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Department of Education
NATIONAL CAPITAL REGION



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August 10, 2023

In compliance with DepEd Order No. 8, s. 2013
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BrainMEsh Inter-High School (BMH) 2023

The Philippine Society of Mechanical Engineers-University of the Philippines Student Unit (PSME-UPSU) will conduct the above-captioned activity on October 7, 2023 at Melchor Hall, UP Diliman, Quezon City.

The event aims to gauge the capability and academic excellence of senior high school students from different institutions and challenge themselves in a competitive environment.

BrainMEsh is a quiz competition that focuses on high school science and math subjects. Participants to this nationwide quiz bee are senior high school students.

For more information, please contact:

Dence Diane Rivera
Head, BrainMEsh Inter-High School 2023
Email: psme.upsu@coe.upd.edu.ph
Contact Number: 09557305967

Encl.: As stated



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PHILIPPINE SOCIETY OF MECHANICAL ENGINEERS
UNIVERSITY OF THE PHILIPPINES STUDENT UNIT INC.
3/F Melchor Hall, College of Engineering, University of the Philippines
Diliman Quezon City 1101



August 9, 2023

WILFREDO E. CABRAL, CESO III
Regional Director, DepEd-NCR

SIR:

Greetings!

We are the Philippine Society of Mechanical Engineers – University of the Philippines Student Unit (PSME-UPSU), a duly recognized organization based on the College of Engineering, University of the Philippines Diliman. Our mission is to promote academic excellence among Filipino students, develop sound relationships with other organizations and institutes, and help students to be more competent in the field of science, technology, engineering, and mathematics, as well as, become effective leaders and builders of our nation.

This coming October, PSME – UPSU will be holding its 30th annual celebration of PSME Month carrying the theme *"EONS (3ONS). Engineering Infinity."* One of our organization's flagship event is the BrainMEsh Inter-High School (BMH) 2023, a nationwide quiz bee for Senior High School students. It is a quiz competition about high school science and math. The event aims to gauge the capability and academic excellence of senior high school students from different institutions and challenge themselves in a competitive environment.

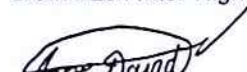
With the "new normal" being observed both within and outside the University, marked by the return to face-to-face learning, the organizers of this year's BrainMEsh have decided to conduct BMH face-to-face, a first since the start of the pandemic. BMH 2023 is scheduled to be held on **October 7, 2023** at Melchor Hall, UP Diliman, Quezon City.

To reach a lot of schools and students for the event to be more effective, PSME-UPSU's BrainMEsh heads would like to seek an endorsement from your good office. Your endorsement will be a big help to senior high school students who want to join the said event.

Attached are our invitation to schools and guidelines about the event. Thank you in anticipation of your immediate action of the above matter.

Respectfully,


Dence Diane Rivera
BrainMEsh Inter-High School 2023 Head


Jose David Javier
PSME Month Overall Head


John Kenneth Asuncion
PSME Month Overall Head



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Dence Diane B. Rivera
*BrainMEsh Inter-High School
2023 Head*

Jose David Javier
PSME Month Overall Head

John Kenneth Asuncion
PSME Month Overall Head

Edric Winfred Uy
President

Greetings of the day! Hope you are doing well.

We are the Philippine Society of Mechanical Engineers – University of the Philippines Student Unit (PSME-UPSU), a duly recognized organization based on the College of Engineering, University of the Philippines Diliman. Our mission is to promote academic excellence among Filipino students, build valuable relationships with other organizations and institutes, and develop students to not just be more competent in the fields of STEM but to also train them to become effective leaders and builders of our nation.

We are excited to announce that your esteemed institution is invited to participate in this year's **BrainMEsh Inter-High School (BMH)**, a nationwide quiz competition for senior high school students. BrainMEsh Inter-High School will be held **Face-to-face** on **October 7, 2023 (Saturday)** at **Melchor Hall, University of the Philippines Diliman**. Teams of three (3) will be solving problems that will measure their knowledge in Mathematics and Physics. The event also aims to gauge the academic capabilities of senior high school students in a competitive environment.

Should you have any questions or clarifications, do not hesitate to email us at psmemonth.psmepsu@gmail.com or contact the undersigned through their mobile numbers. We look forward to having your school as one of our participants. Your engagement would greatly contribute to the event's success and the overall enjoyment for everyone involved. Thank you for your time and we hope to hear from you soon!

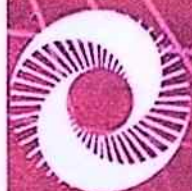
Respectfully,


Dence Diane B. Rivera
BrainMEsh Inter-High School 2023 Co-Head
0955 730 5967


Jose David Javier
PSME Month Overall Head
0917 571 9864


John Kenneth Asuncion
PSME Month Overall Head
0995 937 6384





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BRAINMESH

INTER-HIGH SCHOOL

INTER-HIGH SCHOOL MATH AND PHYSICS QUIZ SHOW

BrainMEsh Inter-High School (BMH) is an inter-high school National Math and Physics Quiz Competition where teams of three will solve and analyze questions that shall measure their knowledge in the field of Mathematics and Physics. Questions are designed to test their knowledge of different topics – ranging from arithmetic to thermodynamics. The event aims to gauge the capability and academic excellence of senior high school students from different institutions and challenge themselves in a competitive environment.

Our organization would like to invite you to be part of this great competition. Attached here are the guidelines, rules, and mechanics, as well as the waiver and registration forms needed. Please do not hesitate to forward questions to our Communications officers. If you have any problems regarding registration, please reach out to us and we will do our best to accommodate you.

Program Details	Time	Venue
Checking for Registration	7:30 – 8:45 AM	Engineering Theater, Melchor Hall
Opening Program	9:00 – 9:15 AM	Engineering Theater, Melchor Hall
Preliminary Phase	9:15 – 11:30 AM	P&G Room, BE Multimedia Hall, MH 501-503
Lunch Break	11:30 – 1:00 PM	
Announcement for the commencement of the next half of the competition	1:00 – 1:20 PM	Engineering Theater, Melchor Hall
Semifinals Phase	1:20 – 3:15 PM	
Finals Phase	3:15 – 4:45 PM	
Awardings	4:45 – 6:00 PM	



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REMINDERS AND GUIDELINES

I. PARTICIPANTS

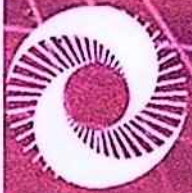
1. BrainMEsh Inter-High School is open for SENIOR HIGH SCHOOL students, Grades 11-12 on ANY track.
2. A team shall consist of three (3) students and MUST belong to the same school.
3. One (1) alternate is allowed per team and must satisfy all terms stated in item number two (2). The alternate must also be registered before the event.
4. Each school may send a maximum of four (4) teams to participate in the competition.
5. One (1) coach per school is required to accompany their participants. Maximum of four (4) coaches per school shall be implemented—representing one coach per registered team.
6. Participants and alternates MUST present any proof of enrollment in the current academic year from their respective schools. They must bring and wear their IDs at the event premises.
7. In an unfortunate case that a pre-registered participant is unable to attend the event, given that he/she has a valid reason, the alternate will be allowed as a replacement.
8. NO WALK-IN teams and alternates will be entertained on the day of the event.

II. EVENT MECHANICS

1. Only pencils, pencil erasers, and calculators are allowed during the competition.
2. Cellular phones and other similar devices will not be allowed and should NOT be in the proximity of the participants. Violators will be apprehended; to be discussed under Warnings and Disqualification.
3. Only registered students are allowed to participate in all phases of the Event.
4. The competition shall be divided into three main phases, namely: Preliminary Phase, Semifinals Phase, and Finals Phase.

A. PRELIMINARY PHASE

1. The three (3) registered participants of the team will individually take a qualifying examination.
2. The examination is to be taken for one (1) hour and thirty (30) minutes.
3. The examination will consist of forty (40) questions.
4. Contestants are required to bring their own calculators.
5. All calculators are required to be reset. The organizing committee shall reserve the rights to check and inspect the calculators of the participants.



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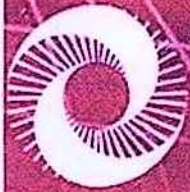
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6. All questionnaires shall be returned at the end of the exam. Scratch papers will also be provided by the proctors, and these too shall be returned by the participants whether they were able to use it or not.
7. The score of each team will be the average score of its members.
8. The top ten (10) teams will advance to the Semifinal Phase.
9. In case of a tie in the tenth (10th) place, both teams will advance to the Semifinals Phase.

B. SEMIFINALS PHASE

1. Team scores will reset to zero (0) and the three team members will work as a group in answering the questions in this phase.
2. This phase will consist of four (4) rounds: EASY, AVERAGE, DIFFICULT, and BRAINMESH.
3. Cellphones and other electronic devices are still prohibited to be used in this phase. Calculators that were used by the participants in the Preliminary Phase are allowed to be used.
4. Each team will be given the following to use for this phase: one (1) whiteboard marker, one (1) white board, and a set of scratch papers. Proctors will be assigned to each team where participants can request another marker or board just in case the ones given to them have defects or show signs of faultiness.
5. Each question will be read TWICE by the Quiz Master. Teams may begin strategizing once the questions are flashed in the projector screen.
6. For the EASY and AVERAGE rounds, teams may only start writing after the quizmaster says "Go". For the DIFFICULT and BRAINMESH rounds, strips of questions will be given to each team and contestants will be allowed to write from the first reading.
7. Timer will only start right after the second reading of the Quiz Master.
8. Teams MUST IMMEDIATELY stop writing and raise their white boards (with their answers neatly written and with proper units) once the allotted time expires. Proctors will read the answer of the team they are assigned with.
9. Proctors reserve the right to give warnings to their assigned teams if deemed necessary. Warnings and Disqualification section will further discuss this (refer to section E).
10. Wrong spelling or incomplete answers are considered incorrect. Illegible writing will be considered incorrect upon the discretion of the judges. As much as possible, do not round off in between calculations, and express numerical answers in three (3) significant figures unless otherwise stated.
11. For any form of question and/or objection regarding the answer to a question, semifinalists may raise their concern ONLY before the next question starts; the quiz master will ask the semifinalists for any objection/s regarding the question. They should tell their objection/clarification to their assigned proctor, and the proctor shall raise their hand. The mic will be given to the participants to ask their concern



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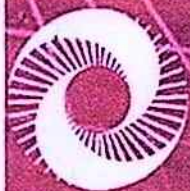
to the judges. The judges will answer their question and their decisions are final and unappealable. Contestation to a previous question will not be entertained. A sample situation is given to further explain the statement:

- a. Team X wants to contest the answer to the current question—question 5. They can only contest their answer to the judges right before question 6 is read, and cannot be raised during any succeeding question—questions 6 onwards.
12. The TOP FIVE (5) teams with the highest cumulative score after the BRAINMESH round will advance to the Finals Phase.
 13. In case of ties, involved teams shall participate in the CLINCHER round (refer to section D)
 14. Listed below are the number of questions per category, equivalent points, and time allotted per question.

Round	Number of Questions	Points	Allotted Time
EASY	10	2	15 seconds
AVERAGE	5	3	30 seconds
DIFFICULT	5	5	60 seconds
BRAINMESH	2	10	100 seconds

C. FINALS PHASE

1. The Finals Phase will be a Buzzer Type round.
2. Team scores will reset to zero (0) and the three team members will work as a group in answering the questions in this phase.
3. Cellphones and other electronic devices are still prohibited to be used in this phase. Calculators that were used by the participants in the Preliminary Phase are allowed to be used.
4. This phase will only consist of DIFFICULT and BRAINMESH questions. Fifteen (15) questions/categories with their respective difficulties will be presented, but only ten (10) questions/categories will be picked by the finalists.
5. The five team finalists shall be given an order in choosing the questions by drawing lots.
6. The first team shall choose one (1) question which will be answered by all teams.
7. Each question will be read TWICE by the quiz master. Teams may begin strategizing at this point.
8. Strips of the chosen question will be given to each team and contestants will be allowed to write from the first reading.
9. Teams are given 100 seconds per question. Timer will start after the second reading of the quiz master, right after his/her "Go" signal.
10. To answer, the team must press their buzzer and then raise their white board. Answers should be written neatly and with proper units.



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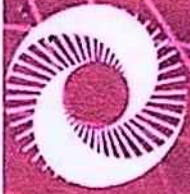
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11. Wrong spelling or incomplete answers are considered incorrect. Illegible writing will be considered incorrect upon discretion of the judges. As much as possible, do not round off in between calculations, and express numerical answers in three (3) significant figures unless otherwise stated.
12. In case of an incorrect answer, the other team/s may steal by pressing their buzzer until the time runs out. A team who answered incorrectly will not be allowed to steal for the same round of answering the question.
13. The next team then chooses another question and follows the same procedures stated from number 6 to 10, until all five (5) team finalists have chosen two (2) questions.
14. To illustrate how the Finals Phase will run, a sample situation is given:
 - a. Let's say that the results of the draw lots are as follows:
 - i. 1st team to choose the question: Team A
 - ii. 2nd team to choose the question: Team B
 - iii. 3rd team to choose the question: Team C
 - iv. 4th team to choose the question: Team D
 - v. 5th team to choose the question: Team E
 - b. The fifteen (15) categories will be flashed in the projector screen and Team A will choose the first category.
 - c. The quiz master now reads the question, and the teams can now immediately write on their boards.
 - d. The quiz master now finishes reading the question for the 2nd reading, he/she will say "Go" and this is the time where the five (5) team finalists will press their buzzers.
 - e. Let's say that Team E was the first to press their buzzer. They presented their answer, and it was incorrect. The four (4) remaining teams—Teams A, B, C, and D—will have the chance to steal. The quiz master will give the "Go" signal again before the remaining teams press their buzzers again. Let's say that Team D pressed their buzzer, gave their answer, but was still incorrect. Teams A, B, and C can still have the chance to steal, and this will go on until every team already answered. If there is still time and the five teams already answered, then the buzzers will reset, and all five teams can answer again.
15. The table below shows the pointing system that will apply in the Final Phase

Difficulty	Number of Questions	Points	Allotted Time
DIFFICULT	10	1	100 seconds
BRAINMESH	5	2	100 seconds

16. The total scores from the Final Phase will determine the Champion, First Runner-Up, and Second Runner-Up.
17. In case of ties, involved teams shall participate in the CLINCHER round (refer to section D)



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D. CLINCHERS

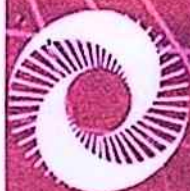
1. In case of ties, a clincher round will be held.
2. Draw lots will commence to set which team will choose a question first.
3. Clincher rounds are analogous to the Final Phase, wherein it is considered as a Buzzer Type round. Rules and procedures from the Final Phase from number 6 to 14 will be followed.
4. The first team to give a correct answer will be awarded the position for which the question was conducted. Time allotted for each question will be announced and may vary from time to time based on the difficulty and structure of the question.
5. In the special case of a three-way tie for the First Place, or the Champion, the first team to get a correct answer will be the Champion. The second team to get a correct answer will be the First Runner-Up, and the third team will be the Second Runner-Up.

E. WARNINGS AND DISQUALIFICATIONS

1. Any form of cheating will NOT be tolerated and will lead to the team's possible disqualification. A participant involved in this act will jeopardize his/her's team's qualification.
2. Any kind of misconduct will NOT be tolerated. Included acts are foul words, foul hand signs, violent reactions, harsh treatment towards the judges and other parts of the organizing team, mishandling of chairs, tables, and other equipment to be used in the whole duration of the competition, etc. Teams involved in such acts will be issued warnings, if not automatic disqualification. The organizing committee of BrainMEsh Inter-High School, headed by its head as well as the two (2) overall head of PSME Month 2023, reserves the right to decide whether a team should be disqualified or not based on the possible violation/s that their team or even just a member of their team commit/s.
3. Rule violations will be dealt with as indicated below:
 - For Preliminary Phase:**
 - i. First offense: The participant will receive a warning and will be given a 3-point deduction from his total score.
 - ii. Second offense: The participant will receive the last warning and will be given an additional 4-point deduction from his/her previous 3-point deduction.
 - iii. Third offense: The participant and his/her team will be disqualified from the competition.

For Semifinals and Finals Phase (including the possible Clincher round):

- iv. First offense: The team will receive a warning and will be given no point for the question.



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- v. Second offense: The team will receive the last warning, will be given no point for the question, and will be refrained from answering the next question.
- vi. Third offense: The team will be disqualified from the competition.

F. OTHER MATTERS

1. In the special case that the judges' decisions are changed, the former decision will be disregarded.
2. Any change in mechanics will be announced during the contest proper. Changes declared therein overrule any contradictions that may occur.
3. During the event, standard health protocols such as hand sanitation and wearing of masks will always be observed.

III. QUESTION CATEGORIES

MATHEMATICS	PHYSICS
Arithmetic	Mechanics
Algebra	Electromagnetism
Probability and Statistics	Optics
Geometry	Sound
Trigonometry	Thermodynamics
Analytic Geometry	
Basic Calculus	

IV. AWARDS

Certificates

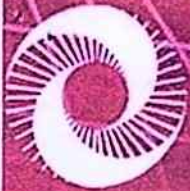
- Certificate of Participation for all Contestants and Coaches
- Certificate of Recognition for Reaching the Semifinal Phase for the 10 teams (team members + coach)
- Certificate of Recognition for Reaching the Final Phase for the 5 teams (team members + coach)

Special Award

- Preliminary Phase Top Scorer

2nd Runner-Up

- Php 8,000.00
- BrainMEsh 2nd Runner-Up Banner Board
- Certificates
- Medals



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1st Runner-Up

- Php 12,000.00
- BrainMEsh 1st Runner-Up Banner Board
- Certificates
- Medals

CHAMPION

- Php 15,000.00
- BrainMEsh Champion Banner Board
- Certificates
- Medals

NOTE:

- Additional/Other privileges may be announced at a later date.
- Names written in the registration form will be used for the certificates Failure to properly spell names in the registration form will not be the fault of the organizers. Certificates will not be reprinted in such cases.

V. EXTERNALS

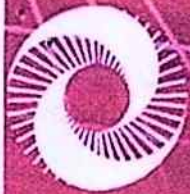
The official BrainMEsh representatives will answer your questions, clarifications, concerns, and other needs for the competition. You may contact them using the following available means.

A. For registration queries, the following representatives are here to assist you:

REPRESENTATIVE	MOBILE NUMBER	EMAIL ADDRESS
Ansherina Mae Rodriguez	0976 344 5139	psmemonth.psmeupsu@gmail.com

B. For concerns regarding the registration fee and/or anything related to the finances connected to the competition, the following people are here to assist you:

REPRESENTATIVE	POSITION	MOBILE NUMBER	EMAIL ADDRESS
Kate Ashley Nicolas	VP for Finance, PSME-UPSU AY 23'24'	0997 471 4019	psmemonth.psmeupsu@gmail.com
John Kenneth Asuncion	Executive Counselor, PSME-UPSU AY 23'24'; Overall Head, PSME Month 2023	0995 937 6384	



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VI. EMAIL FORMAT

- A. Our official PSME Month email address is:
- psmemonth.psmeupsu@gmail.com
- B. Your email must follow the following format:
- Email recipient: psmemonth.psmeupsu@gmail.com
 - Email subject: **BMH_<SchoolName>**
(example: BMH_University of the Philippines Integrated School)
 - Body: Please indicate the COMPLETE NAME of your school's CONTACT PERSON with his/her MOBILE NUMBER and EMAIL ADDRESS. Also, if you have any other concerns, please put them here.
- C. After sending the email, please wait for the assigned person to reply to your concern. If one (1) week already lapsed and we did not reply to your concern, please don't hesitate to send us again an email asking for a follow-up regarding your concern.

VII. REGISTRATION AND PAYMENT PROCEDURE

- A. Registration will be done before the event. No walk-in teams will be entertained during the event.
- B. The participating schools must accomplish the Registration Google Forms sent through their email. Alternatively, please click [here](#) to open the registration form.
- C. The forms must be accomplished on or before September 7, 2023. All documents (logos, proof of enrollment, proof of payment, etc.) must be passed together.
- D. The registration fee will differ based on the bundle that the participants will choose. Refer to the Registration Google Forms regarding the amount of fee needed to be settled.
- E. Payments must be sent to any of the following accounts:
- | PLATFORM | ACCOUNT NUMBER | NAME |
|----------|----------------|---------------------|
| GCash | 0997 471 4019 | Kate Ashley Nicolas |
| BPI | 0879 2727 34 | Jose David Javier |
- F. Once the requirements have been submitted, they will be validated. An email will then be sent to the coach's email confirming their registration.
- G. If some documents would require resubmission, an email requesting such documents will also be sent to the coach, telling them to resubmit through the email thread. The team's slot would only be confirmed once all documents have been settled.