

# APEEJAY STYA UNIVERSITY



ELAN 2016

TECH-SHIELD 16

BOOKLET OF EVENTS

# EVENTS

## **1. PROJECT DISPLAY**

**TIME: 10:00 AM – 12:00PM**

**VENUE: Library Corridor**

### **INTRODUCTION:**

In this fast modernising world and even faster modernising technologies, a need of innovating ideas as well as people to implement those ideas has increased beyond imagination. It is the creation and implementation of these ideas that has allowed us to develop many of the equipments and gadgets that has made this world a lot smaller and within the reach of a common man.

PROJECT DISPLAY is not only a competition but an opportunity for all the budding engineers to showcase their brilliant implemented ideas to other people and to encourage them to develop more such ideas and to keep engineering.

### **RULES & REGULATIONS:**

- This is an individual as well as a team event.
- Each team should have not more than 2 members.
- Each team will be allotted max.10 minutes (including time for cross questioning by judges) to explain their projects.
- Each team or individual should have a working university level project.
- Participation can be done on spot also.
- Projects from any branch of engineering are acceptable.
- Laptops should be brought by the participants(if required especially by CSE)

### **FACULTY COORDINATOR:**

- 1) Dr. Sudhakar Ranjan
- 2) Mrs. Aarti Nagpal
- 3) Mrs. Ekta Bhayana

### **STUDENT COORDINATOR:**

- 1) Dhruv Yadav (EECE) (09999474297)
- 2) Poojita Suri (CSE) (09930710795)
- 3) Chinmaye Agrawal (MEPD) (09958020822)

## **2. PICK & DESIGN**

**TIME: 02:00 PM - 04:00 PM**

**VENUE : AG10**

### **INTRODUCTION:**

In today's world, everybody is associated with wanting to have an easy life, by the use of so called 'hacks', which makes daily life a lot easier by simple DIY projects. The main domain in these 'hacks' are electronics, which play a massive role in improving the nitty-gritties of our lives.

Therefore, PICK & DESIGN competition is an event in which engineering students have an opportunity to showcase their skills by successfully implementing the given select circuits which form a very important part of our lives. Students will surely learn from this event and appreciate the ability to be innovative.

### **RULES & REGULATIONS:**

- TIME LIMIT is of **2** hours.
- Each team can consist of maximum of **3** members.
- Project circuits will be provided at the time of competition.
- All components will be provided on the spot.
- Each team can select any one given circuit (out of **5**) and successfully execute it.
- Participants must bring their own laptops for components' reference.

### **FACULTY COORDINATORS:**

- 1) Mrs. Kavita Jindal
- 2) Mrs. Manju Aggarwal

### **STUDENT COORDINATORS:**

- 1) Mutumba Maliro (09971769791)
- 2) Bukasa Tshibangu (08377881302)
- 3) S.Shreyas (09968262696)

### **3. BoT-DASH**

**TIME: 09:00 PM - 09:00 AM**

**VENUE: AG10-A**

#### **INTRODUCTION:**

Speed!! Speed!! Speed!! In this world of everlasting competition, speed is the word. Blasting through your way at an awe inspiring pace, indulge your robust bots in the exciting race. **"One, who falls behind, is left behind."** So pack your bags and pump your bots because it's get, set and GO!!!

The motive is to design a wired/wireless robot being autonomous or manually controlled machine that is capable of completing the ALL TERRAIN Arena successfully in minimum time.

#### **RULES & REGULATIONS:**

- Maximum team members – 3
- Any team not reporting in time will be disqualified.
- 24 hrs. includes the time for assembling, testing and racing the bots.(i.e. participants won't be having less than 24 hrs. to assemble their bot or robots)
- Line follower should be microcontroller based.
- Battery must be on board (bot or robot).
- Kits for the bots will be provided on spot.
- Any part of the kit whatsoever should not be damaged while making the bots.
- The potential difference between any two points should not exceed a limit of 12V. A tolerance of 5% shall be provided.
- There is no weight limit for the robot.
- The robot will be judged on basis of (in priority):-
  - i. Time to complete the track.
  - ii. Number of checkpoints cleared.
- Team members will be allowed only three times to touch or reset their robots position during the run.
- Timer will start when robot starts from the starting point.
- There will be a time penalty if the robot touches any obstacle or the boundary of the track.
- Organiser's decision will be FINAL.

#### **FACULTY COORDINATORS:**

- 1) Mr. Manish Yadav

#### **STUDENT COORDINATORS:**

- 1) Shivam Singh (08130337021)
- 2) William Russel (09958490337)

#### **4. GREEN IDEA PRESENTATION**

**TIME: 12:00 PM - 01:00 PM**

**VENUE: AF06**

##### **INTRODUCTION:**

Sustainable development is maintaining a delicate balance between the human need to improve lifestyles and feeling of well being on one hand, preserving natural resources and ecosystems, on which we and future generation depend.

GREEN IDEA PRESENTATION is an idea generating platform on principle of design thinking that aims at spurring creativity and fostering innovation on environmental issues. So it's a wonderful opportunity to express your idea, thinking about green energy.

##### **RULES AND REGULATIONS:**

- TIME LIMIT is of 1 hour.
- It is an individual event. .
- All materials will be provided on spot.

##### **FACULTY COORDINATORS:**

- 1) Mrs. Manju Aggarwal

##### **STUDENT COORDINATORS:**

- 1) Shubham Chauhan (08447390646)
- 2) Rupin Sahota (09711932554)

## **5. Hack-A-thon**

**TIME:** 10:00 AM - 10:00 AM (next day)

**VENUE:** BS-09

### **INTRODUCTION:**

It is an event in which computer programmers' team have to collaborate intensively to develop software projects. Each team have to show case their software development skills including graphic designing, interface designing and project management in form of a full stack application.

### **RULES & REGULATIONS:**

- This is a 24 hour Team event.
- Each team should have maximum 3 members.
- Participants can take part in other event also simultaneously but they have to submit their projects next day before 10 AM.
- No plagiarism of code will be accepted.

### **FACULTY COORDINATOR:**

- 1) Dr. Sudhakar Ranjan

### **STUDENT COORDINATORS:**

- 1) Sahil Aggarwal (09818308563)
- 2) Prateek Aggarwal (09717890326)
- 3) Chetan Thakur Anand (09996014716)

## **6. Find-the-Glitch**

**TIME: 11:00 AM - 01:00 PM**

**VENUE: BG-15**

### **INTRODUCTION:**

A computer Programmer should be able to handle all kinds of bugs and errors his/her system encounters. In this event Programmer should find and fix any Syntax errors, Semantic errors, Logical errors and Runtime errors.

### **RULES & REGULATIONS:**

- This is an individual event.
- Contest will be conducted online on HackerEarth platform (link)
- Participation can be done on spot also.
- Laptops should be brought by the participants
- The participant should fix the bug in minimum time will be the winner;
- In case of tie, the compilation time would be given priority.
- Problems of different level would be given to solve.

### **FACULTY COORDINATOR:**

- 1) Mrs. Harsimran Kaur

### **STUDENT COORDINATOR:**

- 1) Gaurav Chauhan (09650836949)
- 2) Praveen Kumar Jha (08826509533)
- 3) Chetan Gupta (08802351055)

## **7. WEAVE THE WEB**

**TIME:** 01:30 PM - 04:30 PM

**VENUE:** Library First Floor Computer Lab

### **INTRODUCTION:**

The internet or the World Wide Web is a very important part of modern day life. We are just a click away from the rest of the world and this is all possible because of the presence of the internet applications that we have on our computer systems.

Internet chatting, emails, Online Editors and other Custom application developments are also employed in case of blog and social networking sites where individual users can contribute their written material on their own from their computers that are placed in various locations around the world. Therefore for developers and Programmers it's a playground to bring something new and innovative to the world.

**WEAVE THE WEB** is not only a competition but an opportunity for all the budding programmers to showcase their brilliant programming skills and develop more such applications that would change the world.

### **RULES & REGULATIONS:**

- This is individual participation event
- Each will be allotted maximum 3 hours to complete their projects.
- Participation can only do on spot.
- Laptops should be brought by the participants(if required, especially by CSE)

### **FACULTY COORDINATOR:**

- 1) Mr. Manpreet Singh Sehgal

### **STUDENT COORDINATORS:**

- 1) Prateek Verma (09873551198)
- 2) Remi Goel (08447781225)
- 3) Samarpit Nasa (09953510970)



## **8. Game On!**

**TIME: 10:00 AM - 04:30 PM**

**VENUE: BG15**

### **INTRODUCTION:**

In this fast and busy world, a need of way to enjoy and relax is required and computer gaming is one of those ways. Various genres of games make people apply their mind in different ways rather than only in studies. In today's world everyone plays games on their PCs, so this event is just for that game lover to play and compete among all others.

### **RULES & REGULATIONS:**

- This is an individual event.
- Each participant is required to bring headphone with him.
- Laptops are not required.
- Any misbehaviour will lead to disqualification from event.
- No late entry will be entertained once event is started.
- The participant securing highest mark will be the winner

### **FACULTY COORDINATOR:**

- 1) Mrs. Deepti Thakral

### **STUDENT COORDINATOR:**

- 1) Praveen Kumar Jha (08826509533)
- 2) Gaurav Chauhan (09650836949)
- 3) Archit

## **9. Simudesign-SOLIDWORKS**

**TIME: 12:00 PM - 07:00 PM**

**VENUE: AF02 <CAD LAB>**

### **INTRODUCTION:**

#### ***PART MODELING & ASSEMBLY MODELING for Engineers & Designers***

The task is all about using your technical knowledge and Basics of Engineering Drawing & Graphics to do the Part Modelling of the given Model, Assemble and simulate it using Solid Works Software in the given time span.

### **RULES & REGULATIONS:**

- Two members in a team are compulsory.
- The task must be completed in given time interval.
- Candidates may bring their own laptop for their ease of access.
- No unethical act will be entertained and the participants will be strictly penalized for the same.
- Use of Mobile & Data Connection/Wi-Fi is strictly prohibited. If participants are found using any other device during the event they may be disqualified.

### **FACULTY COORDINATOR:**

- 1) Ms. Smita Gupta

### **STUDENT COORDINATORS:**

- 1) Rishabh Mahajan (099718287199)
- 2) Abhishek Maitra (09654466106)

## **10. CONSTRUCTO**

**TIME: 05:00 PM - 09:00 PM**

**VENUE: Mechanical Workshop**

### **INTRODUCTION:**

This event is about fabrication and development of engineering tool box which is to be well organized with given dimensions and aesthetics.

### **RULES AND REGULATIONS:**

- Only group of max three participants
- Time allowed is 6 hours
- All the discretion will be done by the coordinator
- Participants will be entertained half an hour before the start of event.

### **FACULTY COORDINATORS:**

- 1) Mr. Chetan Bhardwaj

### **STUDENT COORDINATORS:**

- 1) Mihir (09996014693)
- 2) Manish (09996015184)

## **11. SUPER STRUCTURE**

**TIME: 10:00 AM - 12:00 PM**

**VENUE: CNC LAB**

### **INTRODUCTION:**

Competitors are required to make the largest possible structure (Optimum) using the resources provided which can withstand the maximum possible weight. Groups with two largest structures and could withstand the given load, will be declared as the winner of this competition.

### **RULES & REGULATIONS:**

- Students will be required to form a team of two members.
- Each team will be given a chance to select three coupons from the bunch of coupons. The resources will be given to respective team according to the coupons they selected.
- Teams will be judged based on the quality of Structure produced with the given resources.

### **FACULTY COORDINATOR:**

- 1) Mr. Vijay Kumar

### **STUDENT COORDINATORS:**

- 1) Ashish Anand (07838228759)
- 2) Kanishka Kumar Dubey (09896319572)

## **12. TreeQuation**

**TIME: 10:30 AM - 01:00 PM**

**VENUE: AG08**

### **INTRODUCTION:**

TreeQuation is a unique platform for students from all walks and trades to develop a sustainable solution for various real time problems. Bring out the creative problem solver in you and solve the problem given.

**Event Structure** – The event consists of presenting and defending of solutions (in working prototype and PowerPoint presentation format) by teams of members not more than 2 each that address issues from the domain of either Biodesign or Biomedical Engineering as per the given format.

### **RULES & REGULATIONS:**

- A functional prototype of the solution has to be presented along with presentation slides. The number of presentation slides should not exceed 10 (excluding thank you and opening intro slide).
- The prototype has to cater to the domain of BioDesign or Biomedical Engineering.
- The presentation has to be developed as per the given format.
- Use of profane, offensive or any sort of illegitimate practice, language, material or content is strictly prohibited and will lead to disqualification.
- All presentations are mandatory to address any one of the given areas (more than one can also be included) and should also have a component of entrepreneurship involved.
- Every team is given 10 minutes in total out of which 7 minutes are reserved for presenting the idea, strategy or proposal and the rest 3 minutes are to defend the presentation against the deliberations by the jury.
- The decision of the jury is final and all participants are to abide by the same.
- The number of members per team should not be more than 2 members each.
- All team numbers shall be provided team number so as to keep anonymity and avoid any confusion.

**PPT format** *(slides to be included are as follows in the given order)*

- i. Introduction
- ii. Objective
- iii. Method
- iv. Economic Feasibility & Market Potential
- v. S.W.O.T
- vi. Due references and bibliography

**FACULTY COORDINATOR:**

- 1) Dr. Vineet Sharma

**STUDENT COORDINATORS:**

- 1) Aishwarya Khadanga (08800949296)
- 2) Deepikka Sharma (08447228977)

TECHSHIELD

### **13. BLUEPRINTS (B Plan Competition)**

**TIME:** 02:00 PM - 04:00 PM

**VENUE:** AG08

#### **INTRODUCTION:**

**"BLUEPRINTS"**- It basically deal with Business plan competition. The main purpose of the event is to let the participants come up with their start up plans.

In this competition students need to register themselves by filling a registration form. The participants will make a Business Plan of their choice and will present it on the day of competition. The most innovative idea would be selected by the judges.

#### **RULES AND REGULATIONS:**

- Business plans may be submitted by individual or by a team.
- There must not be more than 3 in a team.
- Participant(s) should bring the soft copy in pen drive and a hard copy with them.
- Final-round submission will be judged according to the following criteria:
  - Is the business financially feasible?
  - How innovative is the idea?
  - Quality of products, services and/or solutions
  - Market opportunities and competition
  - Team qualifications
  - Overall attractiveness of the venture

#### **FACULTY COORDINATORS:**

- 1) Mrs. Ridhi Bhatia

#### **STUDENT COORDINATORS:**

- 1) Harita Bansal (09896319579)

## **14. Innovative Design Solution**

**VENUE: BF03**

**INTRODUCTION:**

***" LET'S NURTURE A BETTER FUTURE "***

Innovative Design Solution for product ( commercial, social cause, Decorative, any cause).

**RULES & REGULATIONS:**

**1) The Presentation should have :-**

- Prototype submission to the scale.
- Design development : VISUAL & WRITTEN
- Aim & objective ( Max. 200 words )
- Product Specification ( All dimensions material & other details )
- Design should be ORIGINAL.

**2) All design should have student complete details.**

3) Decision by jury will be final, no changes will be entertained.

4) Atleast 5 entries should be there for the competition.

**SUBMISSION DATE:** 10th March 2016

**LAST DATE OF REGISTRATION:** 05th March 2016

**REGISTRATION FEE:** Rs. 100 only.

**FACULTY COORDINATOR:**

- 1) Mr. Dibyendu Tripathi
- 2) Mrs. Nupoor Jha

**STUDENT COORDINATOR:**

- 1) Ekansh Sethi (09992589358)



## **15. Thyroid & Health Check-up Camp**

**TIME:** 10:00 AM - 05:00 PM

**VENUE:** Bioscience Lab

### **INTRODUCTION:**

It is quite popular that “HEALTH IS WEALTH”. A person with a good health always has an upperhand in living a healthy life in this environment. So, a health check-up camp is being set up with the aim of providing health check-ups for all. The health check-up will include thyroid test, BMI check, B.P checkup, Blood Group test etc. Overall, it is an wonderful opportunity to get a basic health check-up.

### **RULES & REGULATION:**

- TIME DURATION- 7 hrs
- It is open for all i.e it is a walk-in check-up camp.

### **FACULTY COORDINATOR:**

- 1) Dr. Atul Kathait

### **STUDENT COORDINATOR:**

- 1) Ms. Nikku Yadav (09711197679)
- 2) Snehalata Tandi

## **16. Design of TRUSS Bridge**

**TIME: 10:00 AM – 01:00 PM**

**VENUE: AS08 (B)**

### **INTRODUCTION:**

A truss bridge is a bridge whose load-bearing superstructure is composed of a truss, a structure of connected elements forming triangular units. The connected elements (typically straight) may be stressed from tension, compression, or sometimes both in response to dynamic loads. Truss bridges are one of the oldest types of modern bridges.

### **RULES & REGULATIONS:**

- Time limit of event is 3 hrs. 1.5 hrs for making bridge and other 1.5 hrs for load test.
- Each team can consist of maximum 3 member.
- Project material will be provided at the time of competition.
- Organiser decision will be final

### **FACULTY COORDINATOR:**

- 1) Dr. S C Sharma
- 2) Mr. A K Zalpuri

### **STUDENT COORDINATOR:**

- 1) Shivam Sharma (9560258109)
- 2) Vaibhav Kapoor (9953218406)