



Republic of the Philippines
Department of Science and Technology
Philippine Science High School
Cordillera Administrative Region Campus
Irisan, Baguio City

13 January 2017

ATTY. AUGUSTIN P. LABAN III

Officer In-Charge

Assistant Schools Division Superintendent

Division of Baguio City

Dear Atty. Laban:

Salutations!

With the aim of providing avenue for the development of the inclination towards science, technology, engineering and mathematics, the Philippine Science High School-Cordillera Administrative Region Campus (PSHS-CARC) will hold the following events on February 11, 2017 (Saturday) from 8:00-4:00 PM at the campus site at Purok 12, Irisan, Baguio City. Anent to this, we would like to seek your endorsement for us to invite the elementary and junior and senior high schools in the city to participate in the following events:

EVENT	PARTICIPANTS
Pisayklaban 2016	Elementary school students
Computer Science Skills Challenge 2016	Grades 4-6 pupils and junior high school students
Mathalinong Grade 11 Student	Grade 11 students

The mechanics and guidelines of each of the competitions are attached to this letter for your reference and perusal. For queries, we may be reached thru 0923-5923-851/09207382559 or pisaycarsteam@gmail.com. The names of the contestants as well as the coaches are also requested to be forwarded to the said e-mail address.

Thank you in anticipation of your positive response to this matter.

Very truly yours,


MICHELLE C. DALAY-ON
Event Organizer


MARISOL M. BARNACHEA
Event Organizer

Noted:


DR. CONRADO C. ROTOR JR.
Campus Director



Department of Science and Technology
PHILIPPINE SCIENCE HIGH SCHOOL
Cordillera Administrative Region

For Elem. Schools

PISAYKLABAN 2016

- Consists of a Practicum (STEAM Trail) and a Quiz Bee
- Participants: Elementary School students from private and public schools in Baguio City and nearby Benguet municipalities. 1 team with 3 members each may be delegated per school. The following are the specific qualifications for the participants:

(3 members) Students with high or good proficiency in Science, Mathematics, and Computer/ Information Technology

- 1 from grade 4
- 1 from grade 5
- 1 from grade 6

I. STEAM Trail (A.M.)

This activity consists of several sets of short experiments and laboratory-based activities in Science, Math, and Computer Science. The topics covered will be based on the competencies prescribed by the Department of Education for grades 4 - 6 of the K-12 curriculum. Execution of activities will be by groups and materials for the activities will be provided by PSHS-CARC.

- a. Science (Biology Laboratory)
- b. Mathematics (P.E. Room)
- c. Computer Science (MIS Office)

Top three (3) performing teams after the STEAM TRAIL will be awarded with gold, silver, and bronze medals and gifts.

II. Quiz Bee (P.M.) (Ampitheatre)

A culminating STEAM activity for the elementary student guests. This will test the learnings of student contestants in Science, Mathematics, Computer Science, General Information, and Current Events (July 2016 - present, Philippine and International settings). For Science, Mathematics, and Computer Science Subjects, the questions will be based on the competencies prescribed by the Department of Education for grades 4 - 6 under the K-12 curriculum.

- The quiz bee will comprise three (3) rounds, - the Maalam (easy) round, the Madunong (average) round, and the Dalubhasa (difficult) round.
- All teams will participate in all 3 rounds. Ten (10) questions will be given in every round.

- Questions in the Maalam round are in the Multiple-Choice format and correct answers will garner 3 points each.
- Questions in the Madunong round are in Multiple-Choice and Identification formats; and each correct answer garners 5 points.
- For the dalubhasa round, the student contestants are asked to work on problem solving questions of which their answers are identified/ cited. In this round, each correct answer garners 10 points.
- In case of ties, clincher questions will be given at the final (Dalubhasa) round to break the ties. In such cases, the first team which is able to answer correctly gets another 10 points.
- All participating teams will be provided with an answer board, a chalk/marker pen, and an eraser; which they will use for all three rounds.
- Ten (10) seconds is given to answer Multiple-Choice and Identification questions; while 30 seconds is given for problem solving questions.
- All the quiz questions will be read twice. The 10 or 30-second duration starts after the second reading.
- The contestants are allowed to start solving and writing their answers on their answer boards as soon as the quiz master starts to read a question.
- When the allotted time to answer is over, the contestants are given a cue to raise their answer boards for checking and tabulating of scores.
- Quantitative answers, especially those of the identification types should have units when necessary.
- Queries and clarifications may be raised by the contestants and their coaches during the contest proper, of which invited experts will address appropriately.
- At the end of all three (3) rounds, winners are qualified as follows:

Total score gained is from: 75 - 105 points (Bronze Medal)
 106 - 125 points (Silver Medal)
 126 - 180 points (Gold Medal)

The team with the highest score at the end of the quiz will also be awarded a Platinum plaque.

Top three (3) scorers will also be given cash prizes.

COMPUTER SCIENCE SKILLS CHALLENGE 2016

Elementary Category

This competition is designed for primary school pupils, from both government and private schools, who are proficient in the use of basic computer software. It is composed of three skill categories, with each category focused on the use of one of the following software: **Microsoft PowerPoint 2010**, **Microsoft Excel 2010** and **Basic Web Design**.

Each interested school must send **one (1) participant for each category**, thus its team must consist of three (3) members. The team members must be from **Grades 4 – 6** and must be duly enrolled in the school they are representing. The participants must bring their school IDs during the event for confirmation of the information given in the registration forms.

PSHS-CARC will provide all necessary equipment, software, and files to be used in the competition. Specific tasks and additional guidelines for each skill category will be given during the event, prior to the start of the competition. In case of discrepancies, all appeals must be in written form and submitted to the category head.

The basic guidelines and criteria for judging outputs for each skill category are as follows.

Microsoft PowerPoint 2010

Guidelines:

1. Contestants may use any design template and layout they prefer.
2. Contestants may use available (built-in) MS PowerPoint themes.
3. All animations and slide transitions must be automatic.
4. Duration must be at least 15 seconds and at most 20 seconds.
5. Contestants will be provided with set of images.

Criteria for Judging:

- | | |
|----------------------------------|-----|
| • Layout Design | 20% |
| • Relevance to the assigned task | 20% |
| • Visual Effects | 20% |
| ○ Effective use of Images | |
| ○ Effective use of Animation | |
| • Creativity and Organization | 25% |
| • Overall Impact | 15% |

Microsoft Excel 2010

Criteria for Judging:

- Appearance 20%
 - sheet layout and readability
 - effective use of font formats/effects
 - effective use of cell and background colors
- Functionality 40%
 - Correct Formulas
 - Auto Compute
 - Cell Formats
 - Conditional Formatting
- Usability 15%
- Overall 25%

Basic Web Design

Guidelines:

1. Students can only use Notepad/Notepad++ for coding.
2. Use a valid HTML/HTML 5 document for content.
3. Web page(s) must be consistent with 3 browsers – Chrome, Firefox, Opera.
4. Contestants will be provided with a set of images and articles for the entire site.
5. Contestants may bring reference books but e-books and handwritten/printed notes/codes are not allowed.

Criteria for Judging:

- Content and Layout 20%
 - Organization of information
- Structure and Navigation 20%
 - Consistency across browsers
- Visual Design 20%
 - Effective use of colors
 - Effective use of images
 - Effective use of fonts
- Functionality 15%
 - All links must be working
- Overall 25%

The winners for each category will be awarded the following prizes.

First Place: Gold medal + 300.00 worth of token

Second Place: Silver medal + 300.00 worth of token

Third Place: Bronze medal + 300.00 worth of token

All participants will be given certificates of participation. Likewise, all coaches will be given certificates of appreciation for mentoring their pupils.

COMPUTER SCIENCE SKILLS CHALLENGE 2016

High School Category

This competition is designed for high school students, from both government and private schools, who are proficient in the use of computer software. It is composed of four skill categories, with each category focused on one of the following: **Adobe Photoshop CS 6**, **Flash Animation CS 6**, **Advanced Web Development**, and **Computer Programming**.

Each interested school must send **one (1) participant for each category**, thus its team must consist of four (4) members. The team members may be from any grade level. They must be duly enrolled in the school they are representing. The participants must bring their school IDs during the event for confirmation of the information given in the registration forms.

PSHS-CARC will provide all necessary equipment, software, and files to be used in the competition. Specific tasks and additional guidelines for each skill category will be given during the event, prior to the start of the competition. In case of discrepancies, all appeals must be in written form and submitted to the category head.

The basic guidelines and criteria for judging outputs for each skill category are as follows.

Adobe Photoshop CS 6

General Specifications:

1. Contestants will design and create a poster advertisement using Adobe Photoshop CS 6.
2. Images will be provided to the contestants. No minimum or maximum use of images will be set.
3. Text and slogans may be added.
4. Contestants may use as many Photoshop tricks and technique.
5. Contestants may bring reference books but e-books are not allowed.
6. Final Image Specifications:
 - Size : 8.5 inches x 11 inches
 - Orientation : Portrait
 - Image Resolution : 72 pixels per inch

Time Limit: 1 hour

Criteria for Judging:

- | | |
|---|-----|
| • Creativity | 20% |
| • Relevance to the assigned task | 20% |
| • Effective use of effects and color blending | 20% |
| • Effective use of images and fonts | 15% |
| • Overall visual impact | 25% |

Flash Animation CS 6

General Specifications:

1. Contestants will create an animated advertisement using Adobe Flash CS 6.
2. Final output must be in .swf format.
3. The length of presentation must be at least 20 seconds and at most 25 seconds.
4. Contestants may use other graphic applications such as Paint or Photoshop to edit images.
5. Contestants may incorporate ActionScripts to improve their animation.
6. Contestants may bring reference books, but e-books and handwritten/printed notes/codes are not allowed.

Time Limit: 1 hour

Criteria for Judging:

- | | |
|---|-----|
| • Visual Impact | 20% |
| • Mastery of Flash techniques | 15% |
| • Relevance to the assigned task | 20% |
| • Effective use of animations and transitions | 20% |
| • Overall output | 25% |

Advanced Web Development

General Specifications:

1. Contestants will create a web site using HTML, CSS, JavaScript, and JQuery.
2. Students can only use Notepad/Notepad++
3. Participants can use Cascading Style Sheet for the layout and design of the website.
4. Contestants will be provided with images and articles for the entire site. They can edit images that are provided using any available graphic editor.
5. Contestants may add animated menus using JavaScript or jQuery. The latest version of jQuery Scripting Library will be provided.
6. Contestants can use any JavaScript or jQuery code to provide additional feature/functionality.
7. Contestants may bring reference books, but e-books and handwritten/printed notes/codes are not allowed.

Time Limit : 1 hour

Criteria for Judging:

- | | |
|-------------------------------|-----|
| • Content and Layout | 20% |
| ○ Organization of information | |
| • Structure and Navigation | 20% |
| ○ Consistency across browsers | |
| • Visual Design | 20% |
| • Functionality | 15% |
| ○ All links must be working | |
| • Overall | 25% |

Programming Competition

General Specifications:

1. **Language:** Borland C++, Java 8 with JCreator Pro or DrJava as Editor
2. The problems to be given are limited to effective use of data types, console I/O operations, arrays, methods/functions, sequence, selection, and looping structures.
3. Contestants may choose from Borland C++ or Java 8 or both – i.e., the contestant may solve some problems using Java and others using Borland C++.
4. Each contestant must solve as many programming problems as he/she can within **2 hours**.
5. Each problem has corresponding points. Winners will be determined **NOT BY THE NUMBER OF PROBLEMS SOLVED** but by the **TOTAL POINTS GARNERED**.
6. Once a problem is solved, players must raise their hand to have their programs scored. A problem will be given and the first contestant to solve it will be awarded the points for that problem.
7. A death-match round will be used as tie breaker.
8. Contestants may bring reference books, but e-books and handwritten/printed notes/codes are not allowed.

Technical requirements for every program:

- Program must meet all constraints as specified in the problem.
- Programs must have prompt messages and output labels.

Sample Problem:

Create program that determines and prints the highest value that can be derived from the digits of N wherein N is a three (3) digit integer supplied by the user.

Assume that $99 < N < 1000$.

Sample Run

Enter three(3) digit number : 427

Highest possible number : 742

The winners for each category will be awarded the following prizes.

First Place:	Gold medal + 300.00 worth of token
Second Place:	Silver medal + 300.00 worth of token
Third Place:	Bronze medal + 300.00 worth of token

All participants will be given certificates of participation. Likewise, all coaches will be given certificates of appreciation for mentoring their students.



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MATHALINONG GRADE 11 STUDENT

DATE: February 11, 2016

VENUE: PE Room and Google Room, PSHS-CARC, Irisan, Baguio City

A. MECHANICS

Participants: Grade 11 students from the Senior High Schools in Baguio City

Team Composition: 3 members per team; maximum of 2 teams per school

Rounds: 2 Rounds: Elimination (Written); and Final Round (Orals)

Content Coverage: Basic Mathematics, Elementary, Intermediate and Advanced Algebra, Trigonometry, Plane, Solid and Analytic Geometry, Basic Calculus

Elimination Round:

This round consists of two parts to be answered in 60 minutes each. The students will be allowed to use their calculators on the first half and will be asked to solve the rest of the questions for the second half manually. There will be thirty (30) 1-point questions for each part. Team members will take the examination individually at their designated rooms arranged in such a way that no members of the same team will be in the same room. Scratch papers will be provided. The score of the team is the sum of the individual scores of its members. The top 20% of the total number of teams will advance to the final round.

Final Round:

This round consists of 20 questions: ten (10) Easy questions worth 2 points each and to be answered within 15 seconds, five (5) Average questions worth 3 points each and to be answered within 30 seconds, and five (5) Difficult questions worth 5 points each and to be answered within 60 seconds. All team scores will be reverted to zero at the start of the final round. Each question will be read twice. After the second reading, the quizmaster will signal the start of the required time to answer the question. However, calculators will NOT be allowed during this state of the competition. Protests must be raised directly to the judges before the quizmaster reads the next question. The decision of the judges is final and irrevocable. In case of ties, there will be a tie-breaker round. The top three teams will be named the Champion, 1st runner-up, and 2nd runner-up respectively.