

# Bhagwant Institute of Technology, Barshi

## AARAMBH-2K17

**ELECTRONICS (E&TC/ELECTRICAL/BIO MEDICAL)**

	<p style="text-align: center;"><b>PAPER PRESENTATION TOPICS</b></p> <ol style="list-style-type: none"><li>1. Image &amp; Video Processing</li><li>2. VLSI Design &amp; Fabrication</li><li>3. Radio &amp; Satellite Communication</li><li>4. 3G &amp; 4G Technology</li><li>5. Embedded System</li><li>6. Optical Communication</li><li>7. System on Chip (SoC)</li><li>8. Ad-hoc Network</li><li>9. Speech Processing</li></ol> <p style="text-align: center;"><b>FOR RULES SEE THE LAST PAGE</b></p>
	<p style="text-align: center;"><b>PROJECT EXHIBITION</b></p> <ol style="list-style-type: none"><li>1. Electronics Engineering projects by students of SE/TE/BE students.<ol style="list-style-type: none"><li>2. Not necessarily final year projects.</li><li>3. Projects in any of the sub-branches of Electronics Engineering.</li><li>4. Software based projects are also allowed.</li></ol></li><li>2. Bring one hard copy of synopsis and Send synopsis to mail id</li><li>3. aarambhtechfest@gmail.com on or before 20th feb 2016 Synopsis should contain the details regarding group.</li><li>4. Project demonstration is must. (At least partial fulfillment of project objective)</li><li>5. Requirements for project display should be clearly mentioned.</li></ol>
8085	<p style="text-align: center;"><b>MICRO PROCESSOR &amp; CONTROLLER PROGRAMMING:-</b></p> <ol style="list-style-type: none"><li>1. <u>μ</u>TRICS Maximum two participants per group. Entry fees per group: 200 Rs. College I-Card is compulsory.<ol style="list-style-type: none"><li>1. This contest is based on<ol style="list-style-type: none"><li>a) Microprocessor b) Microcontroller</li></ol></li><li>2. On the spot entries are available.</li><li>3. Round First: Elimination Round -Aptitude Test on 8051 microcontroller and 8085 microprocessor.</li><li>4. Time Duration: 30 min</li></ol></li></ol>

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	5. Round Second: 8051/8085 programming on Keil $\mu$ vision-3 or 4.

	<p style="text-align: center;"><b>CIRCUIT SUDOKU</b></p> <ol style="list-style-type: none"><li>1. Competition will be conducted in two rounds.</li><li>2. There will be two members per team.</li><li>3. Names of the participants entered in the registration forms shall be considered final and no changes will be allowed thereafter.</li></ol> <p style="text-align: center;"><b>Round 1: (Elimination Round)</b></p> <ol style="list-style-type: none"><li>1. This round consists of MCQ type questions.</li><li>2. There will be 30 questions based on Electronics fundamentals and design ability.</li></ol> <p>Time Duration: 30 minutes.</p> <p style="text-align: center;"><b>Round 2: (For those who will qualify ROUND 1)</b></p> <ol style="list-style-type: none"><li>1. Problem statement based on circuit design for an application will be given.</li><li>2. Proper calculations and circuit diagram is required on paper.</li><li>3. Resources such as components, breadboard etc will be provided to implement the circuit built.</li><li>4. Use of calculator is allowed.</li><li>5. Once the time limit is over, no team will be given chance to complete their circuit, if any found will be disqualified.</li><li>6. There will be no access given to the internet or book for reference.</li><li>7. No negative marking.</li><li>8. In case of tie judges and organizers have the right to take the final decision.</li><li>9. Time Duration: 1 hrs.</li></ol> <p><b>2.</b></p>

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#### **CIRCUIT DESIGN**

##### **3. 1 CIRCUIT DESIGN:**

Maximum two participants per group.

Entry fees per group: 200 Rs.

College I-Card is compulsory.

1. First round will be elimination round with objective type questions from the fields of Electronics. (For T.E. and B.E. students will be Expert Technical Aptitude Test. For F.E. and S.E. students will be Beginners Aptitude Test).

2. Time limit for each test will be 30 minutes.

3. Second round will be circuit designing round in which actual applications has to be made.

4. You will get question sheets/components on the registration desk and you have to Design given Circuit.

5. Time limit for this round will be 60 minutes.

6. There will be time bonus.

7. Those participants or groups who are getting output as first will be declared as winner.

8. All the components and materials required for the circuit provided by us.

9. Power supply and other testing device like multimeter, CRO (if required).

Other tools will be made available in a shared hall.

10. Spot entries are available.

#### **TECH QUIZ**

##### **Technical Quiz Rules:-**

1. A team shall consist of max two students .

2. The decision of the quiz-master will be final and will not be subjected to any change.

3. Participants shall not be allowed to use mobile or other electronic instruments.

4. Questions shall be in the form of multiple choice, True / False statement, Visuals, Specific-answer question etc.

##### **Elimination Round :-**

1. Each team would be given a set of question paper containing 20 multiple choice objective type questions.

2. Time limit - 20 minutes.

3. The qualifying Teams would be selected for final stage rounds.

4. In case of tie between 2 or more teams, further 5 questions would be asked for final selection.

5. The selected teams shall have to appear for the final round.

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### **Final Quiz – Stage Rounds:-**

#### **Round 1:**

**A question will be asked to a team and if they are unable to answer, it will be passed to the next team .**

1. Each team would be asked 2 questions each.(Objective type or specific answer questions)
2. 10 marks for each correct answer.
3. If a team cannot answer the question, they can pass the question & then the question would be forwarded to the next team.
4. Answering time is only 30 seconds.
5. Team discussion is allowed.

#### **Round 2: Rapid Fire Round: -**

**Each team will be asked as many questions as possible one after another in one minute of time.**

1. 10 marks for the correct answer and negative 5 marks for the wrong answer
2. Team discussion is allowed
3. If a team cannot answer the question, they can say pass for the next question. The question will not be forwarded to the next team.

#### **Round 3 - Visual round –**

**Teams will be shown clips or Images of components and will have to answer.**

1. 10 marks for each correct answer.
2. Each Team would be asked 2 visual questions. ( 1 slide in each round )
3. Visuals include components and ICs
4. Answering time is only 20 seconds.
5. No passing to the next team.

**PAPER PRESENTATION**

JSPM Group of Institutes, Pune

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