



TURING'S ENIGMA

(COMPUTER SCIENCE)

TURING'S ENIGMA (COMPUTER SCIENCE)

DAY 1

ROUND 1

Decryptor's Dilemma

This round is based on cryptography and encryption. They would need to decipher texts and paragraphs. Delegates will have a storyline through which they must interpret their very first steps. They would be expected to know how to decrypt cipher texts (**Reverse Cipher, Substitution Cipher, Vigenère Cipher, Caesar Cipher, modolo ciphers, base64 encoding, etc**) and must have archiving software. Must know some mathematics as well. please install appropriate Python interpreters and essential software like **Winrar or 7z**

Activities:

- Decoding Caesar, Vigenère, reverse, Rot, and substitution ciphers.
- Use steganography tools to extract hidden messages/features from images.
- Solve riddles that reveal keywords for decryption tools.
- Use simple programming logic
- Grasp of essential topics in CS is required with a bit of programming as well
- A good grasp of O-level CS would help

TURING'S ENIGMA (COMPUTER SCIENCE)

DAY 2

ROUND 2

OSINT/Stenography/Simple Programming

This round would test simple logic, “stenography”, Metadata Analysis, OSINT(OPEN SOURCE INTELLIGENCE), simple Python programming, and a method to view metadata from files.

Following round 1 delegates would know what they are doing. Delegates are advised to see simple stenography and metadata analysis videos from YouTube. This round would also cover various aspects of computer science like programming hence a good grasp on the essentials is key

NOTES:

Phones are not allowed at any stage except for the start of round 1

Bring your laptops

Each round is interconnected with one other

Completion of the first round will be key to figuring out what to do in the next round

Submit a flag value for each round to get points

TURING'S ENIGMA (COMPUTER SCIENCE)

MARKING ROUND 1

We have divided the marking for the round 1 into two categories:

1. Flag Submission(along with documentation on how you found it):

10 points for the first team to submit the flag value

7 points for the second team to submit the flag value

4 points for the third team to submit the flag value

2 points for the rest for each team submitting flag value after the third ones

2. Successful deciphering

Teams are to make a separate document and paste the deciphered text there and send it to the module head

We would compare this document to our original text and accordingly marks would be given:

The team closest to the original text would receive 10 points

The team second closest to the original text receives 7 points

The team third closest to the original text gets 5 points

Rest get 2 points

Note:

Submission must be done on the given email or else it won't accept. Submission of the flag does not solely guarantee a delegation lead in this round. We would also need evidence for the completion of the round (make a document about how you did it what ciphers were used etc). AI tools like ChatGPT are not allowed and module heads and host teams would be keeping a watch out for every delegate. We will follow a no-tolerance policy for cheating and no cross-talk. Delegates would have to submit their phones to module heads after the initial start

TURING'S ENIGMA (COMPUTER SCIENCE)

MARKING ROUND 2

We have divided the marking for round 2 into two categories

1. Flag Submission:

10 points for the first team to submit the flag value

7 points for the second team to submit the flag value

4 points for the third team to submit the flag value

2 points for the rest for each team submitting flag value after the third ones

2. Surprise Marking :

10 points for the first team to submit the successful required task

7 points for the second team to submit the successful required task

4 points for the third team to submit the successful required task

2 points for the rest for each team submitting after the third ones