



EE COMPETITIONS

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The AutoCAD Drawing Competition

1.1 Competition Overview:

PROCOM'24 presents the AutoCAD Drawing competition to show your talent and capabilities in AutoCAD Design Process and to become the best straight through merit and high-quality performance. We welcome all to participate and enlighten your capabilities.

1.2 Members per Team:

1 to 3 members per team

1.3 Rules:

- 1.3.1 Minimum 1 and maximum of 3 members are allowed in each team.
- 1.3.2 Participants must appear at the competition room at least 15 minutes before the commencement of the competitions.
- 1.3.3 Candidates must check AutoCAD software, Mouse & Keyboard before starting the competition.
- 1.3.4 Participants must not communicate or disturb another team during the Competition.
- 1.3.5 Stationary (pencil, pen, paper etc.) will be provided.
- 1.3.6 Calculators will not be provided; so, bring your own calculators.
- 1.3.7 Mobile phones should be switched off during the competitions.
- 1.3.8 Latecomers will not be given extra time.
- 1.3.9 University card and CNIC is necessary.
- 1.3.10 Any team found with any kind of cheating materials or illegal resources (e.g. USB, mobile, internet etc.) during the competition will be disqualified.
- 1.3.11 Competition Head has the right to disqualify any team in any case.
- 1.3.12 No extra time will be given in case of light or PC being shut down by any reason, so keep saving your task.
- 1.3.13 Judges will analyze performance. Results will be final and unobjectionable.
- 1.3.14 Only registered and paid candidates will be allowed.

1.4 Winning Criteria:

- 1.4.1 Winner will be chosen based on three rounds of performance.
- 1.4.2 The shortest time will be taken.
- 1.4.3 The perfect model of 2D and 3D drawing(s).

1.5 Requirement:

- 1.5.1 The competition will be conducted in the lab. PC's will be allotted to each team.
- 1.5.2 Paper, pencil, pen for the logic building will be provided to each member of the team.

1.6 Rounds:

1.6.1 First two Rounds on day 1.

1.6.1.1 Round 1: MCQ's

- I. Round 1 will consist of 30 minutes.
- II. MCQS regarding different commands and their

Functionalities or Special functions and names of objects in AutoCAD will be included

- III. No team will be eliminated in this round.

1.6.1.2 Round 2: 2D drawings within shortest time

1.6.1.3

1.6.1.2.1 Round 2 will consist of 30-40 minutes. 2D drawing(s) and objects will be given to participants for implementation

1.6.1.2.2 50% teams will be eliminated after the 2nd round on the basis of the scores of round 1 and round 2. Only some qualifying teams will be able to participate in the 3rd round.

1.6.2 Final Round on day 2.

1.6.3

Final Round: 3D Drawing implementation by a Written Statement

- I. The final round will consist of 45-60 minutes. A written statement or pictorial hints of drawing would be given to participants for implementation in AutoCAD. Where the team which has the correct drawing or the closest will be the winner of the competition.

functionalities or Special functions and names of objects in AutoCAD will be included

IV. No team will be eliminated in this round.

1.6.3.1 Round 2: 2D drawings within shortest time

1.6.3.1.1 Round 2 will consist of 30-40 minutes. 2D drawing(s) and objects will be given to participants for implementation

1.6.3.1.2 50% teams will be eliminated after the 2nd round on the basis of the scores of round 1 and round 2. Only some qualifying teams will be able to participate in the 3rd round.

1.6.4 Final Round on day 2.

Final Round: 3D Drawing implementation by a Written Statement

I. The final round will consist of 45-60 minutes. A written statement or pictorial hints of drawing would be given to participants for implementation in AutoCAD. Where the team which has the correct drawing or the closest will be the winner of the competition.

The Circuit Soldering Challenge

2.1 Competition Overview:

PROCOM'24 presents the The Circuit Soldering Challenge to show your talent and capabilities in Designing and Debugging Skills and to test your soldering skills and enhance it. If you love to play with electronics, then we provide you a chance to show us your level of skills and expertise.

2.2 Members per Team:

1 to 3 members per Team.

2.3 Rules:

- 2.3.1 Minimum 1 and maximum 3 members are allowed on each team and it will be a 2-days competition.
- 2.3.2 Candidates must appear at the competition room at least twenty minutes before the commencement of the competition.
- 2.3.3 Candidates must check their computer (Mouse, Keyboard) before starting the competition.
- 2.3.4 Latecomers will not be given extra time.
- 2.3.5 Current university, college or institution cards are necessary.
- 2.3.6 Competition head has the right to disqualify any team in any harm case.
- 2.3.7 Calculators will not be provided; so, bring your own calculators.
- 2.3.8 Any material/document is not allowed in any format.
- 2.3.9 Judges will analyze performance. The verdict will be final and unobjectionable.
- 2.3.10 Use of any illegal resource during competition (e.g. USB, mobile, Internet etc.) will cause the elimination of that team.
- 2.3.11 Only registered candidates will be allowed.
- 2.3.12 Keep saving your task during competition. No extra time will be provided in case of light off or PC shut down for any reason.
- 2.3.13 If the PC gets hanged due to any reason. Inform the invigilating team instantly.
- 2.3.14 Ensure yourself that Multisim and Proteus software is correctly installed and working well before starting the competition. No excuses will be entertained during competition.
- 2.3.15 Mobile phones should be switched off during the competition.
- 2.3.16 Candidates must not communicate or disturb other teams during the competition.
- 2.3.17 Candidates may not leave competition while the competition is in progress due to any reason.

2.4 Winning Criteria:

- 2.4.1 Winner will be chosen on the basis of a three round performance.
- 2.4.2 Shortest time will be taken
- 2.4.3 circuits will be judged on the bases of Logic and implementation, Time consumed in making the circuit, Circuit complexity, stability & Working condition of the circuit
- 2.4.4 For tie-in Any Round Previous round, scores will be considered

2.5 Requirement:

All the basic stationary (rough sheet, pencil, pen) and one computer per team, power supply, and breadboard, Soldering iron, solder, electronic components, and Vero board etc. will be provided for designing. The calculator will NOT be provided.

2.6 Rounds:

a) Round 1: Debugging

The first round will be the Debugging round. You will be provided a sheet having 2 circuits on it OR you may have to debug a circuit on a software (Multisim or Proteus). You have to complete this round in 45-60 minutes. After this round, 30% teams will be eliminated depending upon scores.

b) Round 2: Soldering of Discrete Components

For the second round you will be given 30 minutes in which you have to solder discrete components, the schematic will be given on which you'll have to solder them. After this round, 50% teams will be eliminated depending upon scores obtained in both 1st and 2nd round.

c) Final Round: Debugging & Implementation

The third round will be a circuit Debugging & implementation round. In this round, You will be given 45-60 minutes in which you have to Debug the circuit and Implement it. Either connections are missing or maybe wrongly placed in the schematic you first have to debug then solder the circuit.

HARDWARE EXHIBITION

3.1 Competition Overview:

HARDWARE EXHIBITION is your chance to showcase your creativity and innovation with your projects and prove yourselves as a Team of professional Hardware and Circuit designers. We are here to cater you with the audience.

This competition mainly focuses on the engineering and ingenuity skills portrayed by students in a variety of engineering projects that they have developed themselves.

Your teamwork will be judged, highlighting your abilities as a whole. If you need to pitch and showcase your capability and talent we would love to have you in PROCOM 23.

3.2 Members per

Team:

2 to 5 members

3.3 General Rules

- Minimum 2 and maximum 5 members allowed per team
- It is not mandatory that all the members of a group should be from the same institute
- Any team that is not ready or available at the time specified (Relaxations are possible, according to the situation) will be eliminated from the competition
- Participants shall not be allowed to be part of more than one team
- Replacement of the parts will be allowed in case only if accident occurs
- Competition Head/EE Competition team has the right to disqualify any team in any case.
- Judges will analyze performance. Results will be final and unobjectionable.
- Only registered and paid candidates will be allowed.

3.4 Competition Rules:

- 3.4.1 All the tasks should be completed within a given time slot.
- 3.4.2 Only selected projects will be exhibited. Participants will not be allowed to exhibit anything other than selected projects.
- 3.4.3 It is advised to bring your own operational systems i.e. laptops etc. as no such resource will be provided by the team.
- 3.4.4 No software will be provided.
- 3.4.5 It is mandatory for every exhibited project to have a draft containing a detailed specification of their project
- 3.4.6 Projects will be on display for the general public. During the exhibition participants are required to be present with their projects at all times.
- 3.4.7 Any Software or hardware brought should be informed duly to the competition head beforehand.
- 3.4.8 Each and every project will be evaluated by a Panel of judges at the venue.
- 3.4.9 Any sort of replication and unfair means will result in disqualification.

- 3.4.10 Decorum should be maintained at all times. Any sort of ill behavior will result in immediate disqualification from the competition.
- 3.4.11 Use of mobile phones is prohibited.
- 3.4.12 Judges will analyze performance. Results will be final and unobjectionable.
- 3.4.13 Participants are required to be present at the venue 20 minutes before the commencement of competition.

3.5 Marking Criteria

- 3.5.1 Novelty of design and idea
- 3.5.2 Practical Aspects
- 3.5.3 Knowledge
- 3.5.4 Presentation
- 3.5.5 Project report

3.6 Requirements

Single phase AC supply (KE) and tables for displaying projects will be provided. If Any team needs anything else or has any special requirements, they are encouraged to bring it along. In case they require assistance from PROCOM Tcnm then they should contact team PR and get in touch with the competition head.

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