

Republic of the Philippines

Department of Education

Region VII, Central Visayas

**DIVISION OF CEBU PROVINCE**

Sudlon, Lahug, Cebu City



**January 19, 2015**

**DIVISION MEMORANDUM**

No. 047 s. 2015

**STATISTICAL CHALLENGE XVII**

To: Assistant Superintendent  
Education Supervisors/ Coordinators  
District Supervisors/OICs  
Secondary School Heads  
Heads, Private Secondary Schools

1. Attached is a copy of Unnumbered Regional Memorandum dated January 12, 2015 entitled, **The Statistical Challenge XVII.**
2. Immediate and wide dissemination of this Memorandum is desired.

**ARDEN D. MONISIT, Ed. D.**  
Schools Division Superintendent

Telephone Numbers:

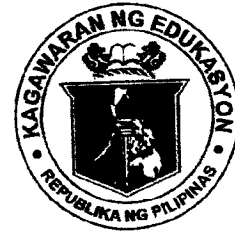
Schools Division Superintendent:	(032) 255-6405
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Disbursing Section:	(032) 255-4401
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DEPARTMENT OF EDUCATION  
REHIYON VII, GITNANG VISAYAS  
REGION VII, CENTRAL VISAYAS  
Sudlon, Lahug, Cebu City



**MEMORANDUM**

TO : Schools Division Superintendents  
Officers-in-Charge of Regular Divisions  
Heads, Public and Private Secondary Schools

SUBJECT : **THE STATISTICAL CHALLENGE XVII**

DATE : January 12, 2015

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Attached is a letter from Ms. Charina Raisa D. Tan, Chairperson, Academic Resource Committee, University of the Philippines Variates, Inc., informing the field of the Statistical Challenge XVII, an inter-secondary statistical quiz show.

For details, refer to the attached communication.

For information and guidance.

*Juliet A. Jeruta*  
JULIET A. JERUTA

Schools Division Superintendent  
Officer-in-Charge  
Office of the Regional Director

IAJ/VGG/rcc  
ESSD

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Tel. Nos.: (032) 414-7324 Curriculum Learning Management Division (CLMD), Tel. Nos.: (032) 414-7323  
Quality Assurance Division (QAD), Tel. Nos.: (032) 231-1071 Human Resource Development Division (HRDD), Tel. No.: (032) 255-5239  
Education Support Services Division (ESSD), Tel. No.: (032) 254-7062 Planning, Policy and Research Division (PPRD), Tel. Nos.: (032) 233-9030;  
414-7065 Administrative Division, Tel. Nos.: (032) 414-7326; 414-4367; 414-7366; 414-7322; 414-4367  
Finance Division, Tel. Nos.: (032) 256-2375; 253-9061; 414-7321

*"EFA 2015: Karapatan ng Lahat, Pananagutan ng Lahat"*



RD2014 21567  
20 NOV

**UNIVERSITY OF THE PHILIPPINES VARIATES, INC.**

**THE ORGANIZATION OF STATISTICS MAJORS**

SCHOOL OF STATISTICS, R. MAGSAYSAY ST.,

UNIVERSITY OF THE PHILIPPINES, DILIMAN, QUEZON CITY

"WE TURN IMPOSSIBILITIES  
INTO PROBABILITIES"

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EMAIL US AT:  
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August 13, 2014

**Ms. Carmelita T. Dulangon**  
Regional Director  
DepEd- Region VII

Dear Ma'am,

Greetings!

We, the University of the Philippines Variates, would like to request for the endorsement of one of our organization's activities - the **Statistical Challenge XVII**.

The **Statistical Challenge XVII** is an inter-secondary statistical quiz show which aims to promote the field of Statistics and to expand the knowledge of high school students in the said subject. The quiz show is now on its 17<sup>th</sup> year, and it will be held in the University of the Philippines Diliman, Quezon City, on **January 31, 2015**. The aforementioned date, however, is still tentative.

In line with this, we would like to request from your office to please endorse this activity for the 17<sup>th</sup> time. Your endorsement will greatly improve the reception of prospective participating schools, as evident during the previous years of endorsement. Attached herewith is a copy of the event's mechanics.

The University of the Philippines Variates is a socio-academic organization in UP Diliman. We cater to the students of the School of Statistics. The main goal of our organization is to provide venues that will hone its members' talents and develop their personalities. Briefly, it aims to shape our members into well-rounded individuals geared to face the challenges of the future.

Thank you.

Respectfully yours,

*Charina Raisa D. Tan*  
**Charina Raisa D. Tan**  
Chairperson  
Academic Resource Committee

*Lianne S. Dela Cruz*  
**Lianne S. Dela Cruz**  
President

Noted by:

*Mr. Michael Daniel C. Lucagbo*  
**Mr. Michael Daniel C. Lucagbo**  
Faculty Adviser

# THE STATISTICAL CHALLENGE XVII

## RULES OF THE CONTEST

1. Each school will be required to bring at least 1 calculator. Only the following models of CASIO calculators will be allowed in the contest: fx-82MS, fx-85MS, fx-350MS, fx-95MS, fx-100MS, fx-115MS. These calculators are 2-liner with no integral and derivative functions.
2. Each school will be provided with scratch papers and an illustration board where participants should write their final answers.
3. Each question shall be read twice and the participants shall be allowed to start writing and computing only after the first reading.
4. The participants shall be given specific time limits to answer the question in the Easy, Average, and Difficult Rounds. They shall be allowed to use calculators for their computations.
5. When the buzzer sounds, each group must show the board containing their final answers to the judges and the audience.
6. The designated proctor for each school shall check the answer, and shall raise a flag if the answer is correct.

## THE CONTEST

This contest is composed of three (3) rounds: the Easy, Average, and Difficult Rounds.

- **EASY ROUND**
  - ❖ Fifteen (15) questions are to be asked. The time limit for each question depends on the question's level of difficulty. Each correct answer shall be worth two (2) points.
- **AVERAGE ROUND**
  - ❖ There are ten (10) questions. The time limit for each question depends upon the question's level of difficulty. Each correct answer shall be worth three (3) points.
- **DIFFICULT ROUND**
  - ❖ There are seven (7) questions. The time limit for each question depends on the question's level of difficulty. Each correct answer shall be worth five (5) points.
- There will be no elimination for this year's contest.
- Points in each round will be accumulated for the final score.
- In case of a tie, clincher questions shall be asked.

## PARTICIPANTS

The group of the participating secondary school shall consist of three (3) students of at least grade 8 standing. Participating students should be enrolled for the current school year.

## PRIZES

- 1<sup>st</sup> prize winners shall be awarded gold medals, a trophy for their school and gift packs from our sponsors.
- 2<sup>nd</sup> prize winners shall be awarded silver medals, a trophy for their school and gift packs from our sponsors.
- 3<sup>rd</sup> prize winners shall be awarded bronze medals, a trophy for their school and gift packs from our sponsors.

## COVERAGE OF THE QUIZ

1. Nature of Statistics
  - 1.1 Definition of Statistics
  - 1.2 Areas of Statistics
  - 1.3 Uses of Statistics
2. Organization and Presentation

- 2.1 Tabular Presentation
- 2.2 Graphical Presentation
- 3. Sampling Techniques
  - 3.1 Simple Random Sampling
  - 3.2 Stratified Sampling
  - 3.3 Cluster Sampling
  - 3.4 Systematic Sampling
- 4. Summary Measures
  - 4.1 Measures of Central Tendency (*Mean, Median, Mode*)
  - 4.2 Measures of Position (*Deciles, Percentiles, Quartiles*)
  - 4.3 Measures of Dispersion (*Coefficient of Variation, Variance, Range*)
  - 4.4 Standard Scores
  - 4.5 Skewness and Kurtosis
- 5. Counting Techniques
  - 5.1 Fundamental Principles of Counting
  - 5.2 Permutation
  - 5.3 Combination
- 6. Elementary Probability
  - 6.1 Random Experiments and Sample Spaces
  - 6.2 Probability of an Event
- 7. Correlations and Regressions
  - 7.1 Pearson's Correlation Coefficient
  - 7.2 Simple Linear Regression
- 8. Hypothesis Testing
  - 8.1 Principles of Hypothesis Testing
  - 8.2 Inferences for the Population Mean
  - 8.3 Comparisons between Two Populations
  - 8.4 Test for Independence
  - 8.5 Analysis of Variance
- 9. Philippine Statistical System

#### **LIST OF STATISTICAL CHALLENGE XVI PARTICIPANTS**

1. Agoon Montessori Learning Center and High School Inc.
2. Angeles University Foundation Integrated School
3. Caloocan City Science High School
4. Chiang Kai Shek College
5. Colegio San Agustin – Biñan
6. Divine Word College Calapan
7. E. Rodriguez High School
8. Kalayaan National High School
9. Lagro High School
10. Manila Science High School
11. Manresa School
12. Miriam College
13. Muntinlupa Business High School
14. Oriental Mindoro National High School
15. Philippine Science High School - Central Visayas Campus
16. Philippine Science High School - Ilocos Region Campus
17. Philippine Science High School - Main Campus
18. Philippine Science High School - Southern Mindanao Campus

19. Philippine Science High School - Western Visayas
20. Pinagbuhatan High School
21. Polytechnic University of the Philippines Laboratory High School
22. Rizal High School
23. St. Paul College of Makati
24. San Isidro National High School
25. Southville International School and Colleges
26. St. Stephen's High School
27. St. Joseph College of Novaliches Inc.
28. Sto. Niño de Novaliches School
29. Taguig Science High School
30. UP Rural High School
31. Westfield Science-Oriented School and Colleges

**HIGHLY RECOMMENDED REFERENCES:**

Elementary Statistics (2010). Almeda, Capistrano and Sarte. (Available at UP Press, National Bookstore and Powerbooks)  
 Introduction to Statistics (3rd Edition). Walpole.  
 Introduction to Statistics and Probability. Mendenhall.

**SOME MORE IMPORTANT REMINDERS:**

1. Participants should come in their school uniform with their school ID's.
2. A registration fee of Php 600 is required from each participating school, which can be deposited through our LandBank account. Deadline is on January 16, 2014.

Landbank Account Details:

Account Name: **University of the Philippines Variates, Inc.**  
 Address: School of Statistics R. Magsaysay St., UP Campus Diliman, Quezon City  
 Account Number: 3071-0297-77

or you may pay a registration fee of P650 on the day of the contest itself.

3. Registration period is until **December 16, 2014 (Tuesday)**.
4. Each contestant is required to submit the following:
  - a. **One 1x1 recent ID picture**
  - b. **Photocopy of school registration material or letter of enrollment attesting that the contestant is enrolled for School Year 2014-2015.**

Submit the reply form and the accomplished registration forms with the rest of the requirements on or before December 16, 2014. If paying through our Landbank Account, please include a copy of the deposit slip. You can drop off the forms at the **UP Variates, Inc. Tambayan, School of Statistics Building, Magsaysay Avenue, University of the Philippines, Diliman, Quezon City, 1101**. We also accept mailed entries. Please forward them to **Mr. Michael Daniel Lucagbo** at the same address. Otherwise, you may send a scanned copy of the said requirements to our e-mail address: [arc.upv@gmail.com](mailto:arc.upv@gmail.com)

5. For further announcements, visit and like our Facebook page: [www.facebook.com/StatisticalChallenge](http://www.facebook.com/StatisticalChallenge) or follow us on Twitter: [@StatChallenge](https://twitter.com/StatChallenge)

**The Statistical Challenge Series is fully-endorsed by the Department of Education.**

**The Quiz Show has been successfully realized for the past 16 years.**

**The UP VARIATES INC. is still honing students in the field of Statistics.**

## REPLY FORM

Date: \_\_\_\_\_

To the UP Variates,

Yes, we are interested in joining the "STAT CHALLENGE." Attached herewith are the registration forms and other requirements.

No, thank you. Perhaps in your next quiz show.

\_\_\_\_\_  
Signature over printed name of School Representative

Name of School: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Contact Person's Position: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

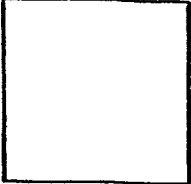
E-mail Address: \_\_\_\_\_

# REGISTRATION FORM FOR THE STATISTICAL CHALLENGE XVII

(PRINT legibly.)

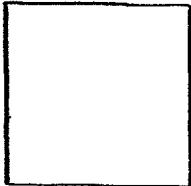
## 1. Participant # 1

Name: \_\_\_\_\_  
Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Year Level: \_\_\_\_\_ Contact No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
Interests: \_\_\_\_\_  
Hobbies: \_\_\_\_\_



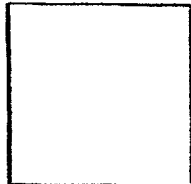
## 2. Participant # 2

Name: \_\_\_\_\_  
Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Year Level: \_\_\_\_\_ Contact No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
Interests: \_\_\_\_\_  
Hobbies: \_\_\_\_\_



## 3. Participant # 3

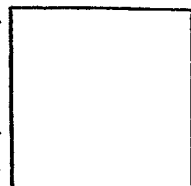
Name: \_\_\_\_\_  
Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Year Level: \_\_\_\_\_ Contact No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
Interests: \_\_\_\_\_  
Hobbies: \_\_\_\_\_



## 4. Substitute Participant

(in case the above contestants cannot participate because of some valid reasons.)

Name: \_\_\_\_\_  
Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Year Level: \_\_\_\_\_ Contact No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
Interests: \_\_\_\_\_  
Hobbies: \_\_\_\_\_



## 5. Coach

Name: \_\_\_\_\_  
Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Contact No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
Position in the School: \_\_\_\_\_  
Email Address: \_\_\_\_\_

