

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
MCA, Summer 2017 – 18 Examination

Semester: 4
Subject Code: 05293251
Subject Name: English and Mathematical Aptitude-1

Date: 28/05/2018
Time: 10:30 am to 01:00 pm
Total Marks: 60

Instructions:

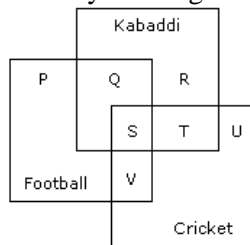
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Answer the followings.**A. Explain the proverbs.****(05)**

1. "The pen is mightier than the sword."
2. "When in Rome, do as the Romans."
3. "The squeaky wheel gets the grease."
4. "When the going gets tough, the tough get going."
5. "No man is an island."

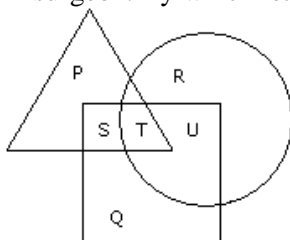
B. Multiple choice type questions/ Give the sentence true or false. (Each of 01 marks)**(10)**

1. The diagram given below represents those students who play Cricket, Football and Kabaddi. Study the diagram and identify the students who play all the three games.



- | | |
|---------------------|-----------------|
| A. P + Q + R | B. V + T |
| C. S + T + V | D. S |

2. In the figure given below, square represents doctors, triangle represents ladies and circle represents surgeon. By which letter the ladies who doctor and surgeon both are represented?



- | | |
|-------------|-------------|
| A. U | B. T |
| C. S | D. P |

3. Rahul put his timepiece on the table in such a way that at 6 P.M. hour hand points to North. In which direction the minute hand will point at 9.15 P.M.?

- | | |
|----------------------|-----------------|
| A. South-East | B. South |
| C. North | D. West |

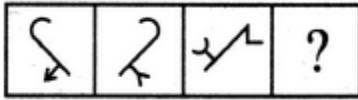
4. A boy rode his bicycle Northward, then turned left and rode 1 km and again turned left and rode 2 km. He found himself 1 km west of his starting point. How far did he ride northward initially?

- | | |
|----------------|----------------|
| A. 1 km | B. 2 km |
| C. 3 km | D. 5 km |

5. Some boys are sitting in three rows all facing North such that A is in the middle row. P is just to the right of A but in the same row. Q is just behind of P while R is in the North of A. In which direction of R is Q?

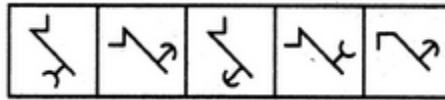
- A. South
 B. South-West
 C. North-East
 D. South-East

6. Problem Figures:



(A) (B) (C) (D)

Answer Figures:

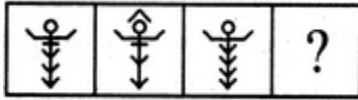


(1) (2) (3) (4) (5)

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

7. What are proverbs?

8. Problem Figures:



(A) (B) (C) (D)

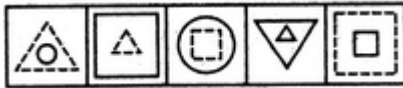
Answer Figures:



(1) (2) (3) (4) (5)

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

9. Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

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

10. Some boys are sitting in three rows all facing North such that A is in the middle row. P is just to the right of A but in the same row. Q is just behind of P while R is in the North of A. In which direction of R is Q?

- A. South
 B. South-West
 C. North-East
 D. South-East

Q.2 Answer the followings. (2 or 3 Mark Questions.) (Three Q- 2 marks & Two Q-3 marks.) (15)

1. How can you use proverbs to learn English?
2. What are IDIOMS?
3. What is Venn diagram?
4. "Bite off more than you can chew." Explain.
5. "Caught between two stools." Explain.
6. "Costs an arm and a leg." Explain.

Q.3 Answer the following. (Any three) (15)

1. A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. What is the speed of the car?
2. A fruit seller had some apples. He sells 40% apples and still has 420 apples. Find the number of apple originally he had?
3. A man complete a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.
4. What is the difference between the compound interests on Rs. 5000 for $1\frac{1}{2}$ years at 4% per annum compounded yearly and half-yearly?

Q.4 Answer the following.

- A. Mr. Thomas invested an amount of Rs. 13,900 divided in two different schemes A and B at the simple interest rate of 14% p.a. and 11% p.a. respectively. If the total amount of simple interest earned in 2 years be Rs. 3508, what was the amount invested in Scheme B? (05)

- B.** 1. Two pipes A and B together can fill a cistern in 4 hours. Had they been opened separately, then B would have taken 6 hours more than A to fill the cistern. How much time will be taken by A to fill the cistern separately? (05)
2. If selling price is doubled, the profit triples. Find the profit percent. (05)

OR

- B.** 1. A can lay railway track between two given stations in 16 days and B can do the same job in 12 days. With help of C, they did the job in 4 days only. In how many days C alone can do the job? (05)
2. The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 4% per annum is Re. 1. What is the sum (in Rs.)? (05)