Time: 60 minutes

Please fill in the following information with a ball-point pen:

STUDENT NAME

S P JAIN'S GMBA REGISTRATION NUMBER: _____ (IF APPLIED ELSE YOUR EMAIL ID) _____

Please read instructions in the answer sheet and question booklet before answering

1. There will be negative marking as per indication in each section (Total no. of Sections : 6)

2. Please check the number of questions before you start answering

3. All rough work to be done only on the blank sheet provided at the back of the question booklet. Please do NOT write on the question paper

4. Laptops, calculators, slide rules, log tables, watch calculators, papers, cellular phones etc are not allowed inside the examination hall

5. You will not be allowed to leave the examination hall during the examination

6. This objective type exam is for 60 minutes

7. Any candidate found violating the instructions and receiving/giving any form of help will be disqualified

The decision of S P Jain will be final and binding on the applicant in case of any dispute.

Signature of Invigilator

APPROPRIATION OF MARKS

Section	No. of Questions	Marks per question	Total Marks per Section	Negative Marking per question
Diagrammatic Reasoning	7	3	21	1
Logic	5	2	10	0.5
IQ	5	2	10	0.5
Numeracy	10	3	30	1
Reading Comprehension	5	3	15	1
GK Questions	14	1	14	2
Total	**46**		**100**	

ANSWER FOR THE QUESTIONS ARE PROVIDED AT THE END OF THE PAPER

DIAGRAMMATIC REASONING (7Q x 3 marks = 21 marks. Negative marking – 1 mark)

1. Given below are five pieces. Three of these pieces when put together form a square. Which combination of three pieces when put together form a perfect square?
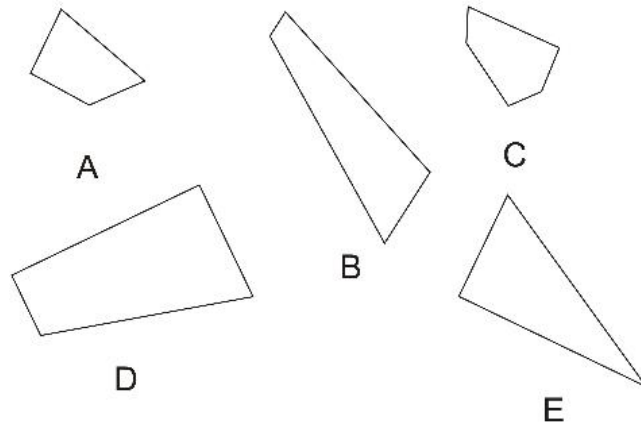

(A) ABE
(B) DCE
(C) ACD
(D) BDE

2. Given below is a series of five figures. Out of the four figures labeled A, B, C and D one of the figures is not correct in the series. (Assume the figure labeled X is correctly put in the series) Which one of the four figures labeled out of A, B, C and D is incorrectly placed in the series?
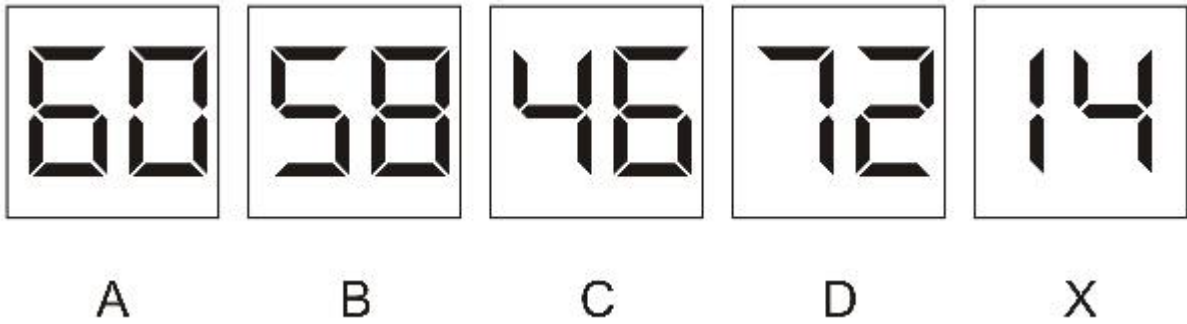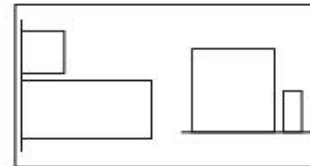
3. In the below given figure two particular figures share a particular relationship. Select the option out of A, B, C which shows a similar relationship as given in the figure. If none of the options (A, B or C) show a similar relation select option D
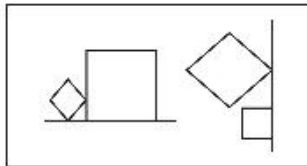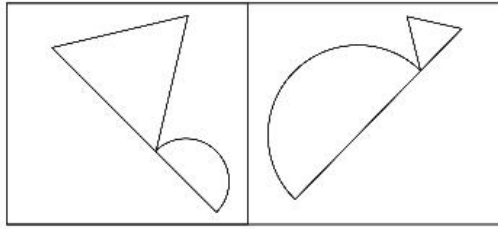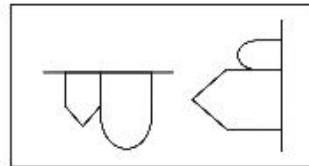
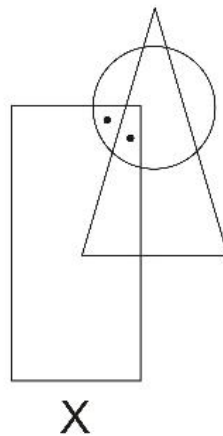| A	B	C	None of the other options
			D

4. Given below is a figure labeled X. In this figure the dots are placed according to a particular logic. Select one of the options A, B, C or D in which dots can be placed using a similar logic?

X
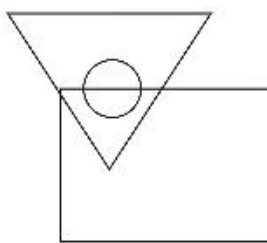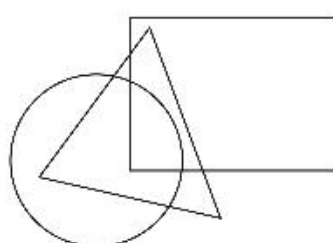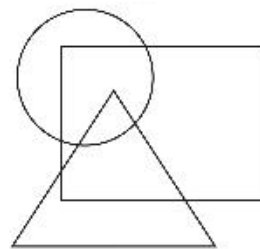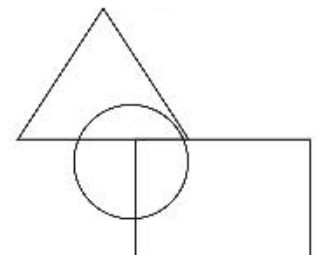
A	B	C	D

5. Given below is a diagram. Find the minimum number of straight lines required to make the given figure?
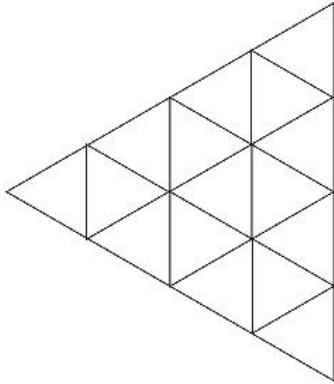
(A) 9
(B) 10
(C) 11
(D) 12

6. Given below are three different views of the same cube. When the cube is unfolded what pattern will be displayed?
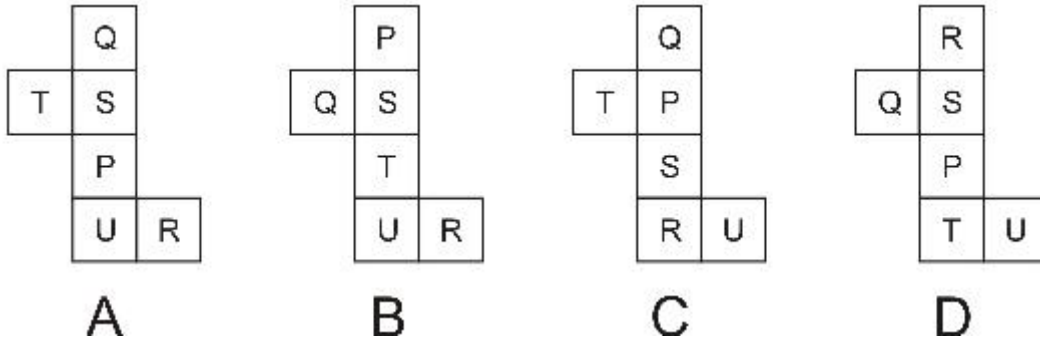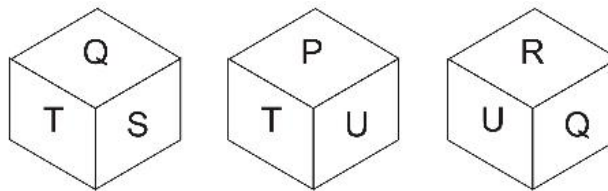
7. Which of the options completes the below figure?
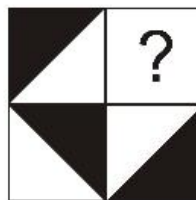
LOGIC (5Q x 2 marks = 10 marks. Negative marking – 0.5 mark)

Ian decided to go on a business trip to six cities. The six cities Ian visited were P, Q, R, S, T and U. In each of these cities he visited one of his customers who lived in that city. Each of these customers is identified by a number 1, 2, 3, 4, 5 and 6
It is known that:
Ian visited customer 5 before he visited customer 1
Q was not the last city visited by Ian
Customer 4 was not located in T
Ian visited P before Q
He visited R before T and he visited exactly one city between R and T
He visited Customer 4 last
The Customer who lives in R is either Customer 1 or Customer 3
The Customer who lives in S is either Customer 1 or Customer 3
Ian visited S before P or R and he visited P before R

1. Which city is customer 4 located in?

    (A) P
    (B) Q
    (C) U
    (D) Cannot be Determined

2. Which customer did Ian visit in city P?

    (A) 1
    (B) 2
    (C) 5
    (D) 6

3. How many cities did Ian visit between U and Q?

    (A) 0
    (B) 1
    (C) 2
    (D) 3

4. If Ian visited Customer 2 before Customer 6 how many Customers did Ian visit between Customer 5 and Customer 6?

    (A) 0
    (B) 1
    (C) 2
    (D) 3

5. Which of the following statements is definitely false?

    (A) Customer 6 lives in Q
    (B) Customer 2 lives in T
    (C) Customer 3 lives in R
    (D) None of the other options

SPJAT SAMPLE PAPER 2   - 6 -

IQ (5Q x 2 = 10 marks. Negative marking – 0.5 mark)

1. What comes next in the following series?
   1/21, 1/14, 1/18, 1/16, 1/15, 1/18, 1/12, …….

2. Ryan asks his friends to guess the manufacturer of the car he has just bought.
   Sheryl responds by saying, "I am sure it is not a Ford"
   Rebecca responds by saying, "I am sure it is either a Mercedes or BMW"
   Monica responds by saying, "I am sure it is a Mercedes"
   Ryan responds by saying, "Atleast one of you is right and atleast one of you is wrong."
   Which company is the manufacturer of the car just bought by Ryan if it is known that the car is manufactured by one of the three companies that were mentioned?

3. In a family that spans three generations it is known that
   R is Q's spouse
   T and T's Spouse X have two children, Y and Z who are of the same sex as X
   T's mother W who is married to O is the sister of S's mother. S's mother is N
   T is of the same sex as S
   Q and R have two children, U who is the same sex as Q and V who is the same sex as R
   P is the father of two children Q and S, who are of different sexes
   If it is known that V is a female then how many females are there in the second generation of the family?

4. A bus starts from the bus stop and goes 10 kilometers east. It then takes a right turn and goes 15 kilometers. It then takes another right turn and goes 25 kilometers. It then takes a left turn and goes 15 kilometers. After that it takes another left and goes 15 kilometers before finally taking a left and going 5 kilometers. In which direction (North, South, East or West) is the bus from the bus stop from where it initially started?

5. What number should replace the question mark in the table given below?

1	2	5	7	10	?
2	6	30	56	110	20

NUMERACY (10Q x 3 = 30 marks. Negative marking – 1 mark)

1. What is the last digit of the number $537^{1279089028}$?

   (A) 1
   (B) 3
   (C) 6
   (D) 7

2. Two cars painted yellow and red are racing against each other on a track of length 4000 meters. The race ends in a tie as both cars finish the race in exactly the same time. However at first when the race starts the yellow car moves 50% faster than the red car. The red car then quickened its pace and for the remaining distance moved 50% faster than the yellow car. When the red car quickened its pace what distance had it already covered?

   (A) 1200 meters
   (B) 1600 meters
   (C) 2400 meters
   (D) 2800 meters

3. If a is an integer and b=3a+7 then which of the following cannot be a divisor of b?

   (A) 4
   (B) 9
   (C) 11
   (D) 13

4. Anne's friends have decided to chip in together and buy her cake. It is estimated that each friend will have to pay Y dollars. At the last minute 12 more people decide to contribute towards the cost of the cake. Initially 18 friends were going to pay for the cake. How many less dollars in terms of Y will it cost per person due to additional people contributing towards the cost of the cake?

   (A) 3Y/5
   (B) 8Y/10
   (C) 3Y/6
   (D) None of the other options

5. A dishonest milkman wants to make a profit on the selling of milk. He would like to mix water (costing nothing) with milk costing Rs.33 per litre so as to make a profit of 20% on cost when he sells the resulting milk and water mixture for Rs.36 In what ratio should he mix the water and milk?

   (A) 1:20
   (B) 1:10
   (C) 1:8
   (D) 1:4

6. Little Stars academy is a girls' school of 300 students. Students can select one or more after school activities. It is known that 170 girls have chosen drama as an after school activity and 240 have chosen singing. If atleast 40 girls have not chosen either drama or singing as an after school activity then the number of girls that have chosen both drama and singing could range from

   (A) 40 to 70
   (B) 120 to 150
   (C) 150 to 170
   (D) 150 to 240

7. In the below diagram which is not drawn to scale QR=RP=PS
   Angle TPS measures 108 degrees
   What is the measure of angle PRS?

   Q R S

   P

   T
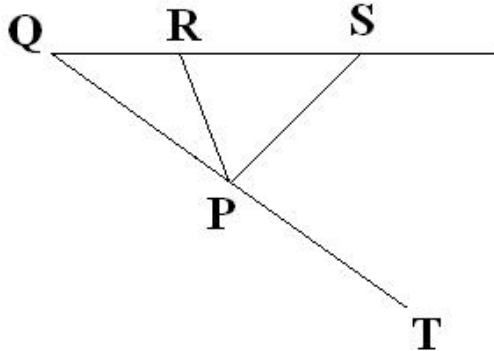
   (A) 72 degrees
   (B) 75 degrees
   (C) 80 degrees
   (D) 90 degrees

8. Point A has the coordinates (9,-2) and point B has the coordinates (2,-9) on the same rectangular coordinate plane

Column A	Column B
Distance from origin (0,0) to Point A	Distance from origin (0,0) to Point B

   (A) The quantity in Column A is greater
   (B) The quantity in Column B is greater
   (C) The two quantities are equal
   (D) The relationship cannot be determined from the information given

Question 9 and 10 are on the graph given below

The below chart tracks the movement of the Indian Rupee against the Japanese Yen and the Euro over a six year period.

Foreign Currency Rates against the Rupee

■— 1 Euro= Indian Rupees   ◆—100 Yen=Indian Rupees
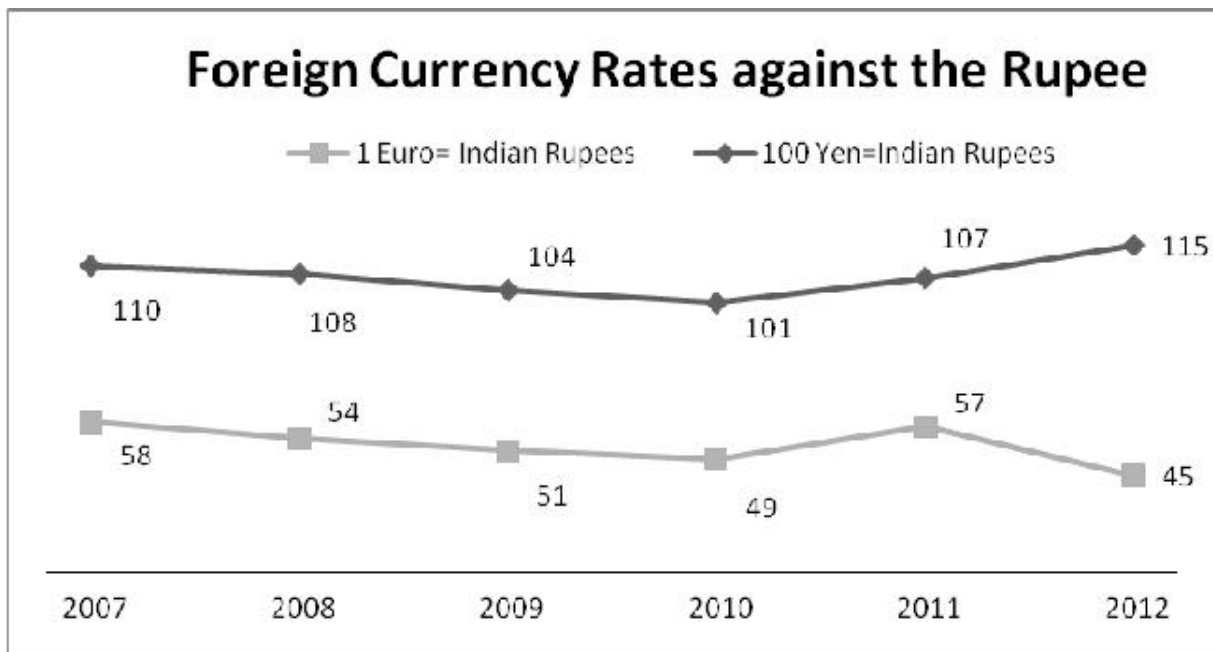
9. A currency trader is studying trends of the Indian currency.He wants to find out in which year he would have got the most Euros for 10,000 Yen(Assume he first converts Yen into Rupees and then the Rupees into Euros)?

   (A) 2009
   (B) 2010
   (C) 2011
   (D) 2012

10. A Japanese currency trader executes the following set of trades.
    In 2007 she converts 100 Yen into Rupees. In 2008 she converts the Rupees she got in the previous trade into Euros. In what subsequent year should she have sold the Euros for Rupees and converted the Rupees back into Yen so that she would have the highest profit on her initial investment of 100 Yen.(Assume that the trader calculates profits in terms of Yen)?

    (A) 2009
    (B) 2010
    (C) 2011
    (D) 2012

READING COMPREHENSION (5Q x 3 = 15 marks. Negative marking – 1 mark)

Since knowledge—indeed, human thought of any sort—is mediated by ideas, it is well worth asking how we acquire them. John Locke an eminent English Philosopher embarked on an extended effort to show where we get all of the ideas that we do so obviously possess. He believed an adequate genetic account will explain, at least in principle, how human beings acquire the ability to think about anything and everything. The below given extract from his work highlights Locke's beliefs regarding how thought and reason are formed in the human mind

Let us then suppose the Mind to be, as we say, white Paper, void of all Characters, without any *Ideas*; How comes it to be furnished? Whence comes it by that vast store, which the busy and boundless Fancy of Man has painted on it, with an almost endless variety? Whence has it all the materials of Reason and Knowledge? To this I answer, in one word, From *Experience*: In that, all our Knowledge is founded; and from that it ultimately derives itself.

The human mind is like a <u>*camera obscura*</u> for Locke, a darkened room into which bright pictures of what lies outside must be conveyed.

Locke argues at length that ideas are not innately imprinted on the human mind. Observing children reveal that their capacity to think develops only gradually, as its necessary components are acquired one by one. No individual idea is invariably present in every human being, as one would expect of an innate feature of human nature, and even if there were such cases, they could result from a universally-shared experience. Everything that occurs to us either arrives directly through experience, or is remembered from some previous experience, or has been manufactured from the raw materials provided solely by experience.

From the outset of his studies, then, Locke took the empiricist stance that the content of all human knowledge is ultimately derived from experience. We can only think about things we're acquainted with in one or the other of two distinct ways:

Our Observation employed either about *external, sensible Objects; or about the internal Operations of our Minds, perceived and reflected on by our selves, is that, which supplies our Understandings with all the materials of thinking.* These two are the Fountains of Knowledge, from whence all the *Ideas* we have, or can naturally have, do spring.

Notice that Locke distinguished sensation and reflection by reference to their objects. We acquire ideas of sensation through the causal operation of external objects on our sensory organs and ideas of reflection through the "internal Sense" that is awareness of our own intellectual operations. These two sources provide us with all of the ideas we can ever have.

The acquisition of ideas is a gradual process, of course. Newborn infants, Locke supposed, are first aware of the vivid experiences of their own hunger or pain. Then, by further experience, they acquire a supply of sensory ideas from which they can abstract, learning to distinguish among familiar things. Only later do they attend to their reflective experience of mental operations in order to acquire ideas of reflection. Since we come to have ideas only by means of our own experience, Locke supposed, any interruption of this normal process could prevent us from having them. Having defective organs of sense, artificially restricting experience, or inattentively observing what we have can all limit our possession of mental contents. Individual human beings therefore exhibit great differences in their possession of simple ideas, and Locke speculated that other sentient beings—having, for all we know, experiences very different from our own—are likely to form ideas of which we can have no notion at all. Since simple ideas are acquired only by experience, anything we do not experience is literally **<u>inconceivable</u>** to us.

1. Which of the following is not mentioned in the passage?

   (A) Sensation of externalities and reflections on the operations of our intellect are the sources of human knowledge and ideas
   (B) Individuals are born with some innate knowledge and characteristics which are further enhanced by our experiences
   (C) Differences in level of knowledge arise due to different experiences of different individuals
   (D) Physical handicaps which reduce our perception of the world can affect the knowledge acquired by individuals
   (E) All of the above are mentioned in the passage

2. What is the difference between reflection and sensation as mentioned in the passage?

   (A) Reflection is the beginning of the process of learning and sensation helps in confirming the knowledge achieved through reflection
   (B) According to Locke the only two sources of acquiring knowledge is either through sensation or reflection
   (C) Knowledge can be acquired via sensation by all animals whereas knowledge can be acquired via reflection only by humans
   (D) Sensation requires our interaction with external stimuli and our perception of it whereas Reflection is the perception of our own intellect's working
   (E) None of the above

3. Why is the human mind compared to a 'camera obscura' (the word italized and underlined) in the passage?

   (A) The human mind has a very high power to remember things via taking a mental image of them
   (B) The human mind can be played tricks upon just as in the case of trick photography using a camera
   (C) The human mind has a vivid imagination
   (D) The human mind depends on interaction with the environment to learn
   (E) None of the above

4. The above passage is

   (A) A direct extract from the works of Locke
   (B) A critical study of the strenghts and weaknesses of the theories of Locke
   (C) A study of the different theories regarding the acquisition of knowledge in individuals
   (D) An extract from a biography on Locke
   (E) None of the other options

5. What does the word "inconceivable" (marked bold and underlined) as used in the passage mean?

   (A) Unbeleivable
   (B) Pleasantly Surprising
   (C) Dangerous
   (D) Unknown
   (E) None of the other options

GENERAL KNOWLEDGE (14Q x 1 = 14 marks. Negative marking – 2 marks)

Mark True (T) or False (F)

1. The Standard and Poor's rating agency downgraded the credit rating of France in January 2012   T   F

2. Motorola Mobility and Lenovo have recently announced to make the first smart phones running on Intel's Medfield chips   T   F

3. As per the Chinese calendar, 2012 is the year of the Rabbit   T   F

4. After the passing away of North Korean leader Kim Jong-il, his successor as the leader of North Korea is his nephew Kim Jong-kult   T   F

5. Greece and Spain no longer use the Euro as their currency   T   F

6. The first race of the 2012 Formula 1 Season will be held in Australia   T   F

7. The United States Republican Party Primary Election in the State of New Hampshire was won by Ron Paul   T   F

8. 2012 has been designated by the United Nations as the International Year of Sustainable Energy for All   T   F

9. Buenos Aires will be hosting the 2016 Summer Olympic Games   T   F

10. The Kuafu project is a Chinese space project to establish a space weather forecasting system to be completed in 2012   T   F

11. Apple recently bought over Israeli flash storage maker Anobit   T   F

12. Kodak, the US based Film Company, recently filed for bankruptcy   T   F

13. Thomas Edison invented the electric light bulb   T   F

14. Bassar Assad is the President of Libya   T   F

ANSWERKEY FOR SPJAT SAMPLE PAPER 2

DIAGRAMMATIC REASONING

1	D
2	A
3	B
4	C
5	C
6	A
7	A

NUMERACY

1	A
2	B
3	B
4	D
5	B
6	C
7	A
8	C
9	D
10	C

LOGIC

1	C
2	C
3	B
4	C
5	C

READING COMPREHENSION

1	B
2	D
3	D
4	E
5	A

IQ

1	1/20
2	BMW
3	3 FEMALES
4	SOUTH
5	4

GK

1	T
2	T
3	F
4	F
5	F
6	T
7	F
8	T
9	F
10	T
11	T
12	T
13	T
14	F