

**AIT ENGINEERING AND TECHNICAL**  
**BOARD**

**TECH AAKRITI'21**

**13-15 & 19 -21 January**

**RULE BOOK**

S.NO	EVENT	POINTS	PARTICIPANTS PER TEAM		TEAMS FOR PARTICIPATION PER BRANCH
1.	Quantivisuals	0	Completed		
2.	Idea Presentation	0			
3.	Seminar	0			
4.	Vulcan	50			
5.	Code Red (TE-BE)	50	2		5
6.	Code Red (FE- SE)	50	2		5
7.	Reverse coding	50	2		10
8.	Bug off	50	2/Open		8/(20)
9.	Nand IT	50	2		10
10.	Impedance	50	2		10
11.	Auto CAD	50	2		10
12.	Catia	50	2		
13.	Tech Matrix	50	2	At least 20	
14.	TECHSTORM (MATHS CUM TECH QUIZ)	50	3	At Least 20	
15.	PLACEMENTS APTI	50	1	At Least 20	
16.	CS-GO	50	5	1	
17.	CHESS	50	5		
18.	RUBIX CUBE CHALLENGE	50	1		
19.	SCI-FI WRITING	50	1	6	
20.	AD-MAKING	70	8	1	

# General rules

1. The Joker Event name must be handed to Dr. P. B. Karandikar (In-Charge Technical board) before 11th January, 3:00 PM . Failure to submit on time will be considered as no joker event opted.
2. List of participants in all events to be handed over to the Technical Secretaries before 12<sup>TH</sup> January 7:00 PM. No further changes can be done to the list of participants once submitted. 5 points will be deducted per hour if the list of participants submitted late after 12<sup>TH</sup> January 7pm.
3. FE-Cap on participation  
Core events - 2 maximum  
Gaming events - 2 maximum  
  
SE/TE/BE have cap of 3 events in core and gaming.
4. Decisions taken by judges and the Technical Board will be final. In case of any disputes, participants or branch heads must consult the Technical secretaries.
5. All participants should be present before the start time of the event.  
Late entrants will not be allowed to participate under any circumstances.
6. Scores of all the events will be calculated on following criteria, points for every position will be added individually, (eg. if a branch gets two positions then they will get points for both positions).
7. In case any student or teacher has any complaint or doubt regarding the judgment, rules of some event or any other issue , they need to first report it to the Technical secretaries and if not satisfied then to the Staff I/C's( Mr. P.B. Karandikar), and then the higher authorities if required.
8. If any branch wins its joker event then it will get double of the points of that specific event but if it loses then it will get negative of that score.
9. Major events are - Tech Storm, Vulcan, Tech Sudoku, Ad-making , Placement Apti.

\*\*Judges and AIT Tech board reserve the right to modify the rules without prior intimation.

# EVENTS

## CODE RED

See Logic in everything around you? Your Daily Grammar is syntax? Algorithms and Flowcharts cloud your brain? Love to solve new and challenging problems? If your answer is a yes, then believe me you have landed at the right place. CODE RED is just the right kind of event for you.

The event will be held in two levels:-

Junior Level – FE-SE

Senior Level – TE-BE

For each level there will be two rounds.

### **Junior Level – FE-SE GUIDELINES:**

1. There should be exactly 5 teams per branch.
2. 2 members per team.
3. 10 teams will make it to the finals.
4. Minimum Two FE teams compulsory from each branch.
5. The position in the final round will decide the position of the branch.

### **Senior Level – TE-BE GUIDELINES:**

1. There should be exactly 5 teams per branch.
2. 2 members per team.
3. 10 teams will make it to the finals.
4. The position in the final round will decide the position of the branch.

### **Round 1:**

First round of both the formats will be of multiple choice questions round based on C/C++.  
Time Allotted : 30 min

### **Round 2:**

1. The teams for the final round will be selected teams from the first round.
2. Programming problems have to be solved on computers.
3. Each team will be provided one computer only.
4. Decisions of the judges will be final and binding.

# Reverse Coding

Reverse engineering ranks highly among the programming Dark Arts. Obtaining the original source code from a program you're given gives you the power to do... pretty much anything. Here at Reverse Coding, we let you exercise this power to achieve the glory that awaits you.

## **Guidelines**

1. There should be exactly 10 teams per branch.
2. 2 members per team.
3. 20 teams will make it to the finals.
4. Minimum Three FE teams compulsory from each branch.
5. The position in the final round will decide the position of the branch.

## **Round 1:**

1. First round consists of MCQs which can be solved by coding.
2. Time allotted: 20 min

## **Round 2:**

1. The teams in the final round will be the selected teams from the first round.
2. Participants have to write the code for pattern that maps input to output.
3. Each team will be using one computer only.

# DEBUGGING (BUG-OFF)

If you are as clever as you can be when you write it, how will you ever debug it? If you think you have a sharp eye and instincts then come and detonate the bombs and bugs from our code. The mission is on you are on your own now.....

You'll be given a set of C/C++ programs containing subtle bugs which may be having serious side effects. All you have to do is spot them. Bring out the Bug!!

This event is divided in **2 categories** :

1st: only FE(mass participation event ) no limit on participants(FE cap on this will not be counted)

Minimum(**20FE**)(branch with max participants will get+15 additional points)

2nd: SE/TE/BE (**8 teams**)

## **Guidelines**

### **1st category:**

1. participants will participate individually.
2. 50% of the total FE will qualify for next round.

### **2nd category**

1. There should be exactly 8 teams per branch.
2. 2 members per team.
3. 20 teams will make it to the finals.
4. The position in the final round will decide the position of the branch.

### **Round 1:**

1. Coding apti round
2. This round will be for 30 minutes.

### **Round 2:**

1. In this the top 20 teams will debug the full programs given to them.
2. This round will be for 1 hrs.
3. In case of a tie, timing will be considered.

# NAND IT

Do you consider yourself as sharp or snappy? Do you always decide things instantly in Boolean? How often do you use the words - True or False or for that matter, Yes or No?

If you are astounded, you just have the passion for Boolean digital circuits which needs to be unleashed and we give you the right platform. Scrutinize problems and arrive at a solution with Just two magical numbers 0 and 1. If you think you are trained enough to go through the Boolean drills then suit up and get ready to face the bombs.

## **GUIDELINES:**

1. There should be exactly 10 teams per branch.
2. 2 members per team.
3. 10 teams will make it to the finals.
4. Minimum Three FE teams compulsory from each branch.
5. The position in the final round will decide the position of the branch.

## **Round 1**

1. It will be a written test of simple multiple choice questions to assess participant's general aptitude and digital logic knowledge.
2. There will be 20-25 MCQs on the basics of digital logic, DLD & DELD to be solved in 20 mins.

## **Round 2**

1. Here the top 10 teams from the first round will be provided with the problem statements which are to be implemented on the digital logic kits.
2. Time for this round will be 90 minutes.
3. The questions will be preferably from the basics of digital logic, DLD & DELD.
4. No of questions : 3.
5. Time bonus will be considered for tie-breaking between two or more teams.
6. Participants caught while cheating will be immediately disqualified .

# IMPEDANCE

Electronics and Telecommunications? Love it or hate it. You just can't ignore it. If ICs and silicon chips are your world and if you think you can do wonders on the bread board .Trust me your mania for Electronics need a channel and we give you the right exposure to make your talent pecuniary. Time to win a few accolades.

This is a contest for all those master minds whose brain is as fast as a flash while troubleshooting various circuits.

## **GUIDELINES**

1. There should be exactly 10 teams per branch.
2. 2 members per team.
3. 10 teams will make it to the finals.
4. Minimum Three FE teams compulsory from each branch.
5. The position in the final round will decide the position of the branch.

### **Round 1:**

It will be a quiz (Apti + Analog apti) round consisting of multiple choice questions of 30 min.

### **Round 2:**

Problem statements will be given and an individual team has to implement the circuit accordingly. Details about it will be given on the spot. Time limit will be of 90 min.

Instructions-

1. Only calculators are allowed.
2. Participants caught while cheating will be immediately disqualified .



# AUTOCAD

1. There should be exactly 10 teams per branch.
2. 2 members per team.
3. 10 teams will make it to the finals.
4. Minimum Three FE teams compulsory from each branch.
5. The position in the final round will decide the position of the branch.

## **Round I:**

MCQs

Teams will be given MCQs to solve.

Time span - 30 Minutes.\*

## **Round II:**

The Final Round will be on AUTOCAD and based on orthographic projections and isometric projections.

Time Duration: 60 Minutes.\*

\*changes in the pattern can be made with a prior notice (min 2 days before the event) to the branch heads.

\*the decision of the Judges will be FINAL and non-questionable.

# CATIA

1. There should be exactly 10 teams per branch.
2. 2 members per team.
3. 10 teams will make it to the finals.
4. Minimum Three FE teams compulsory from each branch.
5. The position in the final round will decide the position of the branch.

## **Round I:**

MCQs

Teams will be given MCQs to solve.

Time span - 30 Minutes.\*

## **Round II:**

The Final Round will be on CATIA and based on 3D .

Time Duration: 60 Minutes.\*

\*changes in the pattern can be made with a prior notice (min 2 days before the event) to the branch heads.

\*the decision of the Judges will be FINAL and non-questionable.

# TECH MATRIX

“Ever wondered how your daily Sudoku and Crossword solving skills can make you win cash prizes ?”

## **GUIDELINES**

1. There should be at least 20 teams per branch including 5 Pure FE teams per branch.
2. 1 or 2 members per team.
3. There will be only one round in this event.
4. The position in this round will decide the final position of each branch.
6. As it is an open event, +15 points will be awarded to that branch whose maximum students will take part in it (Max. students will be calculated by the percentage of students of a specific branch attending that event).

### Rules:

1. The participants have to solve a Sudoku and Crossword puzzle in this event.
2. The Sudoku puzzle will follow the normal standards while the Crossword puzzle will have technical words as its answers.
3. Sudoku will be evaluated if and only if the participant fills the whole Sudoku matrix.
4. Crosswords will be evaluated based on the number of correct answers.
5. The participant will record their answers in a google form. Both the Sudoku and the Crossword will have a common google form.
6. Time given will be 40 mins.

# TECHSTORM ( TECH QUIZ)

## **GUIDELINES:**

1. 20 minimum participants per branch
2. Compulsory 5 FE from each branch.

## **ROUND 1:**

Aptitude will be written in MCQs.

30 aptitude questions.

Time : 20 Mins

+4 marks will be awarded for a right attempt

-1 marks will be awarded for a wrong attempt

0 marks will be awarded if not attempted

5 participants per branch will be selected for the next round.

## **ROUND 2:**

Total Questions : 15 questions

Time : 30 seconds per question

Paper Pattern will be disclosed at the time of the event...

# PLACEMENTS APTI

## **Guidelines**

1. This competition is open for all.
2. There is no limit on the number of participants.
3. There will be one round only.
4. Each team consists of only one student.(minimum **20 teams**)
5. As it is an event of mass participation so +15 points will be awarded to that branch whose maximum students will take part (Max. students will be calculated by the percentage of students of a specific branch attending that event).

## **Round Details**

1. Teams will be given MCQ aptitude questions, 30mins will be given for solving.

# CS-GO

1. There can only be 1 team per branch.
2. Team Size : 5 members ( 1 Fe per team ).
3. Games will be played online and further details will be provided later.

## GAME SETTINGS;

1. Rounds : 15 Rounds per game.
2. Voice Chat : On
3. Friendly Fire : Enabled
4. Map Pick :
  - a. The following 7 maps will be allowed in the event :  
Dust II, Inferno, Mirage, Nuke, Overpass, Train, and Vertigo.
  - b. For each game each team will ban 3 maps (total 6 maps).
  - c. The match will be played on the last remaining map.
5. Team picking their side( CT or T ) will be chosen randomly each game.

## GENERAL GUIDELINES:

1. CRASHES AND DISCONNECTION: If a Player crashes or disconnects during the load screen, prior to beginning play, then the Map must be restarted. If a Player crashes or disconnects during Match play, then play will continue on and it is up to the disconnect Player to reconnect as soon as possible if he/she can.
2. EVENT FORMAT:
  - a. There will be a total of 10 matches ( each team will play against all other teams).
  - b. Positions will be decided on the basis of no. of games won( primarily) and no. of rounds won( secondary ).
3. Teams will make sure availability and stable connection of their members. The decision taken by the board will be final under any circumstance.

# CHESS

## **GUIDELINES**

1. There can only be 1 team per branch.
2. 5 members per team.
3. 1 Fe must be in a team.
3. The position in the final round will decide the position of the branch.  
Instructions-
4. Each branch will play against all other teams. The last position holder will be disqualified and the remaining 4 will qualify for the semi final.
5. IN semi 1st will play against 4th and 2nd will against 3rd position holder (knockout).

## **Games Detail:**

Platform: Chess.com

3 rapid matches (10min) without increment will be there for each member.

In case of a draw 5min (blitz will be there) (only one game will be there)

TO win a match team must win over 3 boards.

# Rubix Challenge

Branches can submit any number of videos ,best will be considered.

send your video on : [aittechboard2020@gmail.com](mailto:aittechboard2020@gmail.com)

before 22nd january:

participants should be clearly visible in the video (not just hands).

# SCI FI WRITING

## **GUIDELINES:**

1. There should be exactly 6 students per branch.
2. Minimum one FE participant compulsory from each branch.
3. There will be only one round.
4. Topic should be provided on the spot only.
5. The student has to write a sci-fi story.
6. Paper will be provided but the student has to bring his/her own stationary.
7. Time allotted: 30 minutes.

# AD making

## **GUIDELINES:**

1. There can be 2 teams per branch. (1 Ad compulsory and 1 optional)
2. Minimum 5 members per team. (2 non aitiains are allowed for some scene in add)
3. The Ad should be original and any content from youtube or any other already available sources will lead to deduction of marks.
4. It should not have any kind of vulgar content or any content which can hurt the feelings of any community/ person.
5. If any AIT Engineering and Technical board members/ faculties irrespective of branches are willing to take part in this event then they should take the consent from technical secretaries at first.
6. The characters in the Ad should have at least 20% FEs.
7. All the students involved in the process should be included in the credits along with year.
8. Time limit is 2 +1 minutes. Negative marking will be done if the time limit is exceeded or lagged (5 points for every 5 seconds).
9. The branches have to submit their ad on or before 21 January before 12 pm to [aittechboard2020@gmail.com](mailto:aittechboard2020@gmail.com) 2 copies of abstract describing the theme and story of the movie. Failing to do so will lead to direct disqualification.
10. \*changes in the pattern can be made with a prior notice (min 2 days before the event) to the branch heads.
11. \*Non technical members are not allowed to interrogate with judges , the decision of the Judges will be FINAL and non-questionable.
12. Themes are:
  1. Covid awareness
  2. Promoting digital India in the field of healthcare.



# UNDERTAKING

We branch heads (4 branches) and Technical heads has read and understood all the points and rules given in the rulebook. The Rules and Regulations mentioned are fair and acceptable. We are aware of all the rules and we ensure that the rules are followed and Tech- aakriti 2020-21 will be conducted successfully.

It will be the responsibility of the branch heads to make sure that every student of their branch takes part in at least one event.

Decisions taken by judges and the technical board will be final. In case of any disputes, participants or branch heads must consult the technical secretaries.

## **Key Points**

1. Healthy competition
2. No use of unfair means

Branch	Branch Head	Technical Head
Comp-A		
Comp-B		
IT		
Mech		
ENTC		

## Technical Secretaries

ARUN

RIYA

## Technical Secretaries 2019-20

Saurabh Pratap

Nidhi Yadav

## Faculty IN-Charge

Dr. P. B. Karandikar

Dr.Ashwini Sapkal