

## SPJAT SAMPLE PAPER 1

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. Please check the number of questions before you start answering (Total no. of Sections : 5)
2. 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
3. Laptops, calculators, slide rules, log tables, watch calculators, papers, cellular phones etc are not allowed inside the examination hall
4. You will not be allowed to leave the examination hall during the examination
5. 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.

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Signature of Invigilator

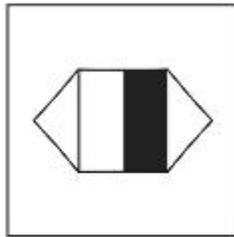
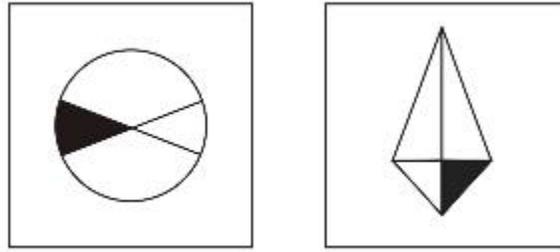
## APPROPRIATION OF MARKS

<b>Section</b>	<b>No. of Questions</b>	<b>Marks per question</b>	<b>Total Marks per Section</b>
Diagrammatic Reasoning	7	3	21
Logic	6	2	12
IQ	6	2	12
Numeracy	10	4	40
Reading Comprehension	5	3	15
<b>Total</b>	<b>34</b>		<b>100</b>

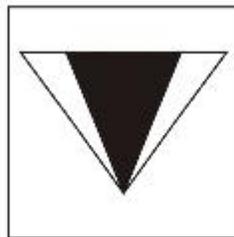
ANSWER FOR THE QUESTIONS ARE PROVIDED AT THE END OF THE PAPER

**DIAGRAMMATIC REASONING**

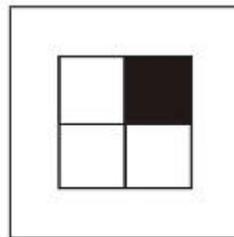
1. Given below are two figures which share a similar relation. Which of the options share the same relation with the two figures given on top?



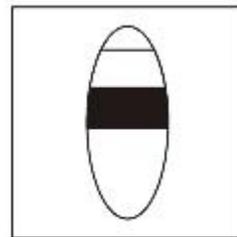
A



B

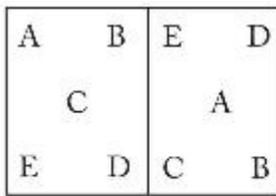


C

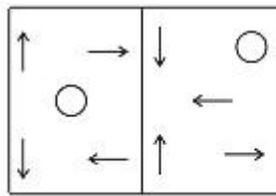


D

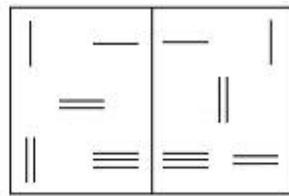
2. Which one of the following figures is the odd one in the below given series?



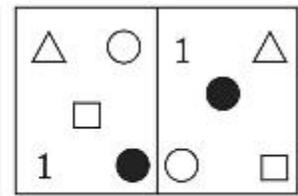
A



B

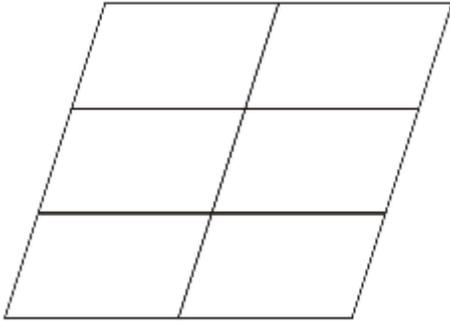


C



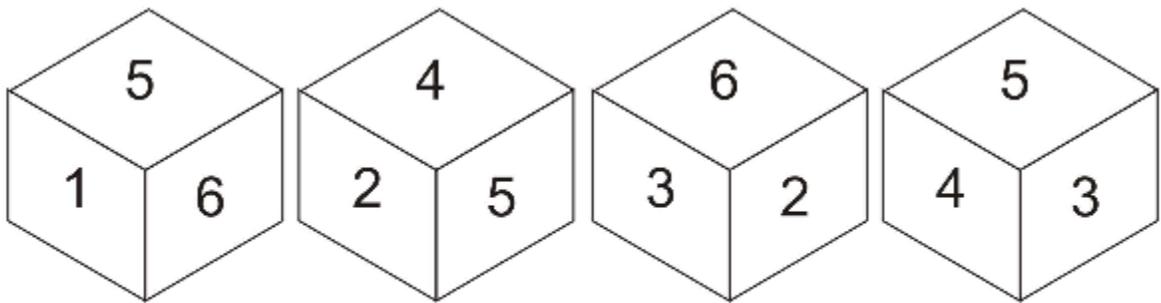
D

3. How many parallelograms are there in the below figure?



- (A) 14
- (B) 16
- (C) 18
- (D) 20

4. Rajan is a quality supervisor at a factory which produces dice. During inspection he comes across four dice which are shown below. Rajan is shocked to discover that 3 out of the four dice are definitely defective. Which of these dice has a possibility of NOT being defective?



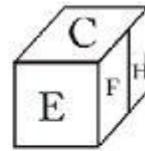
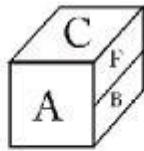
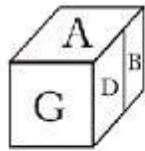
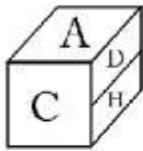
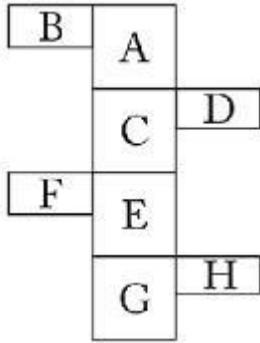
A

B

C

D

5. Given below is a piece of paper which has several letters printed on it. If this paper is folded into a cube which options would it look like?



A

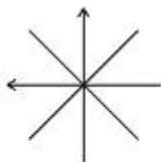
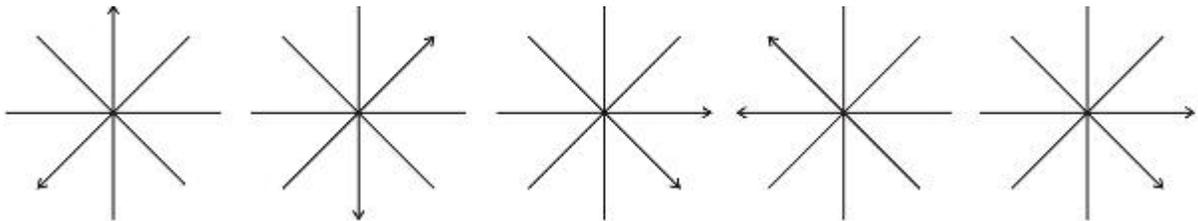
B

C

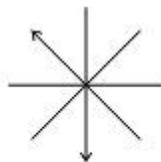
D

- (A) Option A and Option B  
 (B) Option A and Option C  
 (C) Option B and Option C  
 (D) Option A and Option D

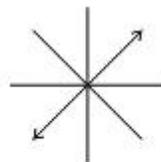
6. What comes next in the given below series?



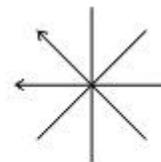
A



B

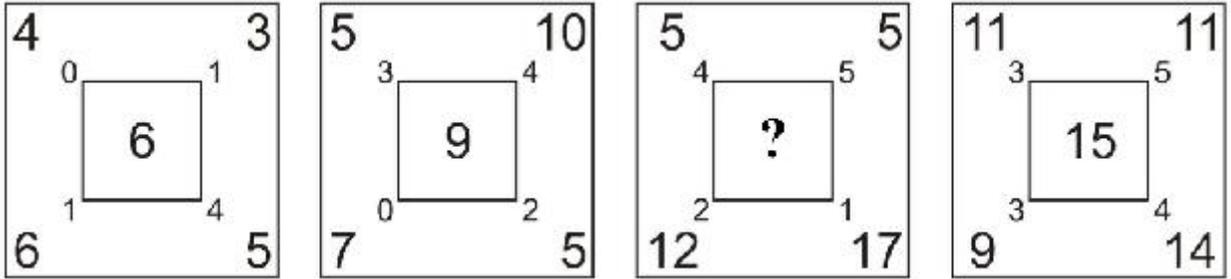


C



D

7. If all the four squares follow the similar logic then what number should replace the question mark?



- (A) 10
- (B) 12
- (C) 13
- (D) Cannot be logically filled

## LOGIC

There are six members in a book club namely A, B, C, D, E and F. For the book club's monthly meeting in January each of them carry one book which they own. The titles of these books are Book No. 1 owned by A, Book No. 2 owned by B, Book No. 3 owned by C, Book No. 4 owned by D, Book No. 5 owned by E and Book No. 6 owned by F

The following additional information is provided

Each member has read the book which he owns and is carrying to the club meeting

The book carried by B has been read by no other member of the club except B

The book carried by E has been read only by B, E and one other member of the club

D has read four of the books which were carried to the club meeting including the one which she was carrying

The book carried by A has been read by A, B and two other members of the club

C has not read any other book except the one which she is carrying.

C and three other members of the club have read the book which C was carrying

Four members other than F have read Book No.6

1. If both D and E have read Book No.1 and F has read four of the books that were brought to the club meeting (including the one she owned), which books other than the one she owns has F read?
  - (A) Book No.1, Book No.4 and Book No.5
  - (B) Book No.3, Book No.4 and Book No.5
  - (C) Book No.1, Book No.3 and Book No.5
  - (D) Cannot be Determined
  
2. If E as well as F have read both the books owned by A and C then which of the following cannot be true?
  - (A) Both E and F have read Book No.3
  - (B) D has read Book No.3 and Book No.5
  - (C) E has read Book No.6
  - (D) A has read Book No.5
  
3. If A has read Book No.5 which of the following is necessarily true?
  - (A) F has read Book No.4
  - (B) B has read Book No.3
  - (C) F has read Book No.1
  - (D) None of the above options
  
4. It is known that A has read 5 of the books which were at the meeting including the book she owns and E has read three books which were at the meeting including the one she owns. Which of the following books must D definitely have read?
  - (A) Book No.1
  - (B) Book No.1 and Book No.5
  - (C) Book No.5
  - (D) Cannot be determined

5. If D has not read the book owned by C, and B has not read Book No.4 then how many books have B and D read including the books they own?
- (A) B and D both have read 4 books each
  - (B) B has read three books and D has read four books
  - (C) B has read four books and D has read three books
  - (D) B and D both have read three books each

**IQ**

1. A, B, C and D are four mothers each of whom has two daughters. Anne wants to find out the ages of each of the daughters of all the four mothers. However when she asks the mothers the ages of their children the following is the response she receives
- (i) A says when you multiply my daughters ages the answer is 9 and the youngest one was born in January
  - (ii) B says when you add the ages of both my daughters and square the answer is 169 .The age of my older daughter is a perfect cube
  - (iii) C says that the when you multiply the ages of her daughters the answer is 77. C's own age is 32 years
  - (iv) D says that upon adding the ages of her daughters the result is a two digit number XY. Upon multiplying the ages of her daughters the result is a two digit number YX. The ages of both her daughters are under 10 years
- For how many of the mothers can Anne be absolutely sure of the ages of both daughters?

2. Which number should replace the question mark?

7	3	5	6
9	1	8	1
4	3	?	3
5	3	2	6

3. If
- A # B means B is the son of A
  - A @ B means A is the sister of B
  - A \$ B means A is the daughter of B
  - A ! B means B is the father of A
  - A & B means B is the mother of A
  - A % B means A is the brother of B
- Given below is a symbolic representation of the relations in a particular family  
U \$ V @ W # X ! Y  
Fill in the blank below  
Y is U's \_\_\_\_\_

4. Which number is the odd one out?  
9678 4572 5261 5133 3527 6895 7768
5. What number is three places away from itself plus three,  
two places away from itself multiplied by two,  
two places away from itself less four and  
two places away from itself divided by three?

20	14	12	24	33
3	10	16	15	18
17	7	4	8	6
5	1	9	30	36
39	21	13	2	11

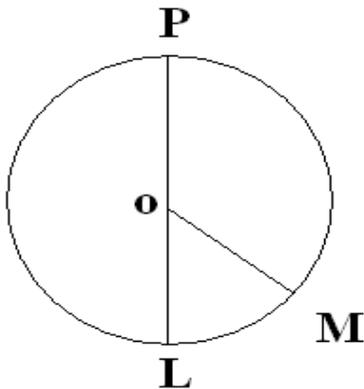
## NUMERACY

1. In the first half of the season a football team participating in the local league won 40% of its matches. It then went on to win all its matches except two in the second half of the season. If it is known that for the entire season the percentage of matches won by the team was 66.67% and that the team played double the number of matches in the second half of the season as compared to the first half of the season then how many matches did the team play in the first half of the season?  
  - (A) 2
  - (B) 5
  - (C) 10
  - (D) 15
  
2. A hat contains 8 pieces of paper and each piece of paper has a different number on it. The numbers written on the paper are 4,1,9,3,7,8,5,13  
A piece of paper is picked at random from the hat and kept aside. After which another piece of paper is removed. What is the probability that the sum of the numbers written on both these pieces is 11 or 12?  
  - (A) 1/7
  - (B) 3/28
  - (C) 5/28
  - (D) 1/14
  
3. What is the remainder when  $(43717)^{43628232}$  is divided by 5?  
  - (A) 1
  - (B) 2
  - (C) 3
  - (D) 4
  
4. Ahmed alone can complete a task in 10 days and Rajeev can complete the same task in 4 days. Ahmed initially starts working on the task alone for the first four days. However after that he suffers an injury which will make him take double the time to complete the task. Rajeev joins Ahmed (who has been injured) on the fifth day and they together complete the task .At the end of the task they are paid a sum of Rs.10,000 which they decide to share between themselves in the proportion of the work done . How much money is Ahmed entitled to?  
  - (A) Rs.3000
  - (B) Rs.5000
  - (C) Rs.6500
  - (D) Rs.7500
  
5. The radius of a cylindrical water tank is reduced by 50%. However, the speed by which water is filled into the tank is also decreased by 50%. How much more or less time will it take to fill the tank now?  
  - (A) 50% less time
  - (B) 50% more time
  - (C) 75% less time
  - (D) 75% more time

6.

Column A	Column B
Area of a rectangle having a perimeter of 49 cm	Area of circle having a circumference of 44cm

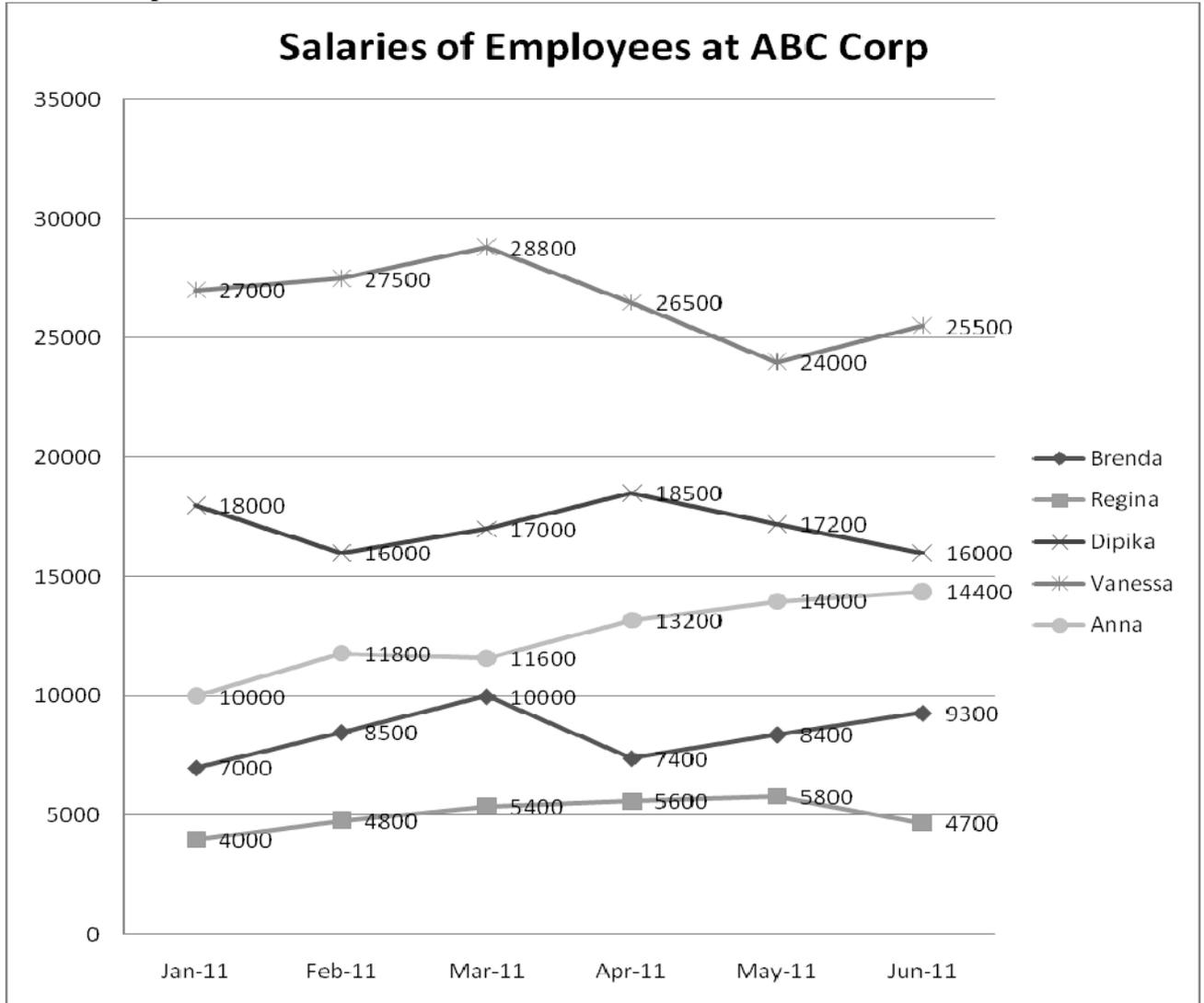
- (A) The quantity in Column A is greater  
(B) The quantity in Column B is greater  
(C) The two quantities are equal  
(D) The relationship cannot be determined from the information given.
7. In the below diagram O is the centre of the circle and angle LOM measures 80 degrees. What is the measure of the angle OPM?



- (A) 30 degrees  
(B) 45 degrees  
(C) 60 degrees  
(D) None of the Above Options
8. The hour hand and minute hand of a clock form an angle. By how much does the smaller angle formed between the hour hand and minute hand decrease in a period of twenty five minutes?
- (A) 150 degrees  
(B) 140 degrees  
(C) 137.5 degrees  
(D) Cannot be determined on the basis of the information provided

Question 9 and 10 are on the graph given below

ABC Corp has five employees whose salaries vary from month to month as per their performance. Given below is a table which shows the salaries of the five employees over a six month table period.



9. In which month did the total salaries paid by ABC decrease the most over the previous month?

- (A) February 2011
- (B) March 2011
- (C) April 2011
- (D) May 2011

10. In which month was the lowest total salary paid by ABC Corp?

- (A) January 2011
- (B) February 2011
- (C) March 2011
- (D) April 2011

## READING COMPREHENSION

We, in civilized societies, are rich. Why then are there so many poor? Why this painful drudgery for the masses? Why, even to the best paid workman, this uncertainty for the morrow, in the midst of all the wealth inherited from the past, and in spite of the powerful means of production, which could ensure comfort to all in return for a few hours of daily toil?

The Socialists have said it and repeated it unwearyingly. Daily they reiterate it, demonstrating it by arguments taken from all the sciences. It is because all that is necessary for production-- the land, the mines, the highways, machinery, food, shelter, education, knowledge--all have been seized by the few in the course of that long story of robbery, enforced migration and wars, of ignorance and oppression, which has been the life of the human race before it had learned to subdue the forces of Nature. It is because, taking advantage of alleged rights acquired in the past, the rich have today appropriated two-thirds of the products of human labour, and then squander them in the most stupid and shameful way. It is because, having reduced the masses to a point at which they have not the means of subsistence for a month, or even for a week in advance, the few only allow the many to work on condition of themselves receiving the lion's share. It is because these few prevent the remainder of men from producing the things they need, and force them to produce, not the necessaries of life for all, but whatever offers the greatest profits to the monopolists. In this is the substance of all Socialism.

Take, indeed, a civilized country. The forests which once covered it have been cleared, the marshes drained, the climate improved. It has been made habitable. The soil, which bore formerly only a coarse vegetation, is covered to-day with rich harvests. The rock-walls in the valleys are laid out in terraces and covered with vines bearing golden fruit. The wild plants, which yielded nought but acrid berries, or uneatable roots, have been transformed by generations of culture into succulent vegetables, or trees covered with delicious fruits. Thousands of highways and railroads furrow the earth, and pierce the mountains. The shriek of the engine is heard in the wild gorges of the Alps, the Caucasus, and the Himalayas. The rivers have been made navigable; the coasts, carefully surveyed, are easy of access; artificial harbours, laboriously dug out and protected against the fury of the sea, afford shelter to the ships.

Whole generations, that lived and died in misery, oppressed and ill-treated by their masters, and worn out by toil, have handed on this immense inheritance to our century.

For thousands of years millions of men have laboured to clear the forests, to drain the marshes, and to open up highways by land and water. Every rood of soil we cultivate in Europe has been watered by the sweat of several races of men. Every acre has its story of enforced labour, of intolerable toil, of the people's sufferings. Every mile of railway, every yard of tunnel, has received its share of human blood.

Millions of human beings have laboured to create this civilization on which we pride ourselves to-day. Other millions scattered through the globe, labour to maintain it. Without them nothing would be left in fifty years but ruins.

There is not even a thought, or an invention, which is not common property, born of the past and the present. Thousands of inventors, known and unknown, who have died in poverty, have co-operated in the invention of each of these machines which embody the genius of man.

1. What would best describe the tone of the above passage?
  - (A) Prescriptive
  - (B) Satirical
  - (C) Critical
  - (D) Analytical
  - (E) Narrative
  
2. What is the central theme of the passage?
  - (A) The decay of society and its increased focus on material wealth as compared to spiritual growth
  - (B) The concentration of wealth among a few which has been generated through the efforts of many
  - (C) The contribution of hundreds of unknown men and women to the improvement of civilization which goes unrecognized
  - (D) The dehumanizing effect development has on society
  - (E) None of the above
  
3. What is the significance of the sentence  
There is not even a thought, or an invention, which is not common property, born of the past and the present?
  - (A) All modern technology is merely old ideas presented in a new way
  - (B) New ideas and inventions are generally evolutionary in nature rather than revolutionary and truly unique
  - (C) Most ideas and inventions are a result of several people working together in a team and actively collaborating with each other and sharing ideas
  - (D) New innovations are not attributable to a single individual rather they are a combination of the efforts of different individuals over different periods of time
  - (E) All great inventors merely present the ideas and thoughts of others as their own and thus should not claim ownership over their inventions
  
4. Which of the following is not mentioned by the author in the passage?
  - (A) Our current state of civilization and development is the result of the contributions of millions of workers of the past
  - (B) A wealthy minority controls a majority of the world's resources and squanders them on unproductive activities.
  - (C) The value of infrastructure rests not in its ownership but in its usage which is enabled by the actions of hundreds of workers
  - (D) The road network has expanded rapidly over and now reaches some of the remotest corners of the globe
  - (E) All the above statements are mentioned in the passage.
  
5. What does the word 'drudgery' as mentioned in the passage mean?
  - (A) Exploitation
  - (B) Boredom
  - (C) Toil
  - (D) Worry
  - (E) Fear

**ANSWERKEY FOR SPJAT SAMPLE PAPER 1**

**DIAGRAMMATIC REASONING**

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

**LOGIC**

- 1            B
- 2            B
- 3            D
- 4            A
- 5            A

**IQ**

- 1    3 mothers, (A, C, D)
- 2    3
- 3    Maternal Uncle/Uncle
- 4    3527
- 5    9

**NUMERACY**

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

**READING COMPREHENSION**

- 1            C
- 2            B
- 3            D
- 4            E
- 5            C