

Directions of Test

Test Name	2017 CAT	Total Questions	100	Total Time	180 Mins
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Section Name	No. of Questions	Time limit	Marks per Question	Negative Marking
Verbal Ability	34	1:0(h:m)	3	1/3
DI & Reasoning	32	1:0(h:m)	3	1/3
Quantitative Ability	34	1:0(h:m)	3	1/3

Section : DI & Reasoning

DIRECTIONS for the question: Study the table/s given below and answer the question that follows.

Question No. : 35

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

	No. of students of age more than 6 years who went to the stall	No. of students of age more than 3 years but not more than 6 years who went to the stall	No. of students of age not more than 3 years, who went to the stall	No. of people who went to only that stall
Selfie stall	50	110	90	100
Puppet stall	30	60	110	40
Snack stall	40	50	60	30
Tattoo stall	30	70	70	20

What is the minimum possible number of students who have attended the festival?

- A) 350 B) 370 C) 300 D) 190

Question No. : 36

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

	No. of students of age more than 6 years who went to the stall	No. of students of age more than 3 years but not more than 6 years who went to the stall	No. of students of age not more than 3 years, who went to the stall	No. of people who went to only that stall
Selfie stall	50	110	90	100
Puppet stall	30	60	110	40
Snack stall	40	50	60	30
Tattoo stall	30	70	70	20

The number of students who went to all the 4 stalls is at most:

- A) 125 B) 130 C) 120 D) 140

Question No. : 37

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

	No. of students of age more than 6 years who went to the stall	No. of students of age more than 3 years but not more than 6 years who went to the stall	No. of students of age not more than 3 years, who went to the stall	No. of people who went to only that stall
Selfie stall	50	110	90	100
Puppet stall	30	60	110	40
Snack stall	40	50	60	30
Tattoo stall	30	70	70	20

The number of students of age not more than 6 years, who attended the festival is at least:

- A) 150 B) 170 C) 210 D) 220

Question No. : 38

Brain tree school has organized a festival where 4 stalls - Selfie stall, Puppet stall, Snack stall & Tattoo stall has been displayed by teacher for students. Each student who has attended the festival has gone to at least one of the four stalls. Also following observations are made:

	No. of students of age more than 6 years who went to the stall	No. of students of age more than 3 years but not more than 6 years who went to the stall	No. of students of age not more than 3 years, who went to the stall	No. of people who went to only that stall
Selfie stall	50	110	90	100
Puppet stall	30	60	110	40
Snack stall	40	50	60	30
Tattoo stall	30	70	70	20

The number of students who went to exactly two of the four stalls is at the most

- A) 280 B) 340 C) 300 D) 290

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 39

A standard deck of playing cards is taken. These cards are arranged in 3 piles such that:

1. Pile number 1 has three times as many black cards as red cards.
2. Pile number 2 has three times as many red cards as black cards.
3. Pile number 3 has twice as many black cards as red cards.

What is the maximum number of cards of any colour that are present in a single pile? (in numerical value)

- A) 18 B) C) D)

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 40

Mr. Fal-Phool Kumar likes to buy fruits and flowers. But he has a peculiar way of buying them. He buys a mango every alternate day, a banana once every 3rd day and a cherry once in 15 days. He also buys a lily once every 9th day, a marigold once a week and a sunflower once every 5th day. He buys all 6 of them on 16th June 2007.

On which of the following dates will he end up buying all fruits on the same day again? (write the correct option)

1. 14th September 2007 2. 15th September 2007 3. 16th September 2007 4. 17th September 2007

A) 1 B) C) D)

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 41

Mr. Fal-Phool Kumar likes to buy fruits and flowers. But he has a peculiar way of buying them. He buys a mango every alternate day, a banana once every 3rd day and a cherry once in 15 days. He also buys a lily once every 9th day, a marigold once a week and a sunflower once every 5th day. He buys all 6 of them on 16th June 2007.

When will he buy all flowers again on the same day? (write the correct option)

1. 25th April 2008 2. 26th April 2008 3. 27th April 2008 4. 07th March 2009

A) 2 B) C) D)

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 42

Mr. Fal-Phool Kumar likes to buy fruits and flowers. But he has a peculiar way of buying them. He buys a mango every alternate day, a banana once every 3rd day and a cherry once in 15 days. He also buys a lily once every 9th day, a marigold once a week and a sunflower once every 5th day. He buys all 6 of them on 16th June 2007.

When will he buy mango, banana, marigold and sunflower on the same day again? (write the correct option)

1. 9th January 2008 2. 10th January 2008 3. 11th January 2008 4. 12th January 2008

A) 4 B) C) D)

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 43

There is a sports club which includes members with a varied taste in sports.

Some of those who enjoy basketball also enjoy cricket.

Those who enjoy cricket dislike carrom.

Some of those who enjoy cricket also enjoy football.

All those who enjoy carrom also enjoy hockey.

Some of those who enjoy hockey also enjoy cricket.

Some of those who enjoy football dislike carrom.

All those who enjoy hockey also enjoy volleyball.

All those, who like polo also like basketball but dislike volleyball.

Ravi enjoys hockey. Which of the following must be true?

- A) He may or may not enjoy carrom B) Ravi enjoys Basketball C) Ravi doesn't enjoy Football D) Ravi enjoys cricket

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 44

There is a sports club which includes members with a varied taste in sports.

Some of those who enjoy basketball also enjoy cricket.

Those who enjoy cricket dislike carrom.

Some of those who enjoy cricket also enjoy football.

All those who enjoy carrom also enjoy hockey.

Some of those who enjoy hockey also enjoy cricket.

Some of those who enjoy football dislike carrom.

All those who enjoy hockey also enjoy volleyball.

All those, who like polo also like basketball but dislike volleyball.

Amod is a national player of hockey. He may also enjoy any of the following games except:

- A) Basketball B) Cricket C) Polo D) Hockey

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 45

There is a sports club which includes members with a varied taste in sports.

Some of those who enjoy basketball also enjoy cricket.

Those who enjoy cricket dislike carrom.

Some of those who enjoy cricket also enjoy football.

All those who enjoy carrom also enjoy hockey.

Some of those who enjoy hockey also enjoy cricket.

Some of those who enjoy football dislike carrom.

All those who enjoy hockey also enjoy volleyball.

All those, who like polo also like basketball but dislike volleyball.

Miss Sheetal enjoys the game of polo. Which of the following may be false?

- A) She enjoys cricket B) She may or may not enjoy football C) She doesn't like hockey D) None of these

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 46

There is a sports club which includes members with a varied taste in sports.
Some of those who enjoy basketball also enjoy cricket.
Those who enjoy cricket dislike carrom.
Some of those who enjoy cricket also enjoy football.
All those who enjoy carrom also enjoy hockey.
Some of those who enjoy hockey also enjoy cricket.
Some of those who enjoy football dislike carrom.
All those who enjoy hockey also enjoy volleyball.
All those, who like polo also like basketball but dislike volleyball.

Based on the information, which of the following statements may be true regarding the members of the club?

- A) Some of those who like polo also enjoy volleyball B) All who like cricket dislike hockey
C) Some of those who like basketball also like carrom D) None of those who like hockey dislike football

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 47

After 15 years in the IT industry, Harinarayan set up his own institute for IT training. In December 2008, he got a 4-month contract for training the employees of ABC Inc, beginning February 2009. He committed 10-hour days for the contract and billed ABC Inc. Rs. 2500 per day, with remuneration paid at the end of every month. In January 2009, he bagged a 5-month contract for training the employees of PQR Inc., also beginning February 2009. Harinarayan again committed 10-hour days for the contract, but billed PQR Inc. Rs. 2000 per day. For both organizations, a month was made up of four weeks and a week had five working days.

Since ABC Inc. and PQR Inc. were located in the same building, Harinarayan decided to juggle both contracts in such a way that he would train the employees for part of the day and get them to work on assignments for the rest of the time, so that he could conduct training in the other assignments for the first two weeks of each month for PQR Inc. For the next two weeks of the month, he reversed the hours spent on training and assignments. For example, during the first two weeks of February, Harinarayan spends 6 hours training the employees of PQR Inc. and gives them assignments for the next 4 hours so that he can utilize this time for training the employees of ABC Inc. The employees of ABC Inc. would be working on assignments for the other 6 hours.

The following table gives the partition of 10 hours for training and assignments for company ABC.

	February	March	April	May	June
Training	6	3	7	2	10
Assignments	4	7	3	8	0

What is Harinarayan's average monthly income from February to June from the contracts with ABC Inc. and PQR Inc.?

- A) Rs. 200,000 B) Rs. 80,000 C) Rs. 130,000 D) Rs. 90,000

Question No. : 48

With the new financial year starting in April 2009, ABC Inc. revised the contract rates with Harinarayan so that he would be paid Rs. 300 per hour of teaching and Rs. 100 per hour of assignments. PQR Inc. revised its rates so that Harinarayan would be paid Rs. 400 per hour of teaching and Rs. 150 per hour of assignments. What is the change in Harinarayan's income for April and May vis-a-vis the earlier rates?

- A) Rs. 1,000 more B) Rs. 9,000 less C) Rs. 10,000 more D) Rs. 20,000 less
-

Question No. : 49

Had the revised rates mentioned in the previous question been implemented for the entire duration of both contracts, what would be Harinarayan's average income for the period February to June from the contracts with ABC Inc. and PQR Inc.?

- A) Rs. 87,000 B) Rs. 217,500 C) Rs. 84,000 D) Rs. 150,000

DIRECTIONS for the question: The question below is followed by two statements marked I and II. Mark as your answer.

Question No. : 50

What is the value of the 4-digit natural number N?

- I. N when divided by 8, 12, 24 and 36 leaves remainders 5, 9, 21 and 33 respectively.
II. N is a multiple of 7.

- A) if the information contained in any one statement alone is sufficient to answer the question, but the information contained in the other statement is not
B) if the information contained in either statement alone is sufficient to answer the question
C) if the information contained in both statements together is sufficient to answer the question
D) if even the information contained in both statements together is not sufficient to answer the question
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DIRECTIONS for the question: Study the table/s given below and answer the question that follows.

Question No. : 51

The table below gives the number of students in M.B.B.S Course in a college in the years 2014 - 15 and 2015 - 16. The M.B.B.S course takes 6 years to complete (5 + one year of internship). The course has years from 1st to 6th and students are admitted only in the 1st year and students leave the college only if they pass the 6th year. Every year the students who pass the annual exams are promoted to the next year while students who fail have to study in the same year the next year also.

Year	2014 - 15	2015 - 16
1 st	126	141
2 nd	108	123
3 rd	150	108
4 th	141	150
5 th	129	138
6 th	135	147

It is known that 114 students passed out of 6th year in the year 2014 - 15.

How many students joined the college in the year 2015 - 16? (in numerical value)

- A) 132 B) C) D)

Question No. : 52

In how many years did exactly six students fail in the exam in the year 2014 - 15? (in year)

- A) 3 B) C) D)

Question No. : 53

How many students in the college failed in the exam in the year 2014 - 15? (in numerical value)

- A) 51 B) C) D)

DIRECTIONS for the question: Study the table/s given below and answer the question that follows.

Question No. : 54

The following table gives the information of the marks scored by three top scorers of the colleges A, B, C, D and E. For each college, the percentage of combined scores obtained by the top three scorers is given in the last row. In any college, every person has to score at least one mark and no two persons got the same marks.

Persons	College				
	A	B	C	D	E
P	64		59	48	
Q		86	55		54
R	56	60		42	
S		54	61		50
T	48			40	66
% score	75	80	87.5	$83\frac{1}{3}$	85

The marks of each of the given persons in each of the given colleges is a natural number. For each of the given persons, two values are calculated viz, median value and deviation value. Median value is the value that occurs in the middle if the marks obtained by a particular person in the given colleges are written in the ascending order. Deviation value is the difference between the highest marks and lowest marks obtained by a person in the given colleges.

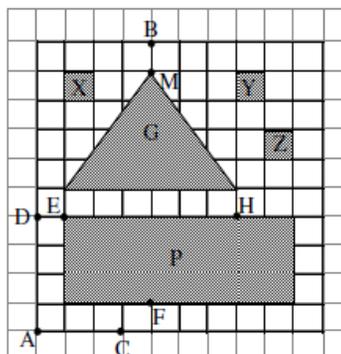
At most how many persons can simultaneously have the deviation value of 50 or more? (in numerical value)

- A) 5 B) C) D)

DIRECTIONS for the question: Go through the graph and the information given below and answer the question that follows.

Question No. : 55

The following diagram shows a square area, 10 km - 10 km. The grid lines show a road network where the roads are spaced 1 km apart. The shaded region P is a pond that can be crossed by boat from and at only the three points shown. Roads around the pond cannot be walked upon. People can walk through as well as along the sides of the garden shown by the shaded region G. The paths around the shaded regions X, Y and Z cannot be walked upon; however the corners of each of these regions can be traversed.



What is the minimum distance that a person has to walk to reach point B from point A?

- A) 11 km B) 12 km C) 16 km D) 14 km

Question No. : 56

If the paths along the sides of the garden cannot be walked upon, how many different paths of minimum length can a person take to travel from point A to point B?

- A) less than 5 B) 5 C) 6 D) more than 6

Question No. : 57

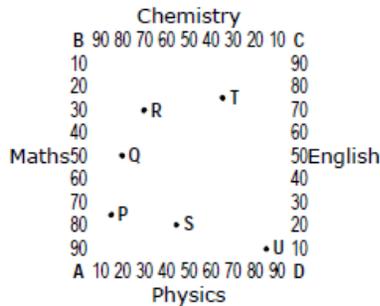
If it cost Rs. 2.25, Rs. 3.25 and Rs. 2.00 respectively to travel 1 km by road, along the garden and by boat across the pond respectively, what is the minimum cost incurred in travelling from point A to point B?

- A) Rs. 31.50 B) Rs. 32.00 C) Rs. 39.90 D) Rs. 24.23

Directions for the question : Answer the questions based on the following information.

Question No. : 58

The marks obtained by the students in Physics, English, Chemistry and Maths are represented on a square grid ABCD. Each side of the grid is 10 cm. Maximum marks for each of the subjects are 100.



What is the approximate average score in Maths?

- A) 48.75 B) 52.50 C) 60.00 D) 67.50

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 59

Four single fathers went to a special party (only for fathers, their sons and daughters) held at New Delhi. Fathers (Mr. Avinash, Mr. Bhuvnesh, Mr. Chatur & Mr. Devansh), each with one son (Eklavya, Farukh, Gopal & Harsh not in any particular order) and a daughter (Ishita, Jyoti, Kamini & Lovely not in any particular order), went on introducing themselves & their children to all. Later, during the course of discussion, the teenagers started chatting about their age and parental upbringing. Following information was shared:

- I. Oddly all the children's age was the square of a positive integer and no two girls were of the same age.
- II. Only Mr. Bhuvnesh had twins (a son & a daughter).
- III. Harsh & Lovely are the siblings whose sum of ages is the lowest: 13. While the maximum sum of ages of any two siblings was 32.
- IV. The eldest boy was 25 years old while the minimum age for the girls was just 4 years.
- V. The maximum possible difference between the ages of two siblings was for Eklavya & Ishita.
- VI. Also, the son of Mr. Avinash was younger than Mr. Bhuvnesh's daughter but older than the son of Mr. Devansh.

Who is the father of Lovely?

- A) Mr. Chatur B) Mr. Devansh C) Mr. Avinash D) Mr. Bhuvnesh

Question No. : 60

If the son of Mr. Bhuvnesh marries the daughter of Mr. Avinash, then which of the following is true?

- A) Eklavya is the son-in-law of Mr. Avinash B) Lovely is the daughter-in-law of Mr. Bhuvnesh
C) Gopal is the brother-in-law of Farukh D) None of the above
-

Question No. : 61

If it is known that Gopal & Kamini are twins; Then who is the father of Farukh & Jyoti?

- A) Mr. Avinash B) Mr. Bhuvnesh C) Mr. Avinash or Mr. Bhuvnesh D) None of the above

Question No. : 62

Who is the eldest boy at the party?

- A) Son of Mr. Chatur B) Son of Mr. Avinash C) Son of Mr. Devansh D) Son of Mr. Bhuvnesh
-

DIRECTIONS for the question: Read the information given below and answer the question that follows.

Question No. : 63

Five friends, Amol, Mandar, Piyu, Shashi and Reena attended Sagar's birthday party, where they partook of the sumptuous snacks and dinner. Each of the five friends gifted Sagar a different article – a fountain pen, a cell phone, a shirt, a jacket and an I-Pod – and Sagar, in return, gifted each of them a different article – a video game, a sweater, a perfume, a calculator and a pair of sunglasses. The following is additional information about the gifts given by the friends and the gifts received from Sagar.

- (i) Amol gifted the shirt and received the video game in return.
(ii) Shashi did not gift the I-Pod but received the perfume in return.
(iii) Mandar did not gift an electronic item and received the calculator in return.
(iv) The person who gifted the jacket received the sweater in return and Reena received the pair of sunglasses.

Who among the following gifted the jacket?

- A) Mandar B) Shashi C) Reena D) None of these

Question No. : 64

Five friends, Amol, Mandar, Piyu, Shashi and Reena attended Sagar's birthday party, where they partook of the sumptuous snacks and dinner. Each of the five friends gifted Sagar a different article – a fountain pen, a cell phone, a shirt, a jacket and an I-Pod – and Sagar, in return, gifted each of them a different article – a video game, a sweater, a perfume, a calculator and a pair of sunglasses. The following is additional information about the gifts given by the friends and the gifts received from Sagar.

- (i) Amol gifted the shirt and received the video game in return.
(ii) Shashi did not gift the I-Pod but received the perfume in return.
(iii) Mandar did not gift an electronic item and received the calculator in return.
(iv) The person who gifted the jacket received the sweater in return and Reena received the pair of sunglasses.

Which of the following statements is true?

- A) Two of the friends who did not gift electronic items, received electronic items in return
B) Piyu gifted the jacket and Shashi gifted the I-Pod C) Shashi neither gifted nor did he receive an electronic item
D) The person who gifted the cell phone received the calculator in return
-

Question No. : 65

Five friends, Amol, Mandar, Piyu, Shashi and Reena attended Sagar's birthday party, where they partook of the sumptuous snacks and dinner. Each of the five friends gifted Sagar a different article – a fountain pen, a cell phone, a shirt, a jacket and an I-Pod – and Sagar, in return, gifted each of them a different article – a video game, a sweater, a perfume, a calculator and a pair of sunglasses. The following is additional information about the gifts given by the friends and the gifts received from Sagar.

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- (ii) Shashi did not gift the I-Pod but received the perfume in return.
- (iii) Mandar did not gift an electronic item and received the calculator in return.
- (iv) The person who gifted the jacket received the sweater in return and Reena received the pair of sunglasses.

Which of the following is the correct combination of friend, article gifted and article received in return?

- A) Piyu – Fountain Pen – Sunglasses B) Shashi – I-Pod – Perfume C) Reena – I-Pod – Sunglasses D) None of these

Question No. : 66

Five friends, Amol, Mandar, Piyu, Shashi and Reena attended Sagar's birthday party, where they partook of the sumptuous snacks and dinner. Each of the five friends gifted Sagar a different article – a fountain pen, a cell phone, a shirt, a jacket and an I-Pod – and Sagar, in return, gifted each of them a different article – a video game, a sweater, a perfume, a calculator and a pair of sunglasses. The following is additional information about the gifts given by the friends and the gifts received from Sagar.

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- (ii) Shashi did not gift the I-Pod but received the perfume in return.
- (iii) Mandar did not gift an electronic item and received the calculator in return.
- (iv) The person who gifted the jacket received the sweater in return and Reena received the pair of sunglasses.

Which of the following is **false**?

- A) Only one friend whose name does not start with a vowel, received an electronic item in return
 - B) The friend whose name appears last in alphabetical order, gifted an electronic item and received a non-electronic item in return
 - C) In alphabetical order, the friend who gifted the I-Pod appears before at least two other friends
 - D) The friend whose name in alphabetical order appears in the middle neither gifted nor received an electronic item
-