



## MATHS OLYMPIAD

### **INTRODUCTION:**

“Mathematics is the music of reason” – JJ Sylvester

Wissenaire'17 provides you a platform to showcase your problem solving skills and tests your reasoning power in the event Maths Olympiad.

### **EVENT FORMAT:**

#### **ROUND 1:**

The first round consists of objective type questions based on applications of mathematics, logical reasoning and aptitude abilities and the total time will be 45-60 minutes.

Top 20 participants will be selected to the second round. Results will be out within 30 minutes after the test.

#### **ROUND 2:**

The 20 selected participants will be allowed to participate in this round. Duration of the test would be 90 minutes. Number and nature of the questions will not be released till the start of the test.

### **RULES AND REGULATIONS:**

1. Maximum number of participants in a team is two.
2. All the participants should be registered.
3. Each participant should bring their respective college ID proof.
4. No participant can be a part of more than one team.
5. Participants from different colleges can participate together.



6. There is no restriction on the number of teams from the college.
7. No reference material will be allowed.
8. No electronic gadgets will be permitted.
9. Violation of any rule can result in elimination of team from the event.

### **CONTACT DETAILS:**

HIMANI J

Event Co-ordinator, Wissensaire'17

Contact no:-9938418082

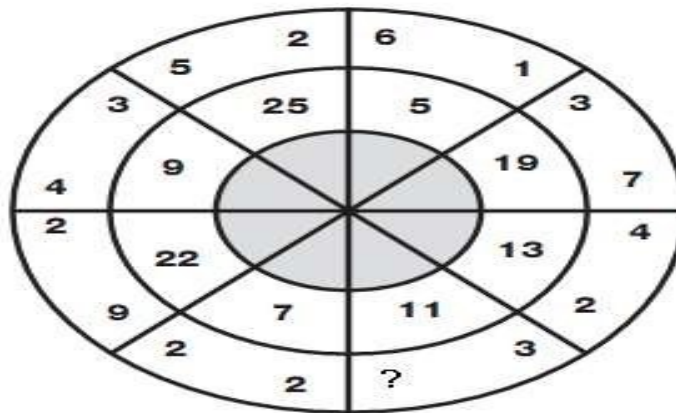
Email id: jhs10@iitbbs.ac.in

### **SAMPLE QUESTIONS OF ROUND 1 IN MATHS OLYMPIAD:**

1. There are 4 basket-ball players A, B, C, D and initially the ball is with A.  
The ball is passed from one person to a different person. In how many ways can the ball come back to A after seven passes?
  - a. 183
  - b. 546
  - c. 693
  - d. 721
  - e. 250
2. The repeating decimal number  $3.14159265265265\dots$  written as the ratio of two integers  $a/b$  is
  - a.  $313845111/99990000$
  - b.  $313844841/99900000$
  - c.  $313845006/99900000$
  - d.  $313845106/99990000$
3. How many zeros are at the end of  $126!$  ? (where  $5! = 5*4*3*2*1=120$ )
  - a. 25



- b. 30
  - c. 31
  - d. 29
4. A man pointing to a photograph says,” The lady in the photograph is my nephew’s maternal grandmother.” How is the lady related to the man’s sister who has no other sister?
- a. Mother-in-law
  - b. Cousin
  - c. Sister-in-law
  - d. Mother
5. Which number replaces the question mark?



- a) 4
- b) 8
- c) 5
- d) 2