1. **BACKGROUND**

**Nepal College of Information Technology – NCIT,** a pioneer private Pokhara University affiliated institution providing engineering education in  Nepal, is renowned for excellence in  teaching & research, while maintaining  close and mutually beneficial links  with various sectors. The Institute offers a wide range of innovative, creative and flexible academic programs, both theoretical and vocational, that suit the individual needs of each student which ultimately supports ongoing social changes and economic advances.

Even though various events are being organized in NCIT college in the sphere of engineering, this time entire third year students of this college is going to organize **NATIONAL EXPO ON TECHNOLOGY “NEXT”,** which is going to be the first ever technological fest in the history of NCIT. This event will be the biggest technical extravaganza held at NCIT premises and we are anticipating your gracious and valuable presence on the very occasion to make this event successful. Such event would be a milestone for engineering students in boosting and enhancing their practical knowledge.

1. **INTRODUCTION**

**NATIONAL EXPO ON TECHNOLOGY “NEXT”** will be the first ever nationwide fest on IT organized by Nepal College of Information and Technology. This event involves an active participation of students from more than 37 affiliated colleges of Pokhara University. An exhilarating voyage of technical know-how, **NEXT** focuses on the promotion of Technology and Innovation. It will give a chance to stop, culminate new ideas and showcase your technical expertise on different fields. The fest will be a three-day grandeur which involves a series of competitions, workshops, seminars, boot camps and guest lectures by some eminent personalities. **NEXT** is a fusion of creativity and imagination. It will be a perfect blend of entertainment and technology with the aim of transformation and empowerment of the society. The technical events included in this event are as follows :

Hackathon

Work camp

Tech talks

Seminar

Programming Competition

Quiz

Rapid code tournament

Open source promotion

Exhibition

Project showcase

1. **OBJECTIVES AND GOALS**

Students become active participants in the learning process not only through the consumption of content but through critical thinking and problem solving by creating own content. So this event aims to provide following objectives :

1. To provide a platform for students to demonstrate their talent and apply their skills which help them achieve their educational or professional goals.
2. To connect skilled students with members of senior management of any institute or organization and impress them with their determination and passion.
3. To provide a new learning environment for the students to challenge themselves and develop new learning skills.
4. To provide exposure and realistic outlook towards the competitive nature of real life.
5. To offer a chance to meet new people and learn more about the diverse fields they belong to.
6. To develop mutual understanding between the engineering institutions, domestic stakeholders and general public.
7. **PARTICIPANTS**
8. Engineers and Engineering students
9. IT students
10. Consultants
11. General Public
12. Technical Professionals
13. Technical Organizations
14. +2 Students
15. Industry
16. **METHODOLOGY**

The event will be conducted as per the following steps:

**STEP**-**1:** All our plans and strategies regarding the event will be portrayed and all government organizations, NGOs, INGOs, telecoms, colleges, consultancies and companies will be recognized for their crucial support and coordination.

**STEP-2:** Various researchers with their research works will be encouraged to participate in the program.

**STEP-3:** All the internal preparations for the whole event will be carried out in the college so as to make the event successful.

**STEP-4:** All colleges, professionals, different organizations interested in participating in the event will be invited for their active participation.

**STEP-5:** All colleges especially engineering colleges will be visited door to door so as to encourage them officially and personally for their participation.

**STEP-6:** Master plan of detailed work plan will be prepared for the rest minor and major works. The performance of various activities will be strictly based on thus made work breakdown structures.

**MAJOR EVENT DETAILS**

**PROJECT EXHIBITION**

Project Exhibition includes hardware, software, civil and electronics related projects demonstration where all the participants would be judged on the basis of their idea, presentation skill and group work. Participants can present their respective hardware and software projects separately in the exhibition.

1. **THEME**

Open Domain

1. **Team Specification**
2. A team may consist of maximum of four members.
3. Students from engineering and IT background can only participate in the exhibition.
4. Collaboration from different colleges are not allowed but can showcase their projects.
5. **Rules and Regulations**
6. The project should be completed before the time of demonstration.
7. Theme of the project should be specified at the time of registration.
8. Report should be submitted on time(before 5pm of 30th of Asadh )
9. Participants are allowed to use any programming language.
10. At the time of judging, all the members of the team should be present.
11. Dress code of the participants should be formal.
12. Decision of Jury Panel will be the final decision.
13. **Winner and Judging criteria**
14. Winners will be separately selected for hardware, software, civil and electronics project.
15. The winner of each category shall be chosen entirely based on the innovation and effectiveness of the project being presented.
16. Consolation prize may be given for any project that may belong to any categorized project.
17. **Certification and winner**
18. Winning team of any category will be awarded with cash prize Rs 10,000.
19. Best Presentation : Rs.5000
20. Best Idea : Rs 5000
21. Young innovative idea for intermediate(+2) students : Rs.5000
22. People Choice Award : Rs.5000
23. **Registration Details**
24. Registration fee : Rs.2000
25. Deadline : 30th Asadh,2076
26. Registration at NCIT, Balkumari ( NEXT Office room no. 504)
27. Contact : Mr. Pradip Thapa (9845956861)

**Logic Battle**

**Logic** **Battle** in **NEXT** is targeted to little more advanced participants, the one having good knowledge about data structure and algorithm. This competition mainly aims to provide platform for students having good logical and programming background but lacks the opportunity. Logic Battle is expected to be conducted between the group of participants, each group containing 2-3 members. The competition will end with judges selecting the winners and awarding them.

**Participants**

Logic Battle mainly plans to aim engineering students and engineers as participants. The participants are expected to have minimal knowledge on data structure and algorithms.

**Methodology**

The Logic Battle is a competitive coding competition which includes problem solving skills of a participant. Call for participation will be made through social media and candidates will be chosen in the first come first serve basis through Google registration form. The date and time of the event will be mailed to respective groups and participants once the registration is confirmed.

* **Competition Format**

It is going to be held on the second day of **NEXT** fest. Coding competition is the competition between groups of candidates, each containing 2-3 members. Each group will be assigned to solve six programming questions in the time limit of 3 hours. The winner of this competition will be selected by the experts on the basis of the flow of logic (algorithm) and output of the respective programs.

**Coding competition details**

Date:

Time:

Targeted groups: 20

No. of members: 3

Duration: 1 day

Form charge: Rs. 300 per group

1st price: Rs. 9000

2nd price: Rs.4500

[Certificate of appreciation will be given to 4 groups]

#### Cash prize for winners

|  |  |  |
| --- | --- | --- |
| **S.N.** | **Categories** | **Amount (RS)** |
| 1 | Winner | 9,000 |
| 2 | First runner up | 4,500 |

**Rapid Coding Tournament**

Rapid Coding Tournament in **NEXT** is targeted towards engineering students with an elementary understanding of programming. The programming competition is expected to be conducted between the group of participants, each group containing 2 members. The competition will end with judges selecting the winners and awarding them.

**Participants**

This tournament mainly plans to aim engineering students currently studying at their first year or the beginners. The participants are expected to have knowledge of basic programming and algorithms.

**Methodology**

Rapid Coding Tournament will be held on the first day of the **NEXT** fest. Call for participation will be made through social media and candidates will be chosen in the first come first serve basis through Google registration form. The date and time of the event will be mailed to respective groups and participants once the registration is confirmed.

Rapid coding tournament is the tournament amidst groups of candidates, each containing 2 members. The coding tournament will be divided into the number of rounds. In each round, the teams will be divided into slots of 4 or less teams and they will compete with each other by solving the given programming question. Logical accuracy of the program and time exercised in solving will play a significant role in selecting the winners of the round. The complexity level of the question increases with the number of rounds. In this competition, time and space complexity of candidate’s program or algorithm won’t be taken into consideration.

**Rapid Coding Tournament details**

Date: Not fixed

Time: 10:00

Targeted groups: 32

No. of members:2

Duration: 1 day

Form charge: Rs. 200 per group

1st price: Rs. 6000

2nd price: Rs.3000

Certificates will be given to 4 teams\*2=8 people

#### Cash prize for winners

|  |  |  |
| --- | --- | --- |
| **S.N** |  | **Amount (RS)** |
| 1 | Winner | 6,000 |
| 2 | First runner up | 3,000 |

**HACKATHON**

**Hackathon** in **NEXT** is an event,that lasts for 3 days in which different individuals from technical or non-technical background work together. It comprises of group of individuals working together to get a minimal viable product in given theme. The theme will be provided to participant a week before the event by organizing a simple orientation program. The actual event will start from 8 am and will end at 5 pm each day for 3 days. It encourages the creativity of student and supports collaboration among them to come up with a product in a short time frame using tools and techniques they are familiar with.

**Targeted Participants**

The main targeted group for **Hackathon** are engineering minds although there is no restriction for the participants. Anyone who are willing to learn and create something can participate.

**METHODOLOGY**

For effective and successful completion of most attractive sub program of the event we have traced out the layout on various phases. Hackathon is estimated to be 27 hours long in the span of 3 days starting form 1st day of the event at 8:00 am.

**Introduction Phase**

In this phase, all the participants in the Hackathon get together and introduce themselves to each other.

**Main Phase**

This phase involves the competition or work period on the theme specified. Code of conduct for Hackathon will be applicable till the last minute of the program. For supervision and guidance for participants, mentors and volunteers would be provided till accomplishment. This phase continues till third day of the **Hackathon** simultaneously until 10:00 am of last day**.**

**Presentation Phase**

After completion of the main phase, at the end participants demonstrate their presentation in the presence of the judges. Jury prepare the result on the basis of performance on various topic of evaluation. This phase will be start just after the main phase in the third day of the event.

**Certificate & Prize Distribution Phase**

On the basis of evaluation and result prepared by the Jury prize and certificate will be distributed after the end of the previous phase and it will end at around 5 pm which completes the 27 hours of the NEXT Hackathon .Certificate will be provided to the all participants in the Hackathon.

#### Cash prize for winners

|  |  |  |
| --- | --- | --- |
| **S.N.** | **Categories** | **Amount (RS)** |
| 1 | Winner | 20,000 |
| 2 | First runner up | 10,000 |
| 3 | Best idea | 2000 |
| 4 | Best Presentation | 2000 |