

Circuit-Mania



Introduction

You have to design a specific electronics application by using the components provided by us. The application will use the concepts from basic Analog and Digital electronics and to be designed on a Bread Board.

Game Play

Round 1:

This will be a written elimination round consisting of questions related to aptitude and basic electrical and electronics hardware.

- · Question sheets will be provided to the registered teams on a particular time.
- They will have 1 hours to solve the questions and submit the answer sheets.
- · Answers have to be written on the same sheet.
- There may be negative marking in some questions. Details will be specified in question sheet.
- Sheets must be submitted within the time limit. No sheets will be accepted after the dead
- · 10 teams will be advancing to the 2nd round

Round 2:

Teams that will qualify after the first round will build an Application. The theme of which will be disclosed on the spot.

- · All the components and required material will be provided to the teams.
- · All teams will be having same kit of components.
- · A total of 3 hours will be given to each team.
- You must design the circuit by using the components provided by us. You may not use
- Any other component/material however in case something got damaged you may request the organizer to replace the components/parts.
- · Working space with all tools and equipment will be made available however teams are

- Free to move at their pace but they have to submit finished/unfinished application and all other unused parts to the registration desk.
- Teams should draw circuit diagram of the application depicting all the principles and theories involved in circuit as well as the working of the Application on a Chart Sheet.
- · Chart Sheet will also be made available by us but you can get only one chart sheet per team.
- Application, Chart Sheets and other unused components must be submitted within the time limit.
- · Submitting the application/kits early will benefit the team as time bonus.
- · Time bonus will be considered for tie-breaking between two or more teams.

Judging Criterion (for round 2)

The application will be judged according to the following criteria:

- · Design of circuit. (10)
- · Compactness of design. (15)
- Efficiency of the application. (15)
- · Desired output. (20)
- Exploration of concepts/theories.(10)
- · Breadboarding skills/neatness of the implemented circuit. (10)
- · Additional functions/options available in the Application. (10)
- · Contents of Chart Sheet. (10)
- 5 teams will be advancing to the 3rd round

Round 3:

- This will be the matlab round and all the team who have advanced to this round will be implementing their circuits in simulink.
- The teams first three teams who could make their circuits run without any errors with the expected outputs will win this competition.

Rules

- Teams of three participants only can contest for this event. Register your team at www.blitzschlag.org
- There will be total 3 rounds.
- First round will be elimination round with objective type questions from fields of
- Electronics and Electrical and some questions will be based on aptitude.
- Second round will be circuit designing round in which actual application has to be made.
- Both the rounds are open in nature, means you will be provided question
- Sheets/components on the registration desk and you need to submit them back within the specified time limit.
- All the components and material required for the circuit will be provided by us.
- Power supply and other testing devices like multimeter, CRO (if needed) and other tools will be made available in a shared hall.

Prizes

Prizes worth 8000 INR

Contact us

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Schedule

Will be updated on website: www.blitzschlag.org