### HISTORY, CIVICS AND GEOGRAPHY(THAILAND) (58)

#### **GEOGRAPHY (THAILAND)**

H.C.G.(Thailand) - Paper - 2

Candidates offering History, Civics and Geography are not eligible to offer History, Civics and Geography (Thailand).

#### Aims:

- 1. To develop an understanding of terms, concepts and principles related to Geography.
- 2. To explain the cause- effect relationships of natural phenomena.
- 3. To understand the use of natural resources and development of regions.
- 4. To acquire knowledge of and appreciate the interdependence of nations and different regions of the world.
- 5. To understand and encourage human efforts made to conserve and protect the natural environment.
- 6. To acquire practical skills related to the meaning and use of maps and their importance in the study of Geography.

#### **CLASS IX**

There will be **one** paper of **two** hours duration carrying 80 marks and Internal Assessment of 20 marks.

Candidates will be expected to make the fullest use of sketches, diagrams, graphs and charts in their answers.

Questions may require answers involving the interpretation of photographs of geographical interest.

#### PRINCIPLES OF GEOGRAPHY

#### 1. Our World

(i) Earth as a planet

Shape of the earth. Earth as the home of humankind and the conditions that exist.

(ii) Geographic grid - Latitudes and Longitudes

Concept of latitudes: main latitudes, their location with degrees, parallels of latitude and their uses.

Concept of longitudes - Prime Meridian, time [local, standard and time zones, Greenwich Mean Time (GMT) and International Date Line (IDL)]. Eastern and Western hemisphere. Using latitudes and longitudes to find location. Calculation of time.

Great Circles and their use.

#### (iii) Rotation and Revolution.

Rotation — direction, speed and its effects (occurrence of day and night, the sun rising in the east and setting in the west, Coriolis effect)

Revolution of the earth and its inclined axis – effects: the variation in the length of the day and night and seasonal changes with Equinoxes and Solstices.

#### 2. Structure of the Earth

(i) Earth's Structure

Core, mantle, crust – meaning, extent and their composition.

(ii) Landforms of the Earth

Mountains, plateaus, plains (definition, types and their formation):

*Mountains – fold, residual and block.* 

*Plateaus – intermont and volcanic.* 

*Plains – structural and depositional.* 

Examples from the world and Thailand

#### (iii) Rocks

Rocks - difference between minerals and rocks, types of rocks: igneous, sedimentary, metamorphic, their characteristics and formation; rock cycle.

(iv) Volcanoes

*Meaning, Types – active, dormant and extinct.* 

*Effects* – *constructive* and *destructive*.

Important volcanic zones of the world.

#### (v) Earthquakes

Meaning, causes and measurement.

Effects: destructive and constructive.

Earthquake zones of the World

#### (vi) Weathering and Denudation.

Meaning, types and effects of weathering.

Types: Physical Weathering – block and granular disintegration, exfoliation;

Chemical Weathering—oxidation, carbonation, hydration and solution;

Biological Weathering – caused by humans, plants and animals.

Meaning and agents of denudation; work of river and wind.

Stages of a river course and associated land forms – V-shaped valley, waterfall, meander and delta.

Wind – deflation hollows and Sand dunes.

#### 3. Hydrosphere

Meaning; Tides; Ocean Currents.

Meaning of hydrosphere; Tides - formation and pattern; Ocean Currents — their circulation pattern and effects. (Specifically of Gulf Stream, North Atlantic Drift, Labrador Current, Kuro Shio, Oya Shio, Andaman Sea of the Indian Ocean, eastern shoreline of the Malay Peninsula and Pacific Ocean).

#### 4. Atmosphere

(i) Composition and structure of the atmosphere. Troposphere, Stratosphere, Ionosphere and Exosphere; Ozone in the Stratosphere, its depletion. Global warming, its impact.

#### (ii) Insolation

- Meaning of insolation and terrestrial radiation.
- Factors affecting temperature: latitude, altitude, distance from the sea, slope of land, winds and ocean currents.

#### (iii) Atmospheric Pressure and Winds.

- Meaning and factors that affect atmospheric pressure.
- Major pressure belts of the world.
- Factors affecting direction and velocity of wind pressure gradient, Coriolis Effect.
- Permanent winds Trades, Westerlies and Polar Easterlies.
- Periodic winds Land and Sea breezes, Monsoons.
- Local winds Loo, Chinook, Foehn and Mistral.
- Variable winds Cyclones and Anticyclones of China
- *Jet Streams- Meaning and importance.*

#### (iv) Humidity

- Humidity meaning and difference between relative and absolute humidity.
- Condensation forms (clouds, dew, frost, fog and mist).
- Precipitation forms (rain, snow, and hail).
- Types of rainfall relief/orographic, convectional, cyclonic/ frontal with examples from the different parts of the world

#### 5. Pollution

(a) Types - air, water (fresh and marine), soil, radiation and noise.

#### (b) Sources

- Noise: Traffic, factories, construction sites, loud speakers, airports.
- Air: vehicular, industrial, burning of garbage.

Water: domestic and industrial waste.

- Soil: chemical fertilizers, bio medical waste and pesticides.
- (c) Effects on the environment and human health.

#### (d) Preventive Measures

Car pools, promotion of public transport, no smoking zone, restricted use of fossil fuels, saving energy and encouragement of organic farming.

#### 6. Natural Regions of the World

Location, area, climate, natural vegetation and human adaptation.

Equatorial region, Tropical grasslands, Tropical Deserts, Tropical Monsoon, Mediterranean, Temperate grasslands, Taiga and Tundra.

#### 7. Map Work

On an outline map of the **World**, candidates will be required to **locate**, **mark** and **name** the following:

- 1. The major Natural Regions of the world Equatorial, Tropical Monsoon, Tropical Deserts, Mediterranean type, Tropical grasslands, Temperate grasslands, Taiga and Tundra.
- 2. The Oceans, Seas, Gulfs and Straits all Major Oceans, Caribbean Sea, North Sea, Black Sea, Caspian Sea, South China Sea, Mediterranean Sea, Gulf of Carpentaria, Hudson Bay, Persian Gulf, Gulf of Mexico, Gulf of Guinea, Bering Strait, Strait of Gibraltar, Strait of Malacca.
- 3. Rivers Mississippi, Colorado, Amazon, Paraguay, Nile, Zaire, Niger, Zambezi, Orange, Rhine, Volga, Danube, Murray, Darling, Hwang Ho, Yangtse Kiang, Indus, Ganga, Mekong, Irrawaddy, Tigris, Euphrates.
- 4. Mountains Rockies, Andes, Appalachian, Alps, Himalayas, Pyrenees, Scandinavian Highlands, Caucasus, Atlas, Drakensburg, Khinghan, Zagros, Urals, Great Dividing Range.
- 5. Plateaus Canadian Shield, Tibetan Plateau, Brazilian Highlands, Patagonian Plateau, Iranian Plateau, Mongolian Plateau.

#### INTERNAL ASSESSMENT

#### PRACTICAL WORK/ PROJECT WORK

- 1. A record file having any **three** of the following exercises will be maintained. (The file will be evaluated out of 10 marks).
  - (a) Uses of important types of maps.
  - (b) Directions and how to identify them an illustrative diagram.
  - (c) Reading and using statement of scale, graphic scale and scale shown by representative

- fraction method. (No drawing work, only explaining their meanings).
- (d) Reading of one town guide map or an atlas map. (Recognising the symbols and colours used, identifying directions and distances).
- (e) Drawing and recognising forms of important contours viz. valleys, ridges, types of slopes, conical hill, plateau, escarpment and sea cliff.
- (f) Drawing at least one sketch map to organize information about visiting an important place, a zoo or a monument.
- 2. Candidates will be required to prepare a project report on any **one** topic. The topics for assignments may be selected from the list of suggested assignments given below. Candidates can also take up an assignment of their choice under any of the four broad areas given below. (The project will be evaluated out of 10 marks).

#### **Suggested list of Assignments:**

- (a) **Weather records:** Maintaining and interpreting weather records as found in the newspaper for at least one season.
- (b) Collection of data from secondary sources (Using Modern techniques i.e. GPS, Remote Sensing, Aerial Photography and Satellite imageries): Preparing a Power Point presentation on current issues like use of earth resources/development activities/dangers of development and ecological disasters like droughts, earthquakes, volcanoes, floods, landslides cyclones and tornadoes in the world.
- (c) **Physical Features:** Collection of data from primary and secondary sources or taking photographs and preparing notional sketches of features found in the vicinity or areas visited during the year as a part of school activity.
- (d) Find out the sources of pollution of water bodies in the locality and determine the quality of water.
- (e) Collect information on global environmental issues and problems and communicate your findings through appropriate modes (posters, charts, collages, cartoons, handouts, essays, street plays and PowerPoint presentation).
- (f) **Area Studies:** Choosing any aspect from World Studies and preparing a PowerPoint presentation or a write up on it.
- (g) Meteorological Instruments and their uses: Six's maximum and minimum thermometer, mercury barometer, aneroid barometer, wind vane, anemometer, rain gauge and hygrometer.

#### CLASS X

There will be **one** paper of **two** hours duration carrying 80 marks and Internal Assessment of 20 marks.

Candidates will be expected to make the fullest use of sketches, diagrams, graphs and charts in their answers.

Questions set may require answers involving the interpretation of photographs of geographical interest.

#### PART – I: MAP WORK

#### 1. Interpretation of Topographical Maps

- (a) Locating features with the help of a four figure or a six-figure grid reference.
- (b) Identification of landforms marked by contours lines (steep slope, gentle slope, hill, valley, ridge, plateau, saddle-shaped, U-shaped valley, spur, escarpment) by contour cross-section method.
- (c) Identifying and drawing of the conventional symbols.
- (d) Definition of contour lines, contour interval, definitions of different types of scales (statement of scale, linear scale, representative fraction), triangulated height, nucleated settlement, dispersed settlement, water-divide, ridge.
- (e) Markings directions between different locations, using eight cardinal points.

#### 2. Map of Thailand

On an outline map of Thailand, candidates will be required to locate, mark and name the following:

Mountains, Peaks: Daen Lao Range, Sankalakhiri, Doi Inthanon, Thanon Thong Chai Range;

Plateaus, plains, peninsula and islands: Khorat plateau, plains in central Thailand, Malay Peninsula, phi phi island;

**Longitude:** Indo China Time (105°E);

**Rivers:** Ping river, Wang river, Yom river, Nan river, Chao Phraya river, Tha Chin River

Water Bodies: Songkhla Lake, Gulf of Thailand, Andaman Sea, South China Sea.

**Direction of Winds**: South West Monsoon, North East Monsoon.

**Distribution of Minerals**: Oil and coal in Kamphaeng phet city; Tin in Phuket, Gem stones in Chantaburi, Erawan Natural Gas field.

**Soil Distribution** – Alluvial Soil (Sandy soil, clayey soil, shallow soil, sandy loam soil), Laterite soil.

Cities - Bangkok, Chinag Mai, Chaing Rai, Phuket, Ayuthaya, Sukhothai, Krabi, Nonthaburi, Nakhon Ratchasima, Hat Yai, Udon Thani, Pak Kret, Pattaya.

**Population -** Distribution of Population (dense and sparse).

#### PART – II: GEOGRAPHY OF THAILAND

#### 3. Location, Extent, Physical features

- Position and Extent of Thailand (through Map only).
- The physical features of Thailand Archipelagos, mountains, plateaus, plains and rivers. (through Map only).
- Northern Thailand, North-eastern Thailand, Central Thailand, Eastern Thailand, Western Thailand, Southern Thailand.

#### 4. Climate

Distribution of Temperature, Rainfall, winds in Summer and Winter and factors affecting the climate. Monsoon and its mechanism. Seasons – Hot Season - March to Mid-May, Rainy Season-Mid May to October affected by South West Monsoon; Dry, Cool Season-November to February affected by North-East Monsoon.

#### 5. Soil Resources

- Types of soil: Alluvial (Sandy soil, clayey soil, shallow soil, sandy loam soil), Laterite soil.
- Distribution, composition and characteristics such as colour, texture, minerals and crops associated.
- Soil Erosion: causes, prevention and conservation.

#### 6. Natural Vegetation

- Importance of forests.
- Types of vegetation (tropical semi-evergreen, tropical deciduous monsoon, savanna); distribution and Characteristics and adaptation with their environment
- Significance of Forest conservation and importance of community forests.

#### 7. Water Resources

- Sources (Surface water and ground water).
- Need for conservation and conservation practices, water harvesting (Watershed management). Irrigation: Importance and methods (canal, well, tube well- advantages and disadvantages of each).

#### 8. Mineral and Energy Resources

- Iron ore, Feldspar, Tin and Lead uses and their distribution.
- Conventional Sources: Coal, Natural gas (distribution, advantages and disadvantages).
- Hydel Power generation and advantages; examples of Bhumibol Dam, Srinagarind Dam and the rivers on which they are constructed.
- Non-conventional Sources: Solar, wind (generation and advantages).

#### 9. Agriculture in Thailand

- Agriculture: role in the economy; problems of agriculture.
- Types of farming in Thailand: subsistence: shifting, intensive; Commercial: extensive, plantation and mixed characteristics, advantages and disadvantages of each.
- Climatic conditions, soil requirements, methods of cultivation, processing and distribution of the following crops:
  - Rice and Maize
  - Rubber and Sugarcane
  - Palm and Soyabean

#### 10. Manufacturing Industries

- Importance and classification of industries (agro based, mineral based);
- Agro based Industry Sugar, rice, food processing, fisheries and textile (economic importance and problems of each);
- Mineral based Industry Iron and Steel in Samut Prakan city of Thailand-sources of raw materials and power; significance to the economy; Electronics in Ayutthaya city of Thailand- importance; cement and automobile industries (sources of raw materials and power; significance to the economy).

#### 11. Transport

Importance of transport; Modes – Roadways, Railways, Airways and Waterways - advantages and disadvantages.

#### 12. Tourism

Definition of tourism, advantages, important places-natural and cultural, positive and negative impacts of tourism.

#### 13. Waste Management

- Impact of waste accumulation spoilage of landscape, pollution, health hazards, effect on terrestrial, aquatic (fresh water and marine) life.
- Need for waste management.
- Methods of safe disposal segregation, dumping and composting.
- Need and methods for reducing, reusing and recycling waste.

## INTERNAL ASSESSMENT PRACTICAL / PROJECT WORK

Candidates will be required to prepare a project report on any **one** topic. The topics for assignments may be selected from the list of suggested assignments given below. Candidates can also take up an assignment of their choice under any of the broad areas given below.

#### Suggested list of assignments:

- 1. Geography of Thailand
  - (a) Land use pattern in different regions of Thailand a comparative analysis.
  - (b) The survey of a local/ floating markets on the types of shops and services offered.
- 2. Environment: Wildlife conservation efforts in Thailand.
- 3. Current Geographical Issues: Development of tourism in Thailand.
- 4. Transport in Thailand: Development of Road, Rail, Water and Air routes.
- 5. List different type of industries in the provinces and collect information about the types of raw materials used, modes of their procurement and disposal of wastes generated. Classify these industries as polluting or environment friendly and suggest possible ways of reducing pollution caused by these units.

- 6. Visit a water treatment plant, sewage treatment plant or garbage dumping or vermicomposting sites in the locality and study their working.
- 7. Need for industrialization in Thailand, the latest trends and its impact on economy of Thailand.

#### **EVALUATION**

The assignments/project work is to be evaluated by the subject teacher and by an External Examiner. (The External Examiner may be a teacher nominated by the Head of the school, who could be from the faculty, **but not teaching the subject in the section/class**.

The Internal Examiner and the External Examiner will assess the assignments independently.

# Award of Marks Subject Teacher (Internal Examiner) External Examiner 10 marks

The total marks obtained out of 20 are to be sent to CISCE by the Head of the school.

The Head of the school will be responsible for the online entry of marks on CISCE's CAREERS portal by the due date.

#### INTERNAL ASSESSMENT IN GEOGRAPHY (Thailand) - GUIDELINES FOR MARKING WITH GRADES

Criteria	Preparation	Procedure/ Testing	Observation	Inference/Results	Presentation
Grade I (4 marks)	Gives complete theoretical information using relevant geographical terms	States the objectives and defines the aspects to be studied.	Studies text and source material and makes a list.	States theoretical information in a coherent and concise manner using geographical terminology. Uses a variety of techniques. Shows resourcefulness. Supports investigation with relevant evidence.	Neatly and correctly stated statement of intent and conclusion matches with objectives.
Grade II (3 marks)	Provides adequate information using appropriate terms.	States objectives but not the limitations of the study.	Makes a limited list of source material only from secondary sources.	Uses sound methodology-using methods suggested. Makes a valid statement about the data collected. Attempts to develop explanations using available information.	Limited use of reference material and a presentation, which is routine.
Grade III (2 marks)	States objectives using some geographical terms but mostly in descriptive terms.	Only lists the aspects to be studied.	References are minimal.	Uses methodology in which selective techniques are applied correctly. Makes descriptive statement. Analysis is limited. Relates and describes systematically the data collected. Tries to relate conclusion to original aim.	Simple and neat with correct placement of references, acknowledgements, contents, maps and diagrams.
Grade IV (1 mark)	States intent without using relevant geographical terms but explaining them correctly.	Shows evidence of what to look for and how to record the same.	23	Makes few relevant statements. Does analyse data that is not presented or tends to copy analysis available from other sources. Makes superficial conclusions. Link between the original aim and conclusion is not clear.	Neat but lacking in correct placement of table of contents, maps, diagrams and pictures.
Grade V (0 marks)	Does not make any use of geographical terms.	Has not collected any relevant data and has not presented sources correctly.	logical technique and	Does not analyse data. Does not use the suggested methods.  Makes conclusions but does not relate them to the original aim.	Presents the report without reference.