



Republic of the Philippines
DEPARTMENT OF EDUCATION

Region III

SCHOOLS DIVISION OF NUEVA ECIJA

Old Capitol Compound, Burgos Avenue, Cabanatuan City 3100

DEP-ED-NUEVA ECIJA
RELEASED
SEP 16 2016

RECORDS SECTION



September 10, 2016


DIVISION MEMORANDUM

No. 245, s. 2016

2016 DIVISION INTEL PHILIPPINES SCIENCE AND TECHNOLOGY FAIR (Secondary)

To: Secondary School Heads
Vocational School Administrators/Principals
Department Heads

1. This is to announce that the 2016 Division Science and Technology Fair (DSTF) shall be held on October 7, 2016 at Aliaga National High School, Aliaga Nueva Ecija.
2. The activity is a series of Science Quizzes, Pinoy Robot Games, and Investigatory Project Contests.
3. The theme for this year's Science Fair is "Environmental Protection and Conservation of the Ecosystem".
4. The activity aims to:
 - 1.1 encourage research and development among secondary students.
 - 1.2 undertake scientific activities that will develop the youth's analytical mind, resourcefulness and creativity;
 - 1.3 apply science, technology concepts and principles;
 - 1.4 promote science and technology concepts consciousness among the youth;
 - 1.5 foster wholesome atmosphere of competitiveness and excellence in undertaking scientific activities towards achieving breakthroughs in research, and;
 - 1.6 identify the most creative and the best science student researchers who will represent the Division in various science research competitions.
5. The participants in these activities are the 1st place winners (CHAMPION) in the school level competition. No registration fee shall be charged to the participants. However, they are requested to bring their own provisions.
6. Expenses incident to this activity shall be charged to local science/ school funds subject to the usual accounting and auditing rules and regulations.
7. Enclosures No 1 and 2 are List of Facilitators and Guidelines of the Contests respectively.
8. Wide dissemination of the content of this Memorandum is requested to ensure full participation of all concerned.


RONALDO A. POZON, Ph. D., CESO V
Schools Division Superintendent

To be included in the PERPETUAL INDEX
Under the following subjects:

CONTEST
SCIENCE
PUPILS
SCIENCE TEACHERS

2016 DIVISION SCIENCE AND TECHNOLOGY FAIR (DSTF)

October 7, 2016

Aliaga National High School

Aliaga, Nueva Ecija

AM

REGISTRATION OF PARTICIPANTS
OPENING PROGRAM
SETTING-UP OF INVESTIGATORY PROJECTS

SCIENCE QUIZ(STE and Regular Class, Senior High School)

GRADES 7

GRADE 8

GRADE 9

GRADE 10

GRADE 11

PINOY ROBOT GAMES

Pinoy Robot Game aims to promote the use of technology in learning and aids in the development and application of both basic and integrated science process skills as applied in the real life settings. The participants are given opportunities to apply and further develop various skills such as information, technology, innovation and critical thinking skills as applied to the designing, creating and programming of their self-made robots. The event supports DepEd in achieving its K-12 target to produce holistically develop Filipino learners with 21st century skills.

The competition is divided into different categories such as

• **SUMOBOT**

This category enables the participants to design a robot that will locate and knock its opponent right out of the ring while detecting the outside circle should an escape move be necessary.

• **LINE TRACINGBOT**

This category aims to create robot that be able to detect particular line and keep following it.

• **FIRE FIGHTING ROBOT (AUTONOMOUS)**

This is a robotics game where a robot must autonomously navigate through a mock home with multiple rooms and with a candle randomly placed in one of the rooms, simulating a house on fire. The robot needs to find the candle and put it out, paving the way for a house-hold robot which would find and extinguish small home fires before they can engulf the house. The main challenge of this contest is to build an autonomous computer-controlled robot that can find its way through an arena that represents a model house, find a lit candle that represents a fire in the house, and extinguish the fire in the shortest time. This task simulates the real-world operation of an autonomous robot performing a fire protection function in a real house. The goal of the contest is to advance robot technology and knowledge while using robotics as an educational tool.

• **INNOVATIVE ROBOT (REMOTE CONTROL / AUTONOMOUS)**

The innovative robot category is one that allows teams to innovate, design and build their robots according to the current year THEME. A sample is Saving the Rivers where teams are to create innovative robot designs to be able to clean, clear, or even recycle the waste that is causing the pollution in our rivers today. There are no strict rules for this category but mainly the judging criteria for the robots. A special panel of judges expert in the topic will be selected by the WRG committee especially for this category. Some judging criteria include design, efficiency, technical competency, aesthetics, practicality, etc. This game category is open Junior and Senior participants.

• **HUMANOID CHALLENGE (PENGUIN WARS)**

This is a robotics game where participants control an articulated two-legged humanoid robot to score goals in opponent's side. The robots can be programmed or remote controlled. The robot's task is to put colored balls in the opponent's side either by kicking, picking, or throwing the ball. Understanding of humanoid's mechanics and strategy is important and cooperation with teammates is required. This game category is open for Junior and Senior participants.

SCIENCE CONGRESS

Life Science (Team, Individual)

Physical Science (Team, Individual)

PM

CONTINUATION OF CONTESTS

SCIENCE CONGRESS

AWARDING AND CLOSING CEREMONY

**DIVISION SCIENCE AND TECHNOLOGY FAIR 2016 (Secondary Level)
Guidelines for Oral Presentation**

I. SCHEDULE OF ORAL PRESENTATION

A. Oral presentation of scientific works for the Science and Technology Fair will commence on October 7, 2016 at Aliaga National High School provided that;

1. The project was APPROVED by the Division Scientific Review Committee (DSRC) during the evaluation and screening conducted on October 2, 2016 at Nueva Ecija High School.

2. Requirements have been complied with according to the remarks of the DSRC members especially, but not limited, to the following:

- a. All mandatory and additional forms properly filled out
- b. Authentication of plant identity from an authorized institution, if possible
- c. Proper citation of references
- d. Duly certified data notebook
- e. Other documents considered necessary for particular studies

II. Board of Judges: The members of the Board of Judges were chosen by the Division Office cognizant to their expertise in the field.

III. Criteria for Judging (<http://www.societyforscience.org/page.aspx?=284>, Retrieved 07 October 2013):

A. CREATIVE ABILITY (30 POINTS)

1. Does the project show creative ability and originality in the questions asked?
 - a. The approach to solving the problem?, the analysis of the data?, the interpretation of the data?
 - b. The use of equipment?, the construction or design of new equipment?
2. Creative research should support an investigation and help answer their question in an original way.
3. A creative contribution promotes an efficient and reliable method for solving a problem. When evaluating projects, it is important to distinguish between gadgeteering and ingenuity.

B. SCIENTIFIC THOUGHT (30 POINTS)

1. Is the problem stated clearly and unambiguously?
2. Was the problem sufficiently limited to allow plausible approach?
3. Good scientists can identify important problems capable of solutions?
4. Are the variables clearly recognized and defined?
5. If controls were nearly necessary, did the students recognize their need and were they correctly used?
6. Are there adequate data to support the conclusions?
7. Does the finalist or team recognize the data's limitations?
8. Does the Finalist/team understand the project's ties to related research?
9. Does the Finalist/team have an idea of what further research is warranted?
10. Did the Finalist/team cite scientific literature, or only popular literature (i.e., local newspapers, Reader's Digest).

C. THOROUGHNESS (15 POINTS)

1. Was the purpose carried out to completion within the scope of the original intent?
2. How completely was the problem covered?
3. Are the conclusions based on a single experiment or replication?
4. Is the Finalist/team aware of the other approaches or theories?
5. How much time did the finalist or team spend on the project?
6. Is the finalist/team familiar with scientific literature on the studied field?

D. SKILL (15 POINTS)

1. Does the Finalist/team have the required laboratory, computation, observational and design of skills to obtain supporting data?
2. Where was the project performed (i.e., home, school laboratory, university laboratory)? Did the student or team receive assistance from parents, teachers, scientists or engineers?
3. Was the project completed under adult supervision, or did the student/team work largely alone.
4. Where did the equipment come from? Was it built independently by the finalist or team? Was it obtained on loan? Was it part of a laboratory where the Finalist or team worked?

E. CLARITY (10 POINTS)

1. How clearly does the Finalist discuss his/her project and explain the purpose, procedure and conclusions? Watch out for the memorize speeches that reflect little understanding of principles.
2. Does the written material reflect the Finalist's or team's understanding of the research?
3. Are the important phases of the project presented in an orderly manner?
4. How clearly is the data presented?
5. How clearly are the results presented?
6. Was the presentation done in a forthright manner, without tricks or gadgets?
7. Did the Finalist/or team perform all the project work, or did someone help?

IV. RULES FOR ORAL PRESENTATION

- A. Each project is to be presented in no more than 10 minutes.
- B. The presentation should be concise highlighting the following:
 1. Title
 2. Objectives
 3. Abstract
- C. PowerPoint slides may accompany the presentation.
- D. The presenter will; be notified accordingly of remaining time during the presentation.
- E. The judges may ask clarificatory questions and/or give suggestions for improvement of the study after the presentation.
- F. Only the official author(s) of the study (as reflected in the submitted manuscript) is (are) allowed to answer the questions.

V. WINNERS

- A. Each judge will independently rate the projects.
- B. Ratings will be totaled and ranked.
- C. Ranks obtained by each project from the three judges will then be added.
- D. The project garnering the lowest totaled rank will be declared first place and so on.
- E. The decision of the judges is final and unappealable.

GUIDELINES FOR SCIENCE QUIZ BEE SECONDARY LEVEL INCLUDING GRADE 11 SHS

RULES AND REGULATIONS

1. All contestants will answer the same set of 30 questions in writing for the first round.
2. The top 10 contestants who gets the highest number of points will move to the next round which will be in a Quiz Show format.
3. There shall be four (4) rounds for all categories: Easy, Average, Difficult, and Clincher. There shall be five (5) easy questions, three (3) average questions, and two (2) difficult questions. All contestants shall answer all questions in the 3 rounds. Each correct answer in every round will be given corresponding points, to wit:
 - Easy - 1 pt.
 - Average - 2 points
 - Difficult - 3 points
4. Each contestant shall be provided with official answer sheets.
5. Each question must be answered within the time allocated for it. Ten (10) seconds for the easy part, twenty (20) seconds for the average questions and thirty (30) seconds for the difficult questions.
6. The quizmaster/ board of judges shall read each question twice and the time shall start only after the quizmaster says "GO". The contestants may begin to answer only after the quizmaster says "GO".

7. The contestant must write his/her final answer on the answer sheet. If a contestant wishes to change his/her answer, the former answer should be crossed-out and the final answer encircled.
8. All answers must be spelled correctly to be considered correct. If the answer is a proper noun, capitalization of the first letter of the word is also a basis in declaring an answer correct.
9. Questions shall indicate the number of significant figures for numerical answers. Use of calculators is not allowed.
10. After the time limit has expired, the proctors/facilitators will collect the answer sheet of each contestant before the quiz master reads the correct answer. The scorer-timer/s shall write on the tabulation board the score of each contestant after every item.
11. If there is a question on the correctness of the answer, the validity of the answer will be determined by the Examiner/Board of Judges. The decision of the Examiner/Board of Judges is final. Solutions may be checked by the Board of Judges if needed.
12. The total score of a contestant after three rounds shall be his/her score. The contestant with the highest final score shall be declared as the first place winner, the second highest-second place winner, the third highest-the third place winner, and so on.
13. In case of a tie, the Clincher Round shall be played. It will be a knockout system between or among the contestants with equal scores until a winner emerges. The first one who can answer correctly will be declared the winner.
14. The duly registered coach of the contestant is the only person authorized to file a protest. All protests shall be referred to the Board of Judges before the quizmaster reads the next question. No protest shall be entertained by the Board of Judges when the quizmaster started reading the next question.
15. Any violation of the aforementioned rules shall cause the disqualification of the contestant concerned.

Enclosure No. 2 to DIVISION MEMORANDUM No. __, s. 2016

2016 DIVISION SCIENCE AND TECHNOLOGY FAIR (DSTF)

October 7, 2016

Aliaga National High School

Aliaga, Nueva Ecija

RONALDO A. POZON, Ph.D, CESO V

Schools Division Superintendent

JOHANNA N. GRVACIO, Ph.D

Assistant Schools Division Superintendent

ERICSON S. SABACAN, Ph.D

Assistant Schools Division Superintendent

JAYNE M. GARCIA, Ed.D

OIC- Chief, Curriculum Implementation Division

PLANNING COMMITTEE

Chairman: Rosemarie Z. Burayag

OIC- EPS, Science

Co- Chair : Rowena B. Caoile

School Principal IV

Members: Division Science Department Heads

TECHNICAL COMMITTEE:

Chairman: Reden C. De Jesus

Head Teacher III, Science

Co- Chair :Rizalyn A. Corpuz

Assistant principal, SHS

Members : Department Heads of Aliaga National High School

LIST OF FACILITATORS AND CHAIRMAN

SCIENCE INVESTIGATORY PROJECTS

- **CHAIRMAN:** Mrs. Evangeline C. Gaspar/ Annaliza M. Rivera

Facilitators

Life Science (Individual) - Maribel Fajardo

Life Science (Team) – Gloria N. Lising

Physical Science (Individual) – Aurea A. Alfaro

Physical Science (Team) – Rose Ann Sawit

SCIENCE QUIZ

- **CHAIRMAN:** Orpha F. Mangulabnan

STE

FACILITATORS

Grade 7 Wendy C. Cabangon

Grade 8 Kristine I. Banal

Grade 9 Emmanuel R. Villamante

Grade 10 Melanie J. Yambot

Grade 11 Maricel C. Duldulao and Elsa V. Galiste

- **CHAIRMAN :** Elvie B. Dela Cruz

REGULAR CLASS

FACILITATORS

Grade 7 Clarissa Mariano

Grade 8 Cynthia A. Castillo

Grade 9 Evangeline A. Gamit

Grade 10 Lorna May Datuin

BOARD OF JUDGES

Grade 7 Ma. Cecilia S. Santiago

Grade 8 Ma. Soledad V. Dadez

Grade 9 Rosalia M. Lanorio

Grade 10 Gerry P. Vicencio

Grade 11 Mary Finela Bayan and Adora C. Dela Cruz

Grade 7 Nora S. Daquiz/Ronald Bondoc

Grade 8 May R. Guillermo/ Evelyn DR. Reyes

Grade 9 Evangeline Melgar/Evelyn S. Reyes

Grade 10 Racquel C. Diaz/Ma. Cecilia Pacol

ROBOTECH

- **CHAIRMAN :** Romulo Viganndre

Facilitator : Jerry Ramos

- **BOARD OF JUDGES**

Joel T. Bautista

Rohit C. Tilwani

Emmanuel Paladin

TABULATORS/RECORDERS

- **CHAIRMAN:** Juanito T. Legamia

Members: 1. Nova Alvarez

2. Anna Lea Ebdane

3. Juanita Petacio

CERTIFICATES/TROPHIES/MEDALS

- **CHAIRMAN:** Allan C. Martinez

Members: 1. Rosemarie R. Manuel

2. Gemma Peralta

3. Maristel C. Inducil

REGISTRATION AND DISTRIBUTION OF CERTIFICATE OF APPEARANCE

- **CHAIRMAN :** Shirley Catacutan

Members: 1. Annaliza Bala

2. Jenny B. Olego

PROGRAM AND INVITATION

- **CHAIRMAN:** Mary Claire C. Payawal

Members: Sharon Rose F. Dela Cruz

Teresita A. Torio

DOCUMENTATION

- **CHAIRMAN :** Cynthia A. Castillo

Members : 1. Sixto C. Dela Cruz

2. Lenilyn F. Gatbunton

3. Leah S. Santos