb the pollution. Hence, I is strong because pollution control is highly desirable. II is weak. There may be some inconvenience initially but in fact their families would live better lives in the outskirts.
⇒ Ans - (D)
32. Ans. D.
There are 30 red gloves and 10 green gloves, so he needs to take atleast two socks, to get a pair, now there can be one sock of each colour, so to be definite sure about a matching pair, he should once again pull out a sock, and the resulting sock will definitely match
with either of the earlier ones, and he will get a pair.
Thus, he needs to take 3 to be sure for a matching pair.
⇒ Ans - (D)
33. Ans. A.
RUSTICATE is written as QTTUIDBSD
The pattern followed is :

R	U	S	T	I	C	A	T	E
(-1)	(-1)	(+1)	(+0)	(+1)	(+1)	(+1)	(-1)	(-1)
Q	T	T	U	I	D	B	S	D

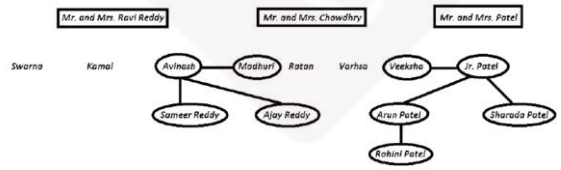
Similarly, STATISTIC :

S	T	T	A	I	S	T	I	C
(-1)	(-1)	(T+)	(+1)	(+0)	(+1)	(+1)	(-1)	(-1)
R	S	B	U	I	T	U	H	B

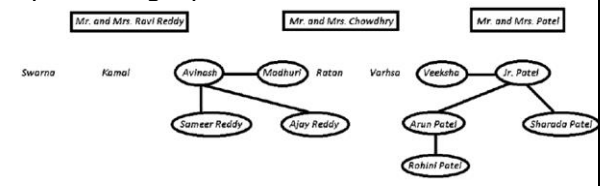
⇒ Ans - (A)
34. Ans. D.
Venn diagram for above statements is :



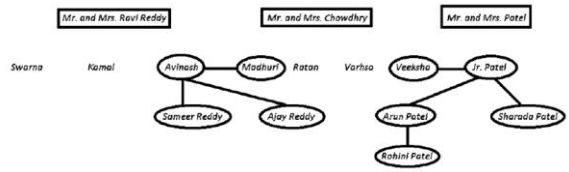
Conclusions:
I. Some churches are huts = true
II. Some churches are bunglows = true
Thus, both conclusion I and II follow.
⇒ Ans - (D)
35. Ans. D.
A clasp is one which holds a bracelet, similarly relationship is observed in buckle : belt.
⇒ Ans - (D)
36. Ans. C.
Brinjal, cabbage and cucumber are classified in vegetables, while papaya is a fruit.
⇒ Ans - (C)
37. Ans. C.
(A) : From the first two statements, we cannot conclude any relation between tigers and wolves.
(B) : All hens are buses, and all buses are boxes, thus all hens are boxes, and not the other way around.
(C) : The first two statements matches with the conclusion that all ABC can run.
(D) : There is no defined relation between peaches and red.
⇒ Ans - (C)
38. Ans. D.
The above statements when represented in pictorial graph is :



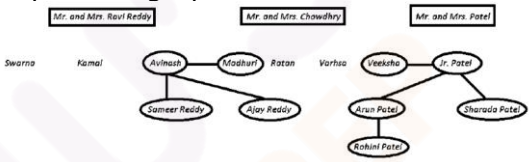
Thus, Surname of Rohini is Patel.
⇒ Ans - (D)
39. Ans. A.
The above statements when represented in pictorial graph is :



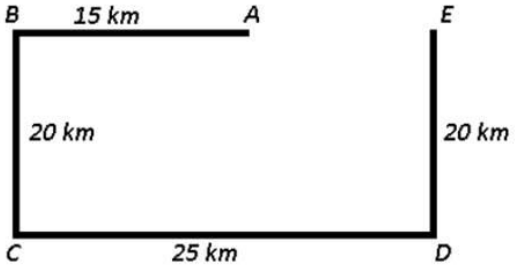
Thus, Sameer is grandson of Madhuri's father.
⇒ Ans - (A)
40. Ans. D.
The above statements when represented in pictorial graph is :



Thus, Surname of Sameer is Reddy.
⇒ Ans - (D)
41. Ans. C.
The above statements when represented in pictorial graph is :



Thus, Mrs. Chowdhry is mother-in-law of Avinash.
⇒ Ans - (C)
42. Ans. D.
ZABCDEFGHIJKLMNOPQRSTUVWXY
Eighth to the right of the fourteenth letter from the right end = 6th letter from right end = T
⇒ Ans - (D)
43. Ans. D.
Let Saritha starts from point A and went 15 km to the West from her house to reach B, then turned left and walked 20 km southwards to reach C. She then turned East and walked 25 km to go to D and finally turning left covered 20 km to finally stop at E.



Thus, she is 10 km east of her house.
⇒ Ans - (D)
44. Ans. B.
The correct order as silkworm produces silk and then after yarn, in the end saree is made :
Silkworm -> Silk -> Yarn -> cloth -> Saree
⇒ Ans - (B)

45. Ans. A.
In the first pair of pictures, a triangle is formed by joining two hypotenuse triangles, and the second picture shows left side triangle with a shade, similarly, for the two semi circles, we need one on the left side, i.e. curve on left with grey shade, as shown in first figure.
⇒ Ans - (A)
46. Ans. D.
According to Ayushman : Koti was more than ten kilometres but less than 15 kilometres from there
⇒ Possible values = [11,12,13,14]
Similarly, According to Smitha, it was more than 12 kilometres but less than fourteen kilometres from there.
⇒ Possible values = [13]
If both of them were correct, combining above sets, we get the require distance = 13 km
⇒ Ans - (D)
47. Ans. C.
48. Ans. D.
In each row, the pattern followed is there are consecutive even or odd numbers as (9,11,13), (13,15,17), (10,12,14)
Similarly, the missing series will be : 14,16,18 and 11,13,15
Thus, missing values = 18, 15
⇒ Ans - (D)
49. Ans. C.
Generally, every shirt has a collar and a pocket, but these two are different from each other, thus the venn diagram that best describes above relation is :

⇒ Ans - (C)
50. Ans. C.
(A) : 16T2R4U6X8
≡ 16 × 2 + 4 ÷ 6 < 8
L.H.S = 32 + 2/3 =32.67 which is greater than 8, hence it is not correct.
(B) : 16U2R4S6W8
≡ 16 ÷ 2 + 4 − 6 > 8
L.H.S. = 8 − 2 = 6 which is less than 8, hence it is also not correct.
(C) : 16R2S4V6R8
≡ 16 + 2 − 4 = 6 + 8
L.H.S. = 18 − 4 = 14
R.H.S. = 6 + 8 = 18
∵ L.H.S. = R.H.S., hence it is correct.
⇒ Ans - (C)
51. Ans. D.
"to Wreak" means "to inflict" or cause something bad
52. Ans. D.
"Voracious" and "Ravenous" both mean hungry. Tenacious means "determined".
53. Ans. B.
"Typing" of documents happened earlier than "crashing of laptop". The earlier event or past of past event therefore takes Past Perfect Tense.
54. Ans. D.
One who can't die is "Immortal". "Perpetual" means "continuous", "Invulnerable" means "Immune".
55. Ans. B.
"Hypothetical" in A, "Pride" in B and "Competition" in C are not fitting in. The answer is D. "Titular" means official and had "no voice" makes sense.
56. Ans. B.
Clemency means mercy and the opposite of mercy is cruelty.
57. Ans. D.
murder of a foetus - Foeticide
murder of oneself - suicide
murder of father - Patricide
murder of brother - Fratricide
58. Ans. D.
.
59. Ans. A.
"Utopia" means too good or ideal to be true. Option A is the correct answer.
60. Ans. B.
.
61. Ans. A.
"him" followed by "to be" is grammatically correct. Hence, Option A is the correct option.
62. Ans. A.
"Albeit" means "Although"
63. Ans. C.
The first blank should have a word that goes with "confused". "Incoherent" meaning "lacking orderliness or sense" is the best choice. Since he continued speaking in an incoherent manner, it means that he did not pay attention to the fact that the audience was running out of patience. Hence "oblivious to" is the best choice.
64. Ans. D.
One who believes in no government and therefore incites disorder in a state is known as : An Anarchist

65. Ans. D.
"**commissioned"** means "to commence open the operations. The opposite of it should mean "to halt the operations". Clearly, Option D "Terminated" fulfills that obligation.
66. Ans. A.
"to stir up a hornet's nest" means "to create trouble".
67. Ans. A.
"To keep an open house" means "to welcome all those who are interested".
68. Ans. C.
"Meddle" means to "Interfere". Option C is the correct answer. "Enthuse" means to make someone enthusiastic. "Impose" means to force your you belief on someone. "Cross" means "to intersect".
69. Ans. A.
The correct spelling is "Foreign". Option A is the correct answer.
70. Ans. C.
Option D can be negated from the following lines; "The reformer must know that what moves people is the authentic life, not mere writing. The newspaper and journals that Tilak and other reformers ran, the books they wrote, sold little, but had an enormous effect.". Option A can be negated from the following lines; "All knew that their lives were an integral whole - they were not moral in public life and lacking in private, not vice versa." Option B is not supported by the paragraph at all. Option C is the answer.
71. Ans. D.
Refer to the following line; "A writer who is merely entertaining his readers, even one who is merely informing them, can do what he wants with the rest of his life." Clearly, D is the answer.
72. Ans. D.
Refer to the following lines: "All knew that their lives
were an integral whole - they were not moral in public life and lack in private, not vice versa. They were not full of pious thoughts and sacred resolutions within the walls of a temple."
"A writer who is merely entertaining his readers, even one who is merely informing them, can do what he wants with the rest of his life. But
the writer, who sets out to use his pen to reform public life, cannot afford such dualities." Clearly, Option D is the answer.
73. Ans. A.
Refer to the following line; ". Critics like me would perhaps be still finding fault in the expression of this or that". Hence, A is the answer.
74. Ans. C.
Refer to the following line; "His influence was multiplied thousand fold by his imprisonment". Clearly, C is the answer.
75. Ans. D.
Refer to the following lines; "Tilak spoke more eloquently from the Mandalay fortress than through columns of the printed Kesari". Clearly, D is the answer.
76. Ans. C.
Tiny, testy and eye-catching with a colourful **fin** plumage, the Siamese fighting fish was named **Thailand's** national aquatic animal.
77. Ans. D.
The longest circle which can be drawn on the Earth's surface passes through Equator
78. Ans. C.
India born **Priya Serrao**, whose family migrated to Australia from Middle East, has won the Miss Universe Australia title for 2019
79. Ans. D.
The **Strait of Gibraltar** is a narrow waterway separating the Atlantic Ocean (bottom left) from the Mediterranean Sea (top right). This 13-kilometer-wide waterway also separates Europe and Africa, with Spain and Gibraltar on the left and Morocco on the right.
80. Ans. B.
Kodaikanal, the famous hill-station of South India, is situated on Palni hills.
81. Ans. D.
When the **bullet is fired** it has Kinetic energy and the direction is **vertically upward**. The **bullet** continues to loose Kinetic energy and **gains** potential energy at higher heights
82. Ans. D.
Chikan embroidery is produced in the **city of Lucknow**, the capital of the state of Uttar Pradesh, India.
83. Ans. C.
IDFC Bank Ltd. and **Capital First Ltd**. announced the completion of merger following the receipt of all requisite shareholder and regulatory approvals and the merged entity is since known as **IDFC First Bank**
84. Ans. A.

The International **Booker Prize** is **awarded annually** for a single work of fiction, translated into English and published in the UK by a registered imprint

85. Ans. A.

Rohit Sharma hit 5 Centuries in 2019 WC

86. Ans. D.

Rigveda is one of the four sacred canonical texts (śruti) of Hinduism known as the Vedas. **The Rigveda** is the oldest known Vedic Sanskrit text

87. Ans. B.

The country which is also known as Persia is Iran

88. Ans. A.

The IAEA Secretariat is headquartered at the Vienna International Centre in Vienna, Austria

89. Ans. C.

The Marumalarchi Dravida Munnetra Kazhagam (Renaissance Dravidian Progressive Conference) is a political party active in the Indian states of Tamil Nadu and Punducherry.

90. Ans. A.

The length of the longest railway platform in India is 4483 ft.

91. Ans. B.

Birla Industrial & Technological Museum (BITM), a unit under NCSM, Ministry of Culture, Government of India, is at Gurusaday Road, West Bengal

92. Ans. D.

'Grapevine' is the term used in relation to informal **communication**. **Communication** between different managers of organization who are not officially attached to each other is known as informal **communication**. There is no fixed source of information, that is why the network of informal **communication** is known as grapevine

93. Ans. D.

Epigraphy "**inscription**", is the **study of inscriptions**

94. Ans. B.

In 2016, Radhika also became the first woman to receive the IMO Award for Exceptional Bravery at Sea. She is well known for her rescue operation which she conducted successfully in June 2015 saving seven fishermen who were trapped for a week in a boat

95. Ans. C.

EXIM Policy of India is prepared by Ministry of Commerce

96. Ans. B.

The **second** major **phase of nationalization** occurred in **1980**, when Government of India acquired the ownership of 6 more **banks**, thus bringing the total number of **Nationalized Banks** to 20

97. Ans. A.

Md.Ali Jinnah is the founder of Muslim League

98. Ans. A.

In 1975 the first Cricket World Cup was contested in England as a series of one-day matches of **60 overs** per side

99. Ans. D.

VAIO was originally a brand of **Sony**, introduced in 1996. **Sony** sold its **PC** business to the investment firm **Japan Industrial Partners** in February 2014 as part of a restructuring effort to focus on mobile devices.

100. Ans. C.

The Paradoxical Prime Minister: Narendra Modi And His India is a 2018 non-fiction book written by senior leader of the Indian National Congress, Shashi Tharoor, about the Prime Minister of India, Narendra Modi.

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