

# CMAT 2019 Question Paper and Solution





1.How much time does Mr. Surya take to cover a distance of 500 m if he runs at a speed of 25 km/hr?

A. 35 sec

B. 80 sec

C. 60 sec

D. 72 sec

2.What is the area covered by a bell-shaped curve from —6 sigma to +6 sigma in normal distribution?

A. 99.73%

B. 99.99%

C. 99.999666%

D. 99.9999%

3. The following table lists the marks of seven students(rows) of a class across six subjects(columns). The Numbers in the Parenthesis indicate the maximum marks of the subject concerned. Use the data in the table to answer the question that follows:

	English (150)	Hindi (120)	History (100)	Physics (100)	Maths (100)	Chemistry (100)
Manya	90	50	90	60	70	80
Arya	100	80	88	60	80	70
Riya	90	72	70	72	91	70
Sreya	85	65	80	80	60	60
Poopesh	80	55	85	95	50	90
Chandesh	70	75	65	85	40	61
Hanish	65	35	50	77	80	80

Who is the topper of the class?

A. Maya

B. Arva

C. Roopesh

D. Riya

4.Rajesh can check the quality of 1000 items in 5 hours and Rakesh can complete 75% of the same job in 3 hours. How much time is required for both of them to check 1300 items, if Rakesh stops checking after 2 hours?

A. 1 hour

B. 2 hours

C. 4 hours

D. 3 hours

5.Two oranges, three bananas and four apples cost Rs. 15. Three oranges, two bananas and one apple cost Rs. 10. I bought 3 oranges, 3 bananas and 3 apples. How much did I pay?

A. Rs. 10

B. Rs. 8

C. Rs. 15

D. Cannot be determined

6. What value should come in place of question mark(?) in the following equation?

 $360\sqrt{?} + 4500 = 19700 - 9800$ 

A. 395

B. 295

C. 225

D. 215

7.In a building there are 30 cylindrical pillars. The radius of each pillar is 35 cm and height is 5 m. Find out the cost of painting the curved surface of half the number of pillars. The rate of painting is

Rs. 10 per  $m^2$ ?

A. Rs. 16,500

B. Rs. 8250

C. Rs. 1650

D. Rs. 4125

8.A management institute has 6 senior professors and 4 junior professors, 3 professors are selected at random for a government project. The probability that at least one of the junior professors would get selected is:

A. 2/3

B. 1/5

C. 5/6

D. 1/6

9.The angle created by two hands of a clock when the clock shows 5.20 P.M. is:

A. 40°

B. 60°

C. 35°

D. 30°

10. The total volume of soaps sold is 680 lakhs units. The volume of Lux sold is 136 lakh units. If the percentage of Lifebuoy sold is 30%, Camay 10%, Liril 15% and Mysore Sandal 10%, answer the following questions.



What is the market share of others in percentage points?

A. 15

B. 13.5

C. 16.8

D. 16

11.In a triangle ABC, AD is the bisector of angle A. If AC = 4.2 cm, DC = 6 cm, BC = 10 cm, find AB.

A. 2.7 cm

B. 2.9 cm

C. 2.8 cm

D. 3.4 cm

12. There are 6 tasks and 6 persons. Task 1 cannot be assigned either to person 1 or person 2. Task 2 must be assigned to either person 3 or person 4. Every person is to be assigned one task. In how many ways can the assignment be done?

A. 360

B. 192

C. 144

D. 180

13. The maximum value of 3 cosx + 4sinx

+ 8 is

A. 15

B. 3

C. 13

D. 7

14.If one third of one-fourth of a number is 15, then three-tenth of that number is

A. 61

B. 54

C. 46

D. 38

15.Students in a commerce class took a test. The average score of men is 70 and of women is 83. The class average is 76. What is the ratio of men to women in the class?

A. 8:7

B. 7:8

C. 7:6

D. 6:7

16. What is the probability of drawing a king or a heart from a deck of cards?

A. 1/13

B. 1/52

C. 17/15

D. 4/13

17. The sum of three consecutive odd numbers is 20 more than the first number. What is the middle number? A. 7

B. Data inadequate

C. 11

D. 9

18.In a simultaneous throw of a pair of dice, find the probability of getting a total of 9 or more.

A. 5/18

B. 5/12

C. 2/7

D. 2/36

19. The length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. If the length, breadth and height are increased by 100% each then what would be the increase in the volume of the cuboid?

A. 8 times

B. 7 times

C. 10 times

D. 9 times

20.It costs Rs. 6000/- and Rs. 6,100/respectively to paint the 4 walls of 2
square halls, of the same height. If the
length of one hall exceeds the length of
the other by 1 m and the cost of painting
is Rs. 5 per sq.m., what is the height of
the two walls ?

A. 10 m

B. 7.5 m

C. 3 m

D. 5 m

21.A rectangular box of width(a), length(b), and height(c) has a solid cylinder of height 'c' and of diameter 'a' placed within it. If a=6, b=8 and c=10, how much volume is left in the rectangular box?

 $A.480-180\pi$ 

B. 240-96π

c. 380-90π

D.  $480-90\pi$ 

22.If  $f(x) == x^3 - 4x + p$  and f(0) and f(1) are of opposite signs, Which one of the following is neccessarily true?

A. -1

B. 0

C. -2

D. -3



- 23. The speed of a boat in still water is 5 km/hr. If it takes thrice as much time in going 20 km upstream as in going the same distance downstream, find the speed of the stream.
- A. 5.5 km/hr
- B. 2.5 km/hr
- C. 3.5 km/hr
- D. 4.5 km/hr
- 24. Three solid cubes of sides 1 cm, 6 cm and 8 cm are melted to form a new cube. Find the surface area of the cube so formed.
- A. 729 cm<sup>2</sup>
- B. 486 cm<sup>2</sup>
- C. 125 cm<sup>2</sup>
- D. 529 cm<sup>2</sup>
- 25. The speeds of 3 cars in the ratio 5: 4: 6. The ratio between the time taken by them to travel same distance is
- A. 12:15:10
- B. 12:10:13
- C. 10:20:30
- D. 15:12:11
- 26.In the following question a statement is given followed by two arguments choose the correct option.
- Statement: Should the political parties be banned
- Argument I : Yes, It is necessary to teach a lesson to the politicians
- Argument II : No, it will lead to an end of democracy
- A. Both the arguments are strong
- B. Only II is strong
- C. Neither I, nor II is strong
- D. Only I is strong
- 27.In the given figure, if the centres of all the circles are joined by horizontal and vertical lines, then find the number of squares that can be formed.



- A. 1
- B. 7
- C. 8
- D. 6
- 28.In analogy, you are required to guess the function relation between the two

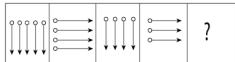
- given words and find the similar relation between the words given in any of the option.
- CUP: LIP:: BIRD: .....
- A. GRASS
- B. BUSH
- C. BEAK
- D. FOREST
- 29. Direction: In the following question a statement is given followed by two conclusions. Choose the correct option.
- Statement: Any student who follow unethical practices in examination disqualifies himself from examinations Conclusion:
- I. Those who involve in un-ethical practices in examination shall be debarred
- II. Examination system should be improved
- A. Only Conclusion (I) follows
- B. Both Condusion (I) and (II) follow
- C. Neither Condusion (I) or (II) follows
- D. Only Conclusion (II) follows
- 30. There are four Trees Lemon, Coconut, Mango and Neem each at a different corner of a rectangular plot. A well is located at one corner and a cabin at another corner. Lemon and Coconut trees are on either side of the gate, which is located at the centre of side, opposite to the side, extremes of which the well and cabin are located. The mango tree is not at the corner where the cabin is located.
- Which of the following pairs can be diagonally opposite to each other in the plot?
- A. Cabin and Neem tree
- B. Coconut tree and Lemon tree
- C. Mango tree and Well
- D. Neem tree and Lemon tree
- 31.If JAPAN is coded KCSES, then the code of CASTLE will be
- A. DIJOBT
- B. DJKRDP
- C. DCVXQK
- D. DKMSGR
- 32.In the following question below, 3 statements I, II and III are given. You are required to find out which of the given statement(s) is/are sufficient to answer the question.



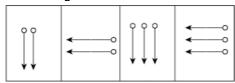
How old was Deepa on 30<sup>th</sup> October 2018 ?

- I. Deepa is 6 yrs older than her sister Prabha
- II. Prabha is 29 yrs younger than her mother
- III. Deepa's mother celebrated her  $45^{th}$  birthday on July  $27^{th}$  2018
- A. I and III
- B. All I, II and III
- C. I and II
- D. II and III
- 33. Find the missing number in the series below :
- 24, 28, 30, 34,
- A. 40
- B. 38
- C. 35
- D. 36
- 34.which word does not belong with the others?
- A. Vision
- B. Retina
- C. Cornea
- D. Pupil
- 35.which word does not belong with the others?
- A. Violin
- B. Flute
- C. Cello
- D. Guitar
- 36.For the Assertion A and Reason R given below choose the correct alternative from the following
- A: Copper is used to make electric wire
- R : Copper has very low electric resistance
- A. A is true, R is false
- B. A is false, R is true
- C. Both A and R are true and R is not the correct Solution of A
- D. Both A and R are true and R is the correct Solution of A
- 37.In the following question, a group of four figures following certain sequence is given as problem figures. Problem figures are followed by another group of four figures known as answer figures marked (1), (2), (3), (4). Find out the figure from the answer figures which when placed next to the problem figures will continue the sequence of the problem figures.

# Problem figure:



#### Answer figure:



- A. (3)
- B. (4)
- C. (2)
- D. (1)
- 38. Vasishta started walking positioning his back towards the sun. After sometime, Vasishta turned left, the turned right, and then towards left again. Which is the direction Vasishta is going now?
- A. South or West
- B. North or West
- C. East or West
- D. North or South
- 39.The missing term in the series 2,1, 1/2,1/4, is
- A. 1/3
- B. 1/8
- C. 2/8
- D. 1/16
- 40.Pointing at Ankit, Shruti said, "his father is the only son of my grandfather." How is Ankit related to Shruti?
- A. Sister
- B. Daughter
- C. Mother
- D. Brother
- 41.Find the odd one out of given combinations:
- A. TUWY
- B. GHJM
- C. ABDF
- D. NOQS
- 42.In the following question, the main statement is followed by four sentences. Select the pair of sentences that relate logically to the given statement. Either the employees have no confidence in the management or they are hostile by nature.



- A. They are hostile by nature
- B. They are not hostile by nature
- C. They have confidence in the management
- D. They have no confidence in the management
- A. DA
- B. BD
- C. CB
- D. BA
- 43.In some way 123 means "he is talented", 3456 means "talented people earn more", 45678 means "people earn more to enjoy". Then what is equal to "earn"?
- A. 4
- B. 6
- C. 7
- D. 5
- 44.If X is the brother of Y and P, Z is the mother of Y and Q is the father of X, which one of the following statement is not definitely true?
- A. Y is the brother of P
- B. Z is the wife of Q
- C. X is the father of P
- D. X is the son of Z
- 45.Read the following information carefully to answer the questions given below it.
- (a) 'A +B' means that 'A' is the father of
- (b) 'A B' means that 'A' is the wife of 'B'
- (c) 'A x B' means that 'A' is the brother of 'B'
- (d) 'A =B' means that 'A' is the daughter of 'B'
- If it is given 'P = R + S + Q', then which of the following is true?
- A. Q is the aunt of P
- B. P is the aunt of Q
- C. P is the Daughter of Q
- D. P is the Mother of Q
- 46.Choose the neccessary for the given word
- "Swimming"
- A. Lifejacket
- B. Suit
- C. Pool
- D. Water

47.In analogy, you are required to guess the relation between the two given words and fill in the blank after finding the similar relationship by choosing any word from the options given below:

Hen: Chick:: Frog: ......

- A. Tadpole
- B. Fawn
- C. Puppy
- D. Kitten

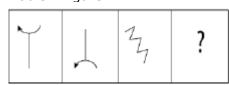
48.Akshay and Ajay are friends studying in same class. Ajay could not score as much marks as Akshay scored and hence Ajay's father took Ajay into task. Ajay replied that there are so many like me in the class. Based on the information find out the answer to the question: Akshay ranks 13th in the class where 33 students are studying. There are 5 students below Ajay rank wise.

How many students are there between Akshay and Ajay?

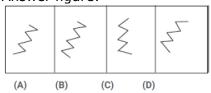
- A. 12
- B. 16
- C. 14
- D. 15
- 49.In a certain code RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in that code?
- A. 318826
- B. 618826
- C. 312688
- D. 318286

50. Select the suitable figure from the answer figures that would replace the question mark?

Problem figure:



Answer figure:



- A. A
- B. D
- C. C
- D. B



- 51.A primafacie case is:
- A. As it seems at first sight
- B. As it turns out to be at the end
- C. As it seems to the court after a number of hearings
- D. As it is made to seem at first sight

Choose the closest meaning of the proverb/idiom:

52.

To leave someone in the lurch.

- A. To help someone in difficulties
- B. To respect someone
- C. To leave someone to his/her fate
- D. To make someone comfortable

Choose the correct word that is opposite in meaning to the word:

53.

**PACIFY** 

- A. Aggravate
- B. Discourage
- C. Slow down
- D. Encourage

The following sentence is underlined and marked as section A, B, C and D . Show which section contains an error.

J 11			
As John had taken	Only a few sips of tea	There was still little tea	Left in the cup
(A)	(B)	(C)	(D)

- A. A B. D
- C. B
- D. C

Choose the correct part of words to fill in the blanks

55.

The instructor asked the students to work ...... the given sum in the note book and hand it......to him for correction.

- A. away, in
- B. out, away
- C. on, over
- D. out, over

56. Choose the word that is closest in meaning to the word: ABRIDGE

- A. Join
- B. Shorten
- C. Understand
- D. To fill the gap

From the options given below choose the correct substitute for the underlined word

57.

Democracy is of the people, by the people and for the people. However, a government run by a few is dangerous for a republic like India.

- A. Oligarchy
- B. Aristocracy
- C. Monarchy
- D. Autocracy

58.In the following sentence, what does the underlined phrase mean?

A good teacher is one who sees to it that a student does not waste time in reinventing the wheel?

- A. waste time on unnecessary details
- B. repeating oneself
- C. waste time in imaginary things
- D. doing something that has already been done

59. The following are jumbled up parts of a sentence. Rearrange them in a proper sequence:

P: did he realize

Q: helped by a man

R: that he had been

S: he never respected S

- A. PROS
- B. QRPS
- C. SROP
- D. PQRS

60.Select the grammetically correct sentence from the following Statements: A. Although he failed in that Mathematics,

- but he received a degree in Engineering. B. Although he had failed in Mathematics, he received a degree in Engineering.
- C. Although that he failed in Mathematics, but he received a degree in Engineering.
- D. Although he had failed in Mathematics, that he received a degree in Engineering.

Read the following passage and answer the question that follows.

Steve Jobs was an enigma. He was quirky. I would like to share a few little known facts about the man who pretty much changed the world with one small technological device. Steve Jobs liked to work bare foot (even while in corporate environments and during million dollar negotiations). He was vegan and often went on diets where he would only eat orange things. He was a Zen Buddhist and extensively travelled India during his



youth. He was such a perfectionist that there was a period when he had no furniture in his house at all, because he could not decide what to buy. He used to read his favourite book of all time, every single year 'Autobiography of a yogi, by Paramhansa Yogananda. This man was not affraid to be himself. "Remembering that I'll be dead soon, is the most imporatant tool, I've ever encountered to help me make the big choices in life. Almost everything ... all expectations, all pride, all fear of embarrasment or failure ... these things just fall away in the face of death, leaving only what is truely important" Jobs, used to say "Remembering that you are going to die is the best way I know to avoid the trap of thinking you have something to lose. You are already naked. There is no reason, not to follow your heart. No one wants to die. Even people who wants to go to heaven, do not want to die to get there. And yet, death is the destination, we all share. No one has ever escaped it, and that is how it should be, because death is very likely the single best invention of life. It is life's change agent It clears out the old to make way for the new."

- 61. This passage tells us:
- A. Some not very well known facts.
- B. Steve Job's business management skills
- C. Steve Job's life story
- D. Very well known facts about Steve Jobs.
- 62. The passage is written in:
- A. Third person narrative
- B. Multiple person narrative
- C. First person narrative
- D. Second person narrative
- 63. Which of the following statement is false? Steve Jobs had no furniture at his house because:
- A. He wanted to buy the perfect furniture
- B. He had no money
- C. He was a perfectionist
- D. He could not decide what to buy
- 64. Steve Jobs believed in
- A. Altruism
- B. Normatism
- C. Materialism

#### D. Perfectionism

65.In the passage which one of the following in not true?

- A. Look for death
- B. Death is the destination
- C. Death is the single best invention
- D. No one escapes the death

#### 66.

"Remembering that you are going to die, is the best way I know ...." I in this line is:

- A. The author of the article
- B. Steve Jobs
- C. Any manager
- D. The narrator in the article

### 67.Parenting is basically:

- A. Culture independent
- B. Common across all cultures
- C. Culture dependent
- D. Country independent

Read the following passage and answer the question that follows.

When a child is born, her first connection to the world is established through her mother, or in a broader sense, her parents. An infant sees the world through her parent's eyes; she tries to imbibe everything she recognises in her parents. Thus, a parent-child relationship lays the foundation of the 'building of her li y . Parenting is the bringing up of a child. It is like the nourishment that is necessary for a sapling to grow into a big and fruitful tree. Hence, for a child to grow into a wonderful human being, good parenting is essential. Parenting styles vary from culture to culture. The world is a big place comprising of a variety of people having different ways of living.

Although culture is the key ingredient, the economic situation and standard of living also have an impact on parenting. While there are a common set of values in different cultures like honesty and integrity, the value system stands divided on some of the major facets of parenting, exemplified by the comparison of the Indian style with that of the West.

- 68. Which of the following is a major differentiator on some of the major facets of parenting?
- A. Value system



- B. Love
- C. Honesty
- D. intregrity

69.

Parenting here is compared to:

- A. Maintaining a relationship
- B. Maintaining a vehicle
- C. Nourishing a plant
- D. Looking after a pet

Read the following passage and answer the question that follows.

There are no World Trade Organisation (WTO) definitions of "developed" and "developing" countries. Members announce for themselves whether they "developed" or "developing" countries. However, other members can challenge the decision of a member to make use of provisions available to developing countries. Developing country status in the WTO brings certain rights. There are for example provisions in some WTO Agreements which provide developing countries with longer transaction periods before they are required to fully implement agreement and developing countries can receive technical assistance. That a WTO member announces itself as a developing country does not automatically mean that it will benefit from the unilateral preference schemes of some of the developed country members such as the Generalized System of Preferences (GSP). In practice, it is the preference giving country which decides the list of developing countries.

- 70. Why would a country likes to announce itself as a developing country? A. So that it gets some relaxation of time in implemenation WTO agreements
- B. So that it need implement WTO agreements
- C. So that it can become member of WTO D. So that it can become the preference giving country
- 71. Who decides whether one country is developing or developed ?
- A. The neighbouring countries
- B. The preference giving country
- C. The World Trade Organization
- D. The country itself

72.

Who can change the decision of a country to make use of provisions available to developing countries?

- A. Any neighbouring country
- B. Any member country of WTO
- C. The World Trade Organization
- D. The preference giving country

Read the following passage and answer the question that follows :

An endangered language is one that is likely to become extinct in the near future. Many languages are falling out of use and being replaced by others that are more widely used in the region or nation, such as English in the U.S. or Spanish in Mexico. Unless current trends reversed, these endangered languages will become extinct within the next century. Many other languages are no longer being learned by new generations of children or by new adult speakers; these languages will become extinct when their last speaker dies. Infact, dozens of languages today have only one native speaker still living, and that person's death will mean the extinction of the language: It will no longer be spoken, or known, by anyone. Ancient Greek and Latin languages are considered dead because they are no longer spoken in the form in which we find them in ancient writings. But they weren't abruptly replaced by other languages; instead, Ancient Greek slowly evolved into modem Greek, and Latin slowly evolved into modem Italian, Spanish, Romanian, and other languages. In the same way, the Middle English of Chauceis day is no longer spoken, but it has evolved into Modern English.

- 73. What is endangered language?
- A. The language that is spoken by many people
- B. A language that is most likely to die in the near future
- C. The language that is not spoken by anyone at all
- D. A language that is most likely to expand in the near future
- 74. Spanish language evolved out of
- A. English
- B. Greek
- C. French



#### D. Latin

75.

"These languages will become extinct ...." In the above sentence "these" refers to :

- A. Middle English
- B. Other languages
- C. Endangered languages
- D. Spanish in Mexico

76. Which country has secured member one spot in the latest FIFA's world rankings released on 25<sup>th</sup>, Oct, 2018?

- A. Brazil
- B. Belgium
- C. France
- D. Argentina

77. The CRR in banking parlance means the following :

- A. Corporate Reserve Ratio
- B. Current Reserve Ratio
- C. Cash Reserve Ratio
- D. Custom Reserve Ratio

78.Debenture holders of a company are its:

- A. Share holders
- B. Directors
- C. Creditors
- D. Debtors

79. What is the full form of NPCI?

- A. Nano Center for Political Integration
- B. National Payments Corporation of India
- C. National Public Control of India
- D. National Council Process Interaction

80. Where is the world's highest altitude Post office located?

- A. New Hampshire
- B. Port Lockroy
- C. Bern
- D. Sikkim

81.India and which country have agreed to undertake the Indus Water Treaty tours in the Indus basin on both sides to resolve issues on the various hydroelectric projects?

- A. China
- B. Pakistan
- C. Bangladesh
- D. Afghanistan

82.Consider the following statements regarding HEATING AND COOLING OF ATMOSPIILIU:

- 1. Convention is important in heating the lower layers of the atmosphere.
- 2. The convention transfer of energy is confined only to the troposphere.
- 3. 'Ioo' is the outcome of advection process.

Identify the correct statements :

- A. All 1,2 and 3 are correct
- B. 2 and 3 only
- C. All 1,2 and 3 are incorrect
- D. 1 and 2 only

83.The Person behind a wonderful concept 'Van Mahotsav':

- A. K.M. Munshi
- B. A.K. Munshi
- C. K.M. Upadhaya
- D. A.K. Simba

84. The Chabahar port being developed by India to gain access to Central Asia is located in which of the following countries

- ?
- A. Iraq
- B. Iran
- C. Oman
- D. Saudi Arabia

85.The train accident that killed 61 people watching Dussera Celebrations in 2018 happened at which place :

- A. Chennai
- B. Amritsar
- C. Bangalore
- D. Patiala

86. Who among the following is not associated with billiards in india?

- A. Subash Agarwal
- B. Mihir sen
- C. Ashok Shadilya
- D. Manoj Kothari

87. Which of the following countries is not a member of SAARAC?

- A. Afghanistan
- B. Bhutan
- C. Maldives
- D. myanmar

88. Which one of the following waves/rays are used in common T.V. Remote control?

- A. Ultrasonic
- B. Infrared



- C. Laser
- D. Radio waves
- 89. Who among the following is not conferred Bharath Ratna?
- A. Nelson Mandela
- B. Sachin Tendulkar
- C. Atal Bihari Vajpayee
- D. Kapil Dev
- 90. The first indian I.T company to reach 100 billion dollar market capitalization is .
- A. Wipro
- B. TCS
- C. Cognizant
- D. Infosys
- 91. Which one of the following is credit rating agencies in india?
- A. MĪX
- B. CARE
- C. SEBI
- D. BARC
- 92. The term 'double fault' is associated with:
- A. Rugby
- B. Long jump
- C. Squash
- D. Tennis
- 93.Consider the following statements regarding ocean currents.
- 1. The heat fishing grounds of the world exit mainly in the mixing zones of warm and cold ocean current
- 2. Gravity is one of factor influencing ocean currents Identify the correct statements:
- A. 1 only
- B. Both 1 and 2 are correct
- C. 2 only
- D. Both 1 and 2 are incorrect
- 94. The responsibilities of establishing and maintaining astound and efficient Accounting and Financial Reporting system in India is
- vested in the hands of:
- A. Finance Ministry
- **B. NITI AYOG**
- C. The Comptroller General of Accounts

### D. RBI

- 95.For which novel did Indian novelist Aravind Adiga win the prestigious Man Booker Prize?
- A. The Inheritance of Loss
- B. The God of Small Things
- C. The White Tiger
- D. Midnight's Children
- 96. Who among the following heads GST council in India?
- A. The Trade Minister
- B. The Finance Minister
- C. The Prime Minister
- D. The Commerce Minister
- 97. The foundation of modem education system in India was laid by
- A. Macaulay's Minutes of 1835
- B. The Hunter Commission of 1882
- C. The Charter Act of 1813
- D. Wood's Despatch of 1854
- 98. Which of the following is not mode of online money transfer in India through online banking?
- A. IFSC
- B. NEFT
- C. IMPS
- D. RTGS
- 99. The major nation that announced the withdrawal from Paris climate change accord in 2017 was:
- A. Spain
- B. United States of America
- C. Germany
- D. Srilanka

# 100.

The New institution that is now playing the role akin to erst while planning commission of India is:

- A. Swacch Bharath Mission
- B. Strategic Policy Group
- C. NITI Aayog
- D. National Security Council



### ###ANSWERS###

1. Ans. D.

Given Speed of surya = 25 km/hr = 25 x5/18 = 125/18 m/s

Time taken(T) = Distance Travelled/ Speed

Time = 500/125/18 = 72 sec

Hence the time taken by Mr. Surya is '72 sec' or '1.2 min'.

2. Ans. C.

As per the empirical rule, approximately 99.7% of the data in a bell-shaped distribution lies within three standard

deviations of the mean, or  $\mu \pm 3\sigma - \mu \pm 6\sigma$ 

. will have approximately 99.99967% of the data. Hence, option C.

3. Ans. B.

The topper of the class is the one who gets highest overall score. Let us check the options, who has got the overall score.

Option A:

The overall score of Maya = 90 + 50 + 90 + 60 + 70 + 80 = 430 marks

Option B:

The overall score of Arya = 100 + 80 + 88 + 60 + 80 + 70 = 478 marks Option C:

The overall score of Rupesh = 80 + 55 + 85 + 95 + 50 + 90 = 455 marks Option D:

The overall score of Riya = 90 + 72 + 70 + 72 + 91 + 70 = 465 marks

So, the topper of the class is Arya, with a overall score of 478 marks.

4. Ans. C.

Given, Rajesh can check the quality of 1000 items in 5 hours

⇒ Efficiency of Rajesh = 200 items/hr. Also given, Rakesh can complete the 75% of same iob in 3 hours

 $\Rightarrow$  time taken by Rakesh to complete 100% of the job = (100/75) x 3 = 4 hours.

⇒ Efficiency of Rakesh = 250 items/hr. Given in the process of checking 1300 items, Rakesh spends only 2 hours. Let say time spent by Rajesh be 't' hours, which is also the total time taken.

Total Work = Efficiency time taken

 $\Rightarrow$  1300 = 250 × 2 + 200 × t

 $\Rightarrow$  200t = 800

 $\Rightarrow t = 4$ 

Hence the time taken in the process of checking 1300 items is 4 hours.

5. Ans. C.

Let the cost of each orange, banana and apple be Rs. 'o', 'b', and 'a' respectively. Given, Two oranges, three bananas and four apples cost Rs. 15

 $\Rightarrow$  20 + 3b + 4a = 15....(1)

Also given, Three oranges, two bananas and one apple cost Rs. 10

 $\Rightarrow$  30 + 2b + a = 10....(2)

Adding (1) and (2), we get,

50 + 5b + 5a = 25

 $\Rightarrow$  0 + b + a = 5

Then the cost of three oranges, three bananas and three apples is given as

 $30 + 3b + 3a = 3 [0 + b + a] = 3 \times 5 =$ 

Rs. 15 6. Ans. C.

 $360\sqrt{?} + 4500 = 19700 - 9800$ 

 $\Rightarrow 360\sqrt{?} + 4500 = 9900$ 

 $\Rightarrow$  360 $\sqrt{?}$  = 5400

 $\Rightarrow \sqrt{?} = 15$ 

 $\Rightarrow \sqrt{?} = 15^2$ 

 $\Rightarrow \sqrt{?} = 225$ 

7. Ans. C.

Curved surface area of cylindrical pillar is given as  $A = 2^{\pi}$ rh, where 'r' is base radius and 'h' is height of the cylinder.

So curved surface area of each pillar A =  $2 \times \pi \times 0.35 \times 5 = 11 \text{m}^2$ 

Given there are 30 cylindrical pillars.

The curved surface area of half the number of pillars =  $15 * A = 165 m^2$ .

Given rate of painting is Rs. 10 per m<sup>2</sup> The cost of painting curved surface of half the number of pillars = Curved surface area \* rate of painting

 $= 165 \times 10$ 

= Rs. 1650.

8. Ans. C.

Probability = Expected number of outcomes/ Total number of outcomes.

Total number of outcomes = The number of ways of selecting 3 professors at random from a total of 10 professors.

= 10C3 = 120 ways.

Expected number of outcomes = Selecting 3 professors so that at least one of the junior professor is selected.

The possible cases are,

Case(1): Selecting 1 junior professor out of 4 and Selecting 2 senior professor out of 6 = 4C1 \* 6C2.



Case(2): Selecting 2 junior professor out of 4 and Selecting 1 senior professor out of 6 = 4C2 \* 6C1.

Case (3): Selecting 3 junior professor out of 4 = 4C3.

So Expected number of outcomes =  $4C1 * 6C2 + 4C2 * 6C1 + 4C3 = 4 \times 15 + 6 \times 6 + 4 = 100$  ways.

Probability = 100/120 = 5/6

9. Ans. D.

In a clock,

In one revolution the minute hand covers 60°

 $\Rightarrow$  60 minutes = 360°

 $\Rightarrow$  1 minute = 6°.

 $\Rightarrow$  for every minute the minute hand covers 6°.

Similarly In one revolution the hour hand covers 12 hours.

 $\Rightarrow$  12 hours = 360°

 $\Rightarrow$  1 hour = 30°.

 $\Rightarrow$  for every hour, the hour hand covers 30°.

So at 5.20 P.M. the hour hand must have covered  $5 * 30^{\circ} = 150^{\circ}$ 

and minute hand must have covered 20 \*  $6^{\circ} = 120^{\circ}$ .

So the angle created by two hands of the clock when the time is  $5.20 \text{ P.M.} = 150 - 120 = 30^{\circ}$ .

10. Ans. A.

Given, Total volume of soaps sold = 680 lakh units.

Volume of Lux sold = 136 lakh units. ⇒ Percentage of Lux sold = (136/680) x 100 = 20%

Also given,

percentage of Lifebuoy sold is 30%, percentage of Camay 10%, percentage of Liril 15% and

percentage of Mysore Sandal 10%

From the pie chart

The percentage of Lux + Life boy + Camay + Liril + Mysore Sandal + Others sold = 100%

 $\Rightarrow$  The market share of others = 100 - 20 - 30 - 10 - 15 - 10 = 15%

11. Ans. C.

In a triangle, the angular bisector divides the side which it intersects in the ratio of other two sides.

So, In the triangle ABC, the angular bisector AD divides the side BC in the ration of AB and AC

 $\Rightarrow$  BD: DC = AB: AC

Given BC = 10 cm and DC = 6 cm

 $\Rightarrow$  BD = BC - DC = 10 - 6 = 4 cm Then , AB = (BD/DC) x AC = (4/6) x 4.2 = 2.8 cm

12. Ans. C.

Based on the given constraints, there will be two cases in which task 1 is either assigned to one among person 3 or 4 or to one among

person 5 or 6

Case 1:

Assigning Task 1 to either Person 3 or 4. No. of ways of assigning task 1 = 2 ways No. of ways of assigning task 2 = 1 way Remaining 4 tasks can be assigned among the remaining 4 persons in 4! ways.

Therefore, Total number of ways =  $2 \times 1 \times 4! = 48$ 

Case 2:

Assigning Task 2 to either Person 5 or 6. No. of ways of assigning task 1 = 2 ways No. of ways of assigning task 2 = 2 ways Remaining 4 tasks can be assigned among the remaining 4 persons in 4! ways.

Therefore, Total number of ways =  $2 \times 2 \times 4! = 96$ 

Hence, total number of possible arrangements= 48 + 96 = 144

13. Ans. C.

Let us consider the fucntion  $f(x) = a \cos x + b \sin x + c$ 

The range of f(x) if given as  $C - \sqrt{a^2 + b^2} \le f(x) \le c + \sqrt{a^2 + b^2}$ 

Then the maximum value of 3  $\cos x + 4 \sin x + is = 8 + \sqrt{3^2 + 4^2}$ 

= 8 + 5 = 13

14. Ans. B.

Let the number be 'x'

one-fourth of the number = (1/4)x = x/4one-third of one-fourth of the number = (1/3)(x/4) = x/12

Given, one-third of one-fourth of the number is = 15

x/12 = 15

x = 180

Hence the number is 180.

Then three-tenth of the number = (3/10)x = (3/10)180 = 54

15. Ans. C.

Let the number of men be 'm' and number of women be 'w' in the class.

Given Average score of men = 70

⇒ Total score of men number of men = 70



⇒ Total score of men = 70 m Also, Average score of women = 83 ⇒ Total score of women number of women = 83 ⇒ Total score of women = 83 × w Given the class average = 76 ⇒ (Total score of men + Total score of women) (number of men + number of women) = 76 $\frac{70m + 83w}{m + w} = 76$
m+w
Let the ratio of number of men to women $m/w = k$ $\Rightarrow 70k + 83 = 76k + 76$ $\Rightarrow 6k = 7$
$\Rightarrow$ k = 7 : 6.
Hence the ratio of men to women in the class is 7 : 6.
16. Ans. D.
Probability of A or B = Probability of A +
Probability of B - Probability of A and B.  ⇒ Probability of drawing king or heart =
Probability of drawing king + Probability
of drawing heart - Probability of drawing
kings which
are hearts from the deck of cards.
A deck of cards contain 52 cards, of which
there are 4 kings and 13 hearts and 1
king which is heart also.
Probability of drawing a king = $4/52$
Probability of drawing a heart = 13/52
Probability of drawing a king which are
heart also = 1/52
⇒ Probability of drawing king or heart =
4/52 + 13/52 - 1/52 = 16/52
= 10/32 =4/13
17. Ans. D.
Let the three consecutive odd numbers be
'x-2', 'x' and 'x+2'
Given the sum of three consecutive odd
numbers is 20 more than the first number
$\Rightarrow$ x-2 + x + x+2 = 20 + x-2
$\Rightarrow 2x = 18$
$\Rightarrow x = 9$
Therefore the three consecutive odd
numbers are 7,9 and 11.
The middle number is 9.
18. Ans. A.
When a pair of dice are thrown simultaneously the maximum sum
possible is 12.
The possible cases of getting a sum of 9
are:
dice 1 dice 2
four five (1)

five four(2)
six three(3)
three six(4)
So a total of 4 cases are possible
The possible cases of getting a sum of 10
are:
dice 1 dice 2
four six(1)
six four(2)
five five(3)
So a total of 3 cases are possible
The possible cases of getting a sum of 11
are:
dice 1 dice 2
five six(1)
six five(2)
So a total of 2 cases are possible
The possible cases of getting a sum of 12
are:
dice 1 dice 2
six six(1)
So a total of 1 case is possible.
Total number ways of getting a sum of 9
or more = $4 + 3 + 2 + 1 = 10$ ways
Total outcomes when two dice are rolled
simultaneously = $6 * 6 = 36$ ways
Probability of getting a sum of 9 or more
= Expected number of outcomes/ Total
OUTCOMAS
outcomes
= 10/36
= 10/36 = 5/18
= 10/36 = 5/18 19. Ans. B.
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2:
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3.
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k,
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant.
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = I × b × h units
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant.
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = I × b × h units = k × 2k × 3k = 6k³ units
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = I × b × h units = k × 2k × 3k = 6k³ units Given the length, breadth and height are
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = $I \times b \times h$ units = $I \times b \times h$ units Given the length, breadth and height are increased by $I = I \times b \times h$ units and height are increased by $I = I \times b \times h$ units $I \times b \times h$ units $I \times b \times h$ units $I \times h$
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, $2k$ , and $3k$ units where 'k' is a constant. Volume of the cuboid(V') = $1 \times b \times h$ units = $k \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, $2k$ , and $3k$ units where $k'$ is a constant. Volume of the cuboid( $k'$ ) = $k'$ × $k'$ × $k'$ × $k'$ units = $k'$ × $k'$ × $k'$ × $k'$ × $k'$ units Given the length, breadth and height are increased by $k'$ 100% each . Then the new length, breadth and height will be doubled.
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = $1 \times b \times h$ units = $1 \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the
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= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = $I \times b \times h$ units = $k \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are $2k$ , $4k$ , and $6k$ units.
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, $2k$ , and $3k$ units where 'k' is a constant. Volume of the cuboid(V') = $1 \times b \times h$ units = $k \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are $2k$ , $4k$ , and $6k$ units. New Volume of the cuboid (V') $2k \times 4k \times k$
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, $2k$ , and $3k$ units where 'k' is a constant. Volume of the cuboid(V') = $1 \times b \times h$ units = $k \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are $2k$ , $4k$ , and $6k$ units. New Volume of the cuboid (V') $2k \times 4k \times 6k = 48k^3$ units.
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = $1 \times b \times h$ units = $k \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are $2k$ , $4k$ , and $6k$ units. New Volume of the cuboid (V') $2k \times 4k \times 6k = 48k^3$ units. Increase in the volume of the cuboid = V'
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= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = I × b × h units = k × 2k × 3k = 6k³ units Given the length, breadth and height are increased by 100% each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are 2k, 4k, and 6k units. New Volume of the cuboid (V') 2k × 4k × 6k = 48k³ units. Increase in the volume of the cuboid = V' - V = 48k³ - 6k³ = 42k³ = 7[6k³] = 7V Therefore the volume has increased 7
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = $1 \times b \times h$ units = $k \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are $2k$ , $4k$ , and $6k$ units. New Volume of the cuboid (V') $2k \times 4k \times 6k = 48k^3$ units. Increase in the volume of the cuboid = V' $- V = 48k^3 - 6k^3 = 42k^3 = 7[6k^3] = 7V$
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= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = I × b × h units = k × 2k × 3k = $6k^3$ units Given the length, breadth and height are increased by 100% each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are 2k, 4k, and 6k units. New Volume of the cuboid (V') $2k \times 4k \times 6k = 48k^3$ units. Increase in the volume of the cuboid = V' - V = $48k^3 - 6k^3 = 42k^3 = 7[6k^3] = 7V$ Therefore the volume has increased 7 times the initial volume.
= 10/36 = 5/18 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3.  Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant.  Volume of the cuboid(V') = I × b × h units = k × 2k × 3k = 6k³ units  Given the length, breadth and height are increased by 100% each .  Then the new length, breadth and height will be doubled.  So new length, breadth and height of the rectangular cuboid are 2k, 4k, and 6k units.  New Volume of the cuboid (V') 2k × 4k × 6k = 48k³ units.  Increase in the volume of the cuboid = V' - V = 48k³ - 6k³ = 42k³ = 7[6k³] = 7V  Therefore the volume has increased 7 times the initial volume.  20. Ans. D.  let the length of the halls be 'a' and 'a+1'
= $10/36$ = $5/18$ 19. Ans. B. Given the length, breadth and height of a rectangular cuboid are in the ratio 1: 2: 3. Let the length, breadth and height be k, 2k, and 3k units where 'k' is a constant. Volume of the cuboid(V') = $I \times b \times h$ units = $I \times 2k \times 3k = 6k^3$ units Given the length, breadth and height are increased by $100\%$ each . Then the new length, breadth and height will be doubled. So new length, breadth and height of the rectangular cuboid are $I \times 2k \times 3k \times 3k \times 3k \times 3k \times 3k \times 3k \times 3k$



Area of 4 walls of first square hall (A1) =  $(4 \times a \times h)m^2$ 

Given, cost of painting is Rs. 5 per sq.m  $\Rightarrow$  cost of painting 4 walls of the first square hall = A1 \* 5 = 4 × a × h × 5 = Rs.20 \* a \* h .

 $\Rightarrow$  Given that this cost of painting = Rs. 6000

$$20*a*h = 6000....(1)$$

Similarly,

Area of 4 walls of second square hall (A2) =  $(4 \times a + 1 \times h)m^2$ 

cost of painting 4 walls of the second square hall =  $A2 * 5 = 4 \times a + 1 \times h \times 5$  = Rs.20 \* (a + 1) \* h.

Given that this cost of painting = Rs. 6100

$$\Rightarrow$$
 20\*(a+1)\*h = 6100.....(2)

Dividing (2) with (1), we get

$$(a+1)/a = 6100/6000$$

$$1 + 1/a = 61/60$$

$$\Rightarrow$$
 a = 60

Substituting this value in equation (1), we get

$$\Rightarrow$$
 h = 5 m.

So, the height of the two walls is 5 m. 21. Ans. D.

Volume left out in the rectangular box = Total volume of the rectangular box - Volume of the cylinder placed within it. Total volume of the rectangular box of width(a), length(b), and height(c) is given as  $(V) = a \times b \times c$  cubic units.

$$= 6 \times 8 \times 10$$

Volume of the solid cylinder of height 'c' and of diameter 'a' is given by (V') =

$$\pi_{4*a^{2}*}$$

cubic units.

$$= {4 \choose 4} * 6^2 * 10$$

$$=90\pi$$
 cubic units.

Therefore left out volume = 480 - 90  $\pi$  cubic units

22. Ans. B.

given  $f(x) = x^3 - 4x + p$  and f(0) and f(1) are of opposite signs.

$$\Rightarrow$$
 f(0)×f(1)<0

$$f(0) = 0^3 - 4 * 0 + p = p$$

$$f(1) = 1^3 - 4 * 1 + p = p - 3$$

$$\Rightarrow$$
 (p)(p-3) < 0

$$\Rightarrow$$
 0 < p < 3 23. Ans. B.

Given, speed of a boat in still water (V) = 5 km/hr

Let speed of the stream be V' km/hr.

time taken to go 20km downstream (t) = distance travelled  $\div$  relative speed of the boat

$$= 20/(V + V')$$

$$= 20/(5+V')$$

time taken to go 20 km upstream (t') = distance travelled  $\div$  relative speed of the boat

$$=20/(V-V')$$

$$=20/(5-V')$$

Given that t' = 3\*t

$$\frac{20}{5 - V'} = 3 \left[ \frac{20}{5 + V'} \right]$$

$$\Rightarrow$$
 4V  $' = 10$ 

$$\Rightarrow$$
 V ' = 2.5 km/hr.

So the speed of the stream is 2.5 km/hr. 24. Ans. B.

Whenever some cubes are melted to form a single larger cube, the total volume always remains constant.

So, Sum of the volumes of three small cubes = Volume of the larger cube.

Let the side of the lager cube so formed be 'a' cm.

Then 
$$1^3 + 6^3 + 8^3 = a^3$$

$$\Rightarrow$$
 a3 = 729

$$\Rightarrow$$
 a = 9 cm.

Surface area of cube so formed =  $6*a^2=6$ ×  $9^2 = 6 \times 81 = 486$  cm<sup>2</sup>

Speed = Distance travelled time taken So, for the same distance travelled, Speed is inversely proportional to time taken.

speed ∞ timetake

Given ratio of speeds of three cars is  $5:4\cdot 6$ 

So, ratio of the time taken to travel same distance is 1/5: 1/4: 1/6

= 12 : 15 : 10

26. Ans. B.

The given statement indicates a question about the ban of political parties, the first argument is weak as there is no context about

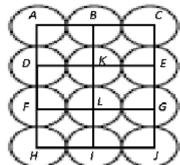
teaching the lesson to the political parties.



But the second argument is strong, because if the parties are banned, it will definitely lead to an end of democracy. Hence, only II is strong.

 $\Rightarrow$  Ans - (B)

27. Ans. C.



Small squares = 6 (ABKD, BCEK, DKLF, KEGL, FLIH, LGJI)

Big squares = 2 (ACGF, DEJH)

Total squares = 8

 $\Rightarrow$  Ans - (C)

28. Ans. C.

Cup is used to drink something with the help of lips. Similarly birds collects grass with the help of beak to make her nest.

 $\Rightarrow$  Ans - (C)

29. Ans. A.

The given statement indicates that if any student is found to use unfair or unethical means in an exam will be disqualified, hence the first conclusion follows since it also debars the student from using unfair means in the exam. But second conclusion does not follow

since there is no context about the examination system.

Thus, only conclusion I follows.

 $\Rightarrow$  Ans - (A)

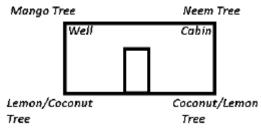
30. Ans. D.

A well is located at one corner and a cabin at another corner opposite to the gate.

Lemon and Coconut trees are on either side of the gate

The mango tree is not at the corner where the cabin is located, ⇒ Mango Tree and Well are at the same corners, also Neem Tree and

Cabin are at same corners



Thus, only possible combination at diagonally opposite ends is Neem Tree and Lemon Tree.

⇒ Ans - (D)

31. Ans. C.

JAPAN is coded KCSES

J	Α	Р	Α	N
(+1)	(+2)	(+3)	(+4)	(+5)
K	С	S	Е	S

Similarly, for Castle:

С	Α	S	Т	L	E
(+1)	(+2)	(+3)	(+4)	(+5)	(+6)
D	С	٧	Х	Q	K

 $\Rightarrow$  Ans - (C)

32. Ans. B.

Clearly, each statement alone is not sufficient to find Deepa's age as on 30th October 2018.

Now, if we combine last two statement, we can find Prabha's age and if we add it to first statement, then we can also find Deepa's age.

Thus, all the three statements are required.

⇒ Ans - (B)

33. Ans. D.

The pattern followed is that '4' and '2' are alternatively added.

24 + 4 = 28

28 + 2 = 30

30 + 4 = 34

34 + 2 = 36

 $\Rightarrow$  Ans - (D)

34. Ans. A.

Retina, cornea and pupil are parts of a human eye, while vision is a functionality of an eye, hence it does not belong with others.

⇒ Ans - (A)

35. Ans. B.

Though all are musical instruments, but violin, cello and guitar are played with hands while a flute is used with mouth hence it is the odd one.

 $\Rightarrow$  Ans - (B)

36. Ans. D.

It is a known fact that Copper has a very low electric resistance, and that's why it is used to make electric wires.

Thus, R is the correct Solution of A.

⇒ Ans - (D)

37. Ans. A.



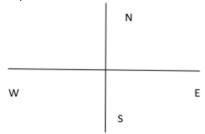
Alternatively, the arrows are facing downwards, and towards the right. Also, it gets decrease by 1 in each alternate figure. Thus, in the

fifth figure, there will be 3 arrows facing downwards as shown in 3rd figure.

$$\Rightarrow$$
 Ans - (A)

38. Ans. D.

As sun rises from east and sets in west So, she can either face east or west only.



Case 1: If she faced east:

Vasishta turned left, the turned right, and then towards left again:



Case 2: If she faced west:

Vasishta turned left, the turned right, and then towards left again:



So, North or South can be only options 39. Ans. B.

The numbers are of the form 2<sup>n</sup> where is in decreasing order starting from 1.

$$2^1 = 2$$
  
 $2^0 = 1$ 

$$2^{-1} = \frac{1}{2}$$

$$2^{-2} = \frac{1}{4}$$

$$2^{-3} = \frac{1}{8}$$

⇒ Ans - (B)

40. Ans. D.

Only son of her grandfather = Shruti's father

Now, Ankit's father is also Shruti's father, ⇒ Ankit is Shruti's brother.

```
⇒ Ans - (D)

41. Ans. B.

(A): T(+1) = U(+2) = W(+2) = Y

(B): G(+1) = H(+2) = J(+3) = M

(C): A(+1) = B(+2) = D(+2) = F

(D): N(+1) = O(+2) = Q(+2) = S

⇒ Ans - (B)
```

If the employees have confidence in the management, it follows that they are hostile.

 $\Rightarrow$  Ans - (C)

42. Ans. C.

43. Ans. D.

From the first and 2nd clue, we can see the words and letters appear in the same order. Hence "earn" =5

44. Ans. C.

X(m), Y and P are siblings.

Z is their mother and Q is father,  $\Rightarrow$  Z is wife of Q.

Hence, second and fourth are definitely true. First can be true if Y is a male.

But third option can never be true, since X is brother of P.

⇒ Ans - (C)

45. Ans. B.

R is the father of S, S is the father Q, which implies R is the grand father of Q P is the daughter of R

Thus P is the aunt of O

46. Ans. D.

Swimming is the practice that is done only in water, hence water is absolute necessary to perform swimming.

 $\Rightarrow$  Ans - (D)

47. Ans. A.

The little one of a hen is called chick, similarly amphibian of a frog is called tadpole.

⇒ Ans - (A)

48. Ans. C.

Total students = 33

Akshay's rank in the class = 13th

Ajay's rank (5 students below him) = 28th

Number of students between them = (28)

-13) - 1 = 14

 $\Rightarrow$  Ans - (C)

49. Ans. A.

Code for each letter is given as:

P -> 3

I -> 1

L -> 8

L -> 8

E -> 2

R -> 6

⇒ PILLER : 318826



 $\Rightarrow$  Ans - (A)

50. Ans. A.

In the problem figure, the second image is mirror image of first when horizontal mirror is placed, similarly the first option is the correct mirror image of the question figure.

In the second figure, number of lines are not equal, and the fourth image is the mirror replica when vertical mirror is placed.

 $\Rightarrow$  Ans - (A)

51. Ans. A.

A "primafacie" case is; "As it seems at first sight"

52. Ans. C.

"To leave someone in lurch" means "To leave someone to his/her fate"

53. Ans. A.

To pacify means to calm someone down. Aggravate means to increase the intensity of something. Hence, A is the correct answer.

54. Ans. D.

C should have "a little" ( which means a good amount).

55. Ans. D.

"Work out" means "finding a solution. "Hand over" means to give someone something. D fits into the given blanks. 56. Ans. B.

"Abridged" version is the "shortened" version

57. Ans. A.

Oligarchy is "a government run by a few"

58. Ans. D.

"Reinventing the wheel" means "doing something that has already been done". 59. Ans. A.

"did he realize that he had been helped by a man he never respected". A is the correct answer.

60. Ans. B.

"that mathematics" in A is wrong, "Although **that"** in C is wrong, "**that he**" in D is wrond.

61. Ans. A.

Refer to the following lines; "I would like to share **a few little known facts** about the man who pretty much changed the world". Clearly, A is the answer.

62. Ans. C.

Refer to the following lines of author; ', I would like to share a few little known facts about the man who pretty much changed the world with one small

technological device...' Thus we can say that the paragraph is in first-person narrative.

63. Ans. B.

Nowhere in the passage has it been stated that he lacked money. Hence, Option B is the odd one out.

64. Ans. D.

Refer to these lines; "He was such a perfectionist that there was a period when he had no furniture in his house at all, .....". Clearly, he believed in "Perfectionism".

65. Ans. A.

Steve Jobs is not asking to "Actively" look for death. Hence, A is the odd one out. 66. Ans. B.

These words are quoted by Steve Jobs.

67. Ans. C.

Refer to the following lines; "

Parenting styles vary from **culture to culture**. The world is a big place comprising of a variety of people having different ways of living. Although **culture** is the key ingredient,....

Clearly, C is the answer.

68. Ans. A.

Refer to these lines; "While there are a common set of values in different cultures like honesty and integrity, the value system stands divided on some of the major facets of parenting, exemplified by the comparison of the Indian style with that of the West." A is the answer. 69. Ans. C.

Refer to these lines; "Parenting is the bringing up of a child. It is like the nourishment that is necessary for a sapling to grow into a big and fruitful tree". Clearly, C is the answer.

70. Ans. A.

Refer to the following lines; "There are for example provisions in some WTO Agreements which provide developing countries with longer transaction periods before they are required to fully implement the agreement and developing countries can receive technical assistance." Clearly, A is the answer.

71. Ans. D.

Refer to the following lines; "There are no World Trade Organisation (WTO) definitions of "developed" and "developing" countries. Members announce for themselves whether they



are "developed" or "developing" countries". Clearly D is the answer.

72. Ans. B.

Refer to the following lines; "However, other members can challenge the decision of a member to make use of provisions available to developing countries." B is the correct answer.

73. Ans. B.

Going by the context of the passage; B appears to be the most sensible answer. 74. Ans. D.

Refer to these lines; "Latin slowly evolved into modem Italian, Spanish, French, Romanian, and other languages." Clearly, D is the answer.

75. Ans. C.

Refer to the following phrase; "these endangered languages". These refers to the "Endangered Languages".

76. Ans. B.

Belgium has secured number one spot in the latest FIFA's world rankings released on 25th October 2018.

77. Ans. C.

Cash Reserve Ratio (**CRR**) is the amount of funds that **banks** have to maintain with the Reserve **Bank** of India (RBI) at all times.

78. Ans. C.

**Debenture holders of a company are its** creditors.

79. Ans. B.

The National Payments Corporation of India is an umbrella organisation for operating retail payments and settlement systems in India.

80. Ans. D.

At 4,400m above sea level in northern India's remote Spiti Valley, the Hikkim **post office** is a vital connection to the outside **world**.

81. Ans. B.

India and Pakistan have agreed to undertake the Indus Waters Treaty mandated tours by their Commissioners in the Indus basin on both sides to resolve issues on the various hydroelectric projects, including the Pakal Dul and Lower Kalnai in Jammu and Kashmir.

82. Ans. B.

Only 2 and 3 are correct.

83. Ans. A.

**Van Mahotsav** (Hindi for Forest **Festival**) is an annual **one** week tree planting **festival** in India which is

celebrated in the first week of July. It was started in the year 1950 by Kanaiyalal Maneklal Munshi by planting a tree at Rajghat, Delhi.

84. Ans. B.

Iran is **India's** gateway to not only Afghanistan and **Central Asia** via **Chabahar Port** 

85. Ans. B.

At least **61 people** were **killed** and 72 injured after a crowd of **Dussehra** revellers that had spilled onto **railway** tracks while **watching** burning of Ravana effigy was run over by **a train** near here; in 2018 at Amritsar

86. Ans. B.

Mihir Sen was a famous Indian long distance swimmer and businessman.

87. Ans. D.

Maldives is not a member of SAARC 88. Ans. B.

The main technology used in home remote controls is **infrared** (**IR**) **light**. 89. Ans. D.

Nelson Mandela was conferred Bharat Ratna in 1990; Sachin Was conferred Bharat Ratna in 2014 and Atal Bihari Vajpayee was conferred Bharat Ratna Year in 2015.

90. Ans. B.

On April 23, the market capitalisation of Tata Consultancy Services Ltd (TCS) crossed the **\$100 billion** milestone.

91. Ans. B.

Credit Analysis & Research (CARE) is a credit rating agency in India.

92. Ans. D.

**Double fault** – hitting a **fault** on the second service. The server loses the point. **Fault** – an unsuccessful serve that does not start the point because the ball does not land in the opponent's designated service box.

93. Ans. B.

The best fishing grounds of the world exist

mainly in these mixing zones. Tides caused by the **gravitational** pull of the Moon and the Sun also play role in the forming of **oceanic currents**.

94. Ans. C.

The Controller General of **Accounts** (CGA) in the Department of Expenditure, Ministry of **Finance** is the Principle **Accounting** Advisor to the Government of **India** on **accounting** matters and is responsible for establishing and



# maintaining a sound and efficient accounting and financial reporting system.

95. Ans. C.

Aravind Adiga is an Indian writer and journalist. His debut novel, The White Tiger, won the 2008 Man Booker Prize.

96. Ans. B.

The council is headed by the union finance minister **Nirmala Sitharaman** assisted with the finance minister of all the states of India.

97. Ans. A.

On 2 February **1835**, British historian and politician Thomas Babington **Macaulay** presented his '**Minute** on Indian Education' that sought to establish the need to impart English education to Indian 'natives'

98. Ans. A.

IFSC stands for **Indian Financial System Code**. It is an 11 character alphanumeric code used to identify each branch of every bank in India.

99. Ans. B.

The U.S. President Donald Trump announced on 1 June, **2017**, that the U.S. would **withdraw** from the **Paris Agreement** and immediately cease implementing the **agreement** including implementing the Nationally Determined Contributions (NDCs) and financial contributions.

100. Ans. C.

The NITI Aayog is a policy think tank of the Government of India, established with the aim to achieve sustainable development goals with cooperative federalism by fostering the involvement of State Governments of India in the economic policy-making process using a bottom-up approach. The New institution that is now playing the role akin to erst while planning commission of India is:



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