



THE PHATTHALUNG PROVINCIAL
ADMINISTRATIVE ORGANIZATION, THAILAND

THE CRITERIA

THE THIRD PHATTHALUNG INTERNATIONAL ACADEMIC
COMPETITION FESTIVAL 2019 (3rd PIACF 2019)

5th SEPTEMBER 2019

AT PRINCESS UBOLRATANA RAJAKANYA'S COLLEGE
PHATTHALUNG, THAILAND

The Name Lists of the Third Phatthalung International Academic Competition Festival 2019

Level	List of Competitions	Category	Test	Page
Grade 4-6	Science Competition	Individual	Written	2-3
Grade 4-6	Mathematics Competition	Individual	Written	4-5
Grade 4-6	ASEAN Quiz Competition	Individual	Written	6-7
Grade 4-6	English Proficiency Competition	Individual	Written	8
Grade 7-12	Science Competition	Individual	Written	9-11
Grade 7-12	Mathematics Competition	Individual	Written	12-14
Grade 7-12	ASEAN Quiz Competition	Individual	Written	15-16
Grade 7-12	Speech Competition	Individual	Practice	17-18

Science Competition, Grade 4 – 6 (Upper Primary Level)

1. Eligibility:

Students who are studying in Grade 4-6 (Upper Primary Level)

2. Category and number of competitors:

2.1 Individual competitor

2.2 Each school can send only **two students** to participate in the competition.

3 Competition details:

3.1 The test consists of **40 multiple choice questions** with four possible answers for each question.

3.2 The test lasts 120 minutes.

3.3 The test is constructed by qualified experts.

3.4 Scope of the test:

The test covers the contents as follows:

- 1) Characteristics and main components of cells of living things; relationship of function in various systems; genetic transmission; biotechnology; diversity of living things; living things' behaviour and responses to stimuli in the environment.
 - 2) Components and properties of solutions; pure substances; transformation of substances through change of their state; solution forming and chemical reaction.
 - 3) Frictional forces; moment of forces; variety of motion in daily life; rules for energy conservation; energy transfer; heat equilibrium; reflection, refraction and density of light.
 - 4) Relationship between electrical quantities; principles of electrical domestic circuits; electrical energy and basic principles of electronic circuits.
 - 5) Change processes of the Earth's crust; geological sources; factors affecting atmospheric change; reactions within the solar system and effects on various things on Earth; importance of space technology.
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- 6) Relationship between science and technology; development and effects of development on quality of life and the environment.

4.Criteria for determining awards:

Competitors who achieve a score of **80 points or more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

Mathematics Competition, Grade 4 – 6 (Upper Primary Level)

1. Eligibility:

Students who are studying in Grade 4 – 6 (Upper Primary Level)

2. Category and number of competitors:

2.1 Individual competitor

2.2 Each school can send only **two students** to participate in the competition.

3. Competition details:

3.1 The test consists of **25 multiple choice questions** with four possible answers for each question.

3.2 The test lasts 120 minutes.

3.3 The test is constructed by qualified experts.

The test covers the contents as follows:

- 1) Concepts of numbers, ratio, proportion, percentage, real numbers expressed in exponential notation with integer indices, square root and cube root of real numbers; operations involving integral numbers, fractions, decimals, exponents, square root and cube roots of real numbers.
 - 2) Surface areas of prisms and cylinders, and volume of prisms, cylinders, pyramids, cones and spheres; the various systems of measuring length, area, and volume.
 - 3) Stages of constructing two-dimensional geometric figures with compass and straight edge; characteristics and properties of three-dimensional geometric figures, i.e., prisms, pyramids, cylinders, cones and spheres.
 - 4) Properties of congruence and similarities of triangles, parallels, Pythagoras' theorems and converse; properties for reasoning and problem-solving; and geometric transformation through translation, reflection and rotation.
 - 5) Characteristics of two-dimensional and three-dimensional geometric figures.
 - 6) Relationships of patterns, situations or problems; and can use single-variable linear equations, two-variable linear equation systems, single-variable linear inequality, and graphs in problem-solving.
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7) Concepts of the measures of central tendency, arithmetic mean, median, and mode of non-frequency distribution data.

8) The concepts of random sampling and probability.

4. Criteria for determining awards:

Competitors who achieve a score of **80 points or more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

ASEAN Quiz Competition, Grade 4 – 6 (Upper Primary Level)

1. Eligibility:

Students who are studying in Grade 4-6 (Upper Primary Level)

2. Category and number of competitors:

2.1 Individual competitor

2.2 Each school can send only **two students** to participate in the competition.

3. Competition details:

3.1 The test consists of **50 multiple choice questions** with four possible answers for each question.

3.2 The test lasts 120 minutes.

3.3 The test is constructed by qualified experts.

3.4 Scope of the ASEAN Quiz:

The test covers the grade 12 graduates learning area of ASEAN in the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) as follows:

3.4.1 The development of ASEAN

- 1) Background of ASEAN
- 2) Objectives of ASEAN establishment and ASEAN member countries
- 3) Meaning and importance of ASEAN Community and ASEAN Charter

3.4.2 Achievements of ASEAN

- 1) Structure and dynamics of ASEAN
 - ASEAN Summit
 - ASEAN Coordinating Councils: ACCs
 - ASEAN Community Councils
 - 2) The importance of 3 ASEAN cooperatives
 - ASEAN Political-Security Community
 - ASEAN Economic Community
 - ASEAN Socio-Cultural Community
 - 3) The results of the previous year meetings
 - 4) Problems and obstacle
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- 3.4.3 ASEAN Economic Community or AEC
 - 1) Meaning and objectives of AEC
 - 2) Goals of AEC
 - 3) Roadmap to AEC
 - 4) Benefits of being a member of AEC
- 3.4.4 The establishment of ASEAN Free Trade Area or AFTA
 - 1) Meaning, importance and objectives of AFTA
 - 2) Benefits of being a member of AFTA
- 3.4.5 Benefits of being a member country of ASEAN
 - 1) Changes to ASEAN Community
 - Political cooperation
 - Economic cooperation
 - Specific cooperation
 - 2) Benefits from ASEAN Community
 - Poverty alleviation
 - Tourism promotion
 - Environment conservation
 - Communicable diseases control
 - Narcotics suppression
 - Disaster management
 - Women's rights protection
 - Global terrorism solution

4. Criteria for determining awards:

Competitors who achieve a score of **80 points** or **more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

English Proficiency Competition, Grade 4-6 (Upper Primary Level)

1. **Eligibility:**

Students who are studying in Grade 4 – 6 (Upper Primary Level)

2. **Category and number of competitors:**

2.1 Individual competitor

2.2 Each school can send only **two students** to participate in the competition.

3. **Competition details:**

3.1 The test consists of **50 multiple choice questions** with four possible answers for each question.

3.2 The test consists of conversation, grammar, vocabulary and reading.

3.3 The test lasts 120 minutes.

3.4 The test is constructed by qualified experts.

4. **Criteria for determining awards:**

Competitors who achieve a score of **80 points or more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

Science Competition, Grade 7-12 (High School Level)

1. Eligibility:

Students who are studying in Grade 7-12 (High School Level)

2. Category and number of competitors:

2.1 Individual competitor

2.2 Each school can send only **two students** to participate in the competition.

3 Competition details:

3.1 The test consists of **40 multiple choice questions** with four possible answers for each question.

3.2 The test lasts 120 minutes.

3.3 The test is constructed by qualified experts.

3.4 Scope of the test:

The test covers the contents as follows:

- 1) Characteristics and main components of cells of living things; relationship of function in various systems; genetic transmission; biotechnology; diversity of living things; living things' behavior and responses to stimuli in the environment.
 - 2) Components and properties of solutions; pure substances; transformation of substances through change of their state; solution forming and chemical reaction.
 - 3) Frictional forces; moment of forces; variety of motion in daily life; rules for energy conservation; energy transfer; heat equilibrium; reflection, refraction and density of light.
 - 4) Relationship between electrical quantities; principles of electrical domestic circuits; electrical energy and basic principles of electronic circuits.
 - 5) Change processes of the Earth's crust; geological sources; factors affecting atmospheric change; reactions within the solar system and effects on various things on Earth; importance of space technology.
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6) Relationship between science and technology; development and effects of development on quality of life and the environment.

7) Scope of the Test;

1) Physics 10 items

2) Chemistry 10 items

3) Biology 15 items

4) Earth Science and Astronomy 5 items

- The test covers the grade 12 graduates learning area of Science as follows.

Physics

- | | |
|----------------------------------|-----------------------------------|
| - One dimensional motion | - Two dimensional motion |
| - Force, mass and laws of motion | - Collision and momentum |
| - Work and energy | - Wave |
| - Light | - Sound |
| - Fluids | - Heat |
| - Electrostatics | - Electromagnetics |
| - Direct current electricity | - Alternating current electricity |

Chemistry

- | | |
|------------------|-------------------------|
| - Periodic table | - Atomic structure |
| - Stoichiometry | - Solid, liquids, gases |
| - Reaction rate | - Chemical equilibrium |
| - Acid-Bases | - Electrochemistry |
| - Hydrocarbons | - Petroleum |
| - Polymers | - Biomolecules |

Biology

- | | |
|----------------------------------|---------------------|
| -Basic biology | - Chemistry of life |
| - Cells of organisms | - Digestive system |
| - Homeostasis | - Locomotion |
| - Perception and response system | - Endocrine system |
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- Animal behavior
- Photosynthesis
- Structure, function and growth of flowering plants
- Plant response
- Reproduction of flowering plants
- Evolution
- Gene and genetic engineering
- Reproduction and development

4.Criteria for determining awards:

Competitors who achieve a score of **80 points or more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

Mathematics Competition, Grade 7 – 12 (High School Level)

1. Eligibility:

Students who are studying in Grade 7 – 12 (High School Level)

2. Category and number of competitors:

2.1 Individual competitor

2.2 Each school can send only **two students** to participate in the competition.

3. Competition details:

3.1 The test consists of **25 multiple choice questions** with four possible answers for each question.

3.2 The test lasts 120 minutes.

3.3 The test is constructed by qualified experts.

The test covers the contents as follows:

- 1) Concepts of numbers, ratio, proportion, percentage, real numbers expressed in exponential notation with integer indices, square root and cube root of real numbers; operations involving integral numbers, fractions, decimals, exponents, square root and cube roots of real numbers.
 - 2) Surface areas of prisms and cylinders, and volume of prisms, cylinders, pyramids, cones and spheres; the various systems of measuring length, area, and volume.
 - 3) Stages of constructing two-dimensional geometric figures with compass and straight edge; characteristics and properties of three-dimensional geometric figures, i.e., prisms, pyramids, cylinders, cones and spheres.
 - 4) Properties of congruence and similarities of triangles, parallels, Pythagoras' theorems and converse; properties for reasoning and problem-solving; and geometric transformation through translation, reflection and rotation.
 - 5) Characteristics of two-dimensional and three-dimensional geometric figures.
 - 6) Relationships of patterns, situations or problems; and can use single-variable linear equations, two-variable linear equation systems, single-variable linear inequality, and graphs in problem-solving.
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- 7) Concepts of the measures of central tendency, arithmetic mean, median, and mode of non-frequency distribution data.
 - 8) The concepts of random sampling and probability.
 - 9) Concepts of the real number system, absolute values of real numbers and real numbers expressed in radicals and in exponential notation with rational indices; estimates of real numbers expressed in radicals and exponents through appropriate calculation methods.
 - 10) Trigonometric ratio for estimating distance and height.
 - 11) Concept of sets and their operation; Venn-Euler diagrams for problem-solving and checking validity of reasoning
 - 12) Reasoning through induction and deduction.
 - 13) Concepts of relation and function that can be applied for problem-solving in various situations.
 - 14) Concepts of arithmetic sequence, geometric sequence the concepts of the sums of the first n terms of arithmetic and geometric series.
 - 15) The concept of solving equations and inequalities with one variable (degree not more than two) graphs of equations, inequalities or functions for problem-solving
 - 16) Simple methodology for opinion polling; central tendency suitable to data and objectives; arithmetic mean, median, mode, standard deviation and percentile of data; data and results of data analysis for facilitating decision-making
 - 17) Concepts of random sampling and probability; projection and for decision-making in various situations
 - 18) Diverse methods for problem-solving; skills and processes for appropriately solving problems faced in various situations; reasoning for decision-making and the conclusions reached.
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4. Criteria for determining awards:

Competitors who achieve a score of **80 points or more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

ASEAN Quiz Competition, Grade 7 – 12 (High School Level)

1. Eligibility:

Students who are studying in Grade 7-12 (High School Level)

2. Category and number of competitors:

2.2.1 Individual competitor

2.2.2 Each school can send only **two students** to participate in the competition.

3. Competition details:

3.1 The test consists of **50 multiple choice questions** with four possible answers for each question.

3.2 The test lasts 120 minutes.

3.3 The test is constructed by qualified experts.

3.4 Scope of the ASEAN Quiz:

The test covers the grade 12 graduates learning area of ASEAN in the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) as follows:

3.4.1 The development of ASEAN

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 - ASEAN Economic Community
 - ASEAN Socio-Cultural Community
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- 3) The results of the previous year meetings
- 4) Problems and obstacle
- 3.4.3 ASEAN Economic Community or AEC
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 - 1) Meaning, importance and objectives of AFTA
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- 3.4.5 Benefits of being a member country of ASEAN
 - 1) Changes to ASEAN Community
 - 1.1) Political cooperation
 - Economic cooperation
 - Specific cooperation
 - 2) Benefits from ASEAN Community
 - 2.1) Poverty alleviation
 - 2.2) Tourism promotion
 - 2.3) Environment conservation
 - 2.4) Communicable diseases control
 - 2.5) Narcotics suppression
 - 2.6) Disaster management
 - 2.7) Women's rights protection
 - 2.8) Global terrorism solution

4. Criteria for determining awards:

Competitors who achieve a score of **80 points** or **more** will receive **gold medal** certificates.

Competitors who achieve a score of **70-79 points** will receive **silver medal** certificates.

Competitors who achieve a score of **50-69 points** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.

Speech Competition, Grade 7-12 (High School Level)

1. Eligibility:

Students who are studying in Grade 7-12 (High School Level)

2. Category and number of competitors:

- 2.1 Individual competitor
- 2.2 Each school can send only **one student** to participate in the competition.

3. Competition details:

- 3.1 Competitors are given a topic from a list **only one topic**. The competitors will have a maximum of 5 minutes to prepare the speech.
 - 3.2 The competitors must report at 30 minutes before the competition starts and pick up their ranking number for the competition. If the competitors don't report within the limit time, they will be considered disqualified from the competition.
 - 3.3 The topic for competition
Topic for Grade 7-12 (High School Level)
 - 1) How to preserve the environment in my country.
 - 3.4 The order of competitors will be determined at random.
 - 3.5 The time for the speech competition will be between 3 - 5 minutes.
 - 3.6 The committees do not allow the competitors to use notes or other information during their speech.
 - 3.7 The competitors are allowed to use the microphone.
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4. Scoring Criteria (Full score of 100 points)

4.1 Speech material (**Content**) Good organization, relevant ideas, interesting, adequate content **40 points**

31 - 40 = effective

21 - 30 = good

11 - 20 = adequate

1 - 10 = poor

4.2 Clear and accurate pronunciation (**Grammar and Pronunciation**) **20 points**

16 - 20 = generally effective, generally easy to understand despite Thai accent

11 - 15 = some inaccurate use of grammar but meaning is conveyed, occasionally causing difficulty in understanding

6 - 10 = frequently incomprehensible causing difficulty in understanding

1 - 5 = almost totally incomprehensible, almost impossible to understand

4.3 Presentation (**Presentation**) **20 points**

16 - 20 = effective

11 - 15 = good

6 - 10 = adequate

1 - 5 = poor

4.4 Fluency (**Flow of language**) **20 points**

16 - 20 = speech connected with occasional hesitation

11 - 15 = speech still connected even with noticeable hesitation

6 - 10 = speech very disconnected, difficult to follow

1 - 5 = no connection in speech

5. Criteria for determining awards:

Competitors who achieve scores of **80 or more** will receive **gold medal** certificates.

Competitors who achieve scores of **70-79** will receive **silver medal** certificates.

Competitors who achieve scores of **50-69** will receive **bronze medal** certificates.

Competitors who achieve a score of **0-49 points** will receive **participant** certificates.

The judges' decision will be final.
