



International Geography Championships

2022 Battery Examination - Part 3

Name _____

School _____

Grade _____

Instructions – Mark your answers on the scantron provided. Correct answers are worth 2 points. Incorrect answers are worth –1 point. Questions left blank are worth 0 points.

Questions 1-10 are about glacial landforms.

1. The Quaternary glaciation, an alternating series of glacial and interglacial periods, began about how long ago?

- A. 10,000 years
- B. 100,000 years
- C. 500,000 years
- D. 2.6 million years

2. Which of these is the only pair of remaining ice sheets from the last ice age?

- A. Antarctica and Greenland
- B. Patagonian and Weichselian
- C. Laurentide and Wisconsin
- D. Pinedale and North American

3. Many prominent glacial landforms can be found in which of the following areas?

- A. the Iberian Peninsula
- B. the Arabian Peninsula
- C. the Fennoscandian Peninsula
- D. the Gallipoli Peninsula

4. Retreating glaciers form characteristic valleys named for their resemblance to what letter?

- A. O
- B. S
- C. U
- D. X

5. Which famous American location is a glacial valley?

- A. the Black Hills
- B. the Grand Canyon
- C. the Royal Gorge
- D. Yosemite Valley

6. What notable European mountain is a pyramidal peak, given its distinctive shape by glacial action?

- A. Mount Etna
- B. Stromboli
- C. Mount Olympus
- D. the Matterhorn

7. Which of these, named due to their resemblance to rosary beads, is one of a series of glacial lakes connected by a stream?

- A. esker
- B. paternoster
- C. cirque
- D. fjord

8. Which of these is formed when a chunk of ice left by a glacier melts to form a lake?

- A. a drumlin
- B. a kettle lake
- C. a tarn
- D. a kame

9. Which of these is NOT a fluvio-glacial landform, which results from erosion and deposition of sediments caused by glacial meltwater?

- A. glacial valleys
- B. eskers
- C. moraines
- D. drumlins

10. The term nunatak, which refers to a landform that protrudes from an ice field or glacier, comes from what indigenous language spoken across the North American Arctic?

- A. Aymara
- B. Nahuatl
- C. Ojibwe
- D. Inuit

Questions 11-20 are about cities.

11. As of 2020, roughly what percentage of the world's population lived in an urban area?

- A. 90%
- B. 60%
- C. 30%
- D. 10%

12. Which of these is NOT a factor for people moving to cities across the world since 1900?

- A. industrialization
- B. the Agricultural Revolution
- C. lower birth rate
- D. more economic and educational opportunities

13. Developing sustainable cities and communities is Sustainable Development Goal Number 11 as established by what body?

- A. NATO
- B. the United Nations
- C. the G7
- D. the OAS

14. Which of these is NOT an alternate term for a sustainable city?

- A. 'green city'
- B. 'eco-city'
- C. 'smart city'
- D. 'world city'

15. Sustainable cities should be designed with consideration for all of these EXCEPT which of the following?

- A. historic preservation
- B. environmental impact
- C. social impact
- D. economic impact

16. Which of the following is the largest metropolitan area in the world?

- A. Kuala Lumpur, Malaysia
- B. Riyadh, Saudi Arabia
- C. Santiago, Chile
- D. Tokyo, Japan

17. Which of these is NOT considered a fashion capital city of the world?

- A. Milan
- B. London
- C. Caracas
- D. Paris

18. The concentric zone model uses what shape to model the evolution of urban social structures?

- A. circles
- B. squares
- C. trapezoids
- D. parallelograms

19. Homer Hoyt's sector model of cities suggests that urban growth is most closely related to which of these?

- A. education
- B. climate
- C. literacy
- D. transportation

20. Many Islamic cities in North Africa and the Middle East center their cities around which of the following?

- A. politics
- B. religion
- C. economics
- D. trade

Questions 21-30 are about climate.

21. Which of these is the MOST important cause of global warming trends since 1950?

- A. volcanic eruptions
- B. sunspots and other solar activity
- C. human activity
- D. more active hurricane seasons

22. In general, which of these areas has warmed the MOST since 2000?

- A. the Arctic
- B. Australia
- C. equatorial Africa
- D. the Antarctic

23. Which of these is NOT true of warming in the Arctic since 2000?

- A. it has contributed to melting permafrost
- B. it has resulted in glacial retreat
- C. it has resulted in increased biodiversity in the entire Arctic region
- D. it has resulted in sea ice loss

24. Melting of snow and ice cover amplifies global heating due to which of these effects?

- A. carbon trapping
- B. the albedo effect
- C. evaporative cooling
- D. intensification of the jet stream

25. Permafrost is a major carbon sink because it contains which of these?

- A. ice and snow
- B. large amounts of biomass and decomposed material
- C. large numbers of trees and forests
- D. large oil deposits

26. Melting permafrost creates a feedback cycle that has which of the following effects?

- A. no measurable effect
- B. it will cause an overall cooling effect on the planet
- C. it will cause an overall warming effect
- D. it will promote the formation of new permafrost and glaciers in the area

27. Since the early 1990s, seas levels have risen roughly how much?

- A. 1 inch (2.5cm)
- B. 3 inches (7.5cm)
- C. 6 inches (15cm)
- D. 1 foot (30cm)

28. Which of these is MOST responsible for sea level rise since the 1990s?

- A. the melting of Antarctic ice
- B. the melting of ice in Greenland
- C. the melting of temperate glaciers
- D. the thermal expansion of water

29. Oceans have become more acidic since the start of the Industrial Revolution due to the uptake of which of these from the atmosphere?

- A. nitrogen
- B. ammonia
- C. carbon dioxide
- D. methane

30. Climate inertia means that changes like lowering greenhouse gas emissions will have which of the following effects on the global climate?

- A. no effect at all
- B. a very slow and gradual effect
- C. a very rapid and profound effect
- D. it will only effect air quality but global heating will not be effected

Questions 31-40 are about geographical concepts.

31. Which of the following best describes the concept of relative location?

- A. the name of a specific location
- B. the arrangement of a specific location
- C. the location of something as it relates to surrounding features
- D. the location of a newly formed community

32. The latitude and longitude of a specific location are used to determine which of the following?

- A. absolute location
- B. random location
- C. irregular location
- D. remote location

33. Which of these is NOT an example of nominal location?

- A. Amazon River
- B. Fiji
- C. plateau
- D. the Alps

34. Which of these geographical patterns present as a straight line?

- A. clustered
- B. linear
- C. dispersed
- D. basic

35. Geographers use which of these concepts to organize the world into smaller sections?

- A. assimilation
- B. accommodation
- C. regionalization
- D. homogenization

36. Which of these is an example of a cultural landscape?

- A. Grand Canyon in the USA
- B. Victoria Falls in Zambia
- C. Great Barrier Reef off the coast of Australia
- D. Hagia Sophia in Turkey

37. Which of the following best describes a hearth?

- A. a region in which ideas originate
- B. a region that is sparsely populated
- C. a region that conquers another region
- D. a region in which environmental degradation has occurred

38. The presence of Incan ruins, Spanish colonial architecture, and modern culture in current day Bolivia is an example of which of the following?

- A. situation
- B. determinism
- C. sequent occupance
- D. density

39. Which of these is NOT a result of relocation diffusion?

- A. Islam in Indonesia
- B. Indian curry in the UK
- C. oil in the Middle East
- D. COVID-19 in Italy

40. What type of diffusion is characterized by rapid, widespread diffusion of ideas through mediums like the Internet?

- A. restrictive diffusion
- B. contagious diffusion
- C. inverse diffusion
- D. isolated diffusion

Questions 41-50 are about culture and religion.

41. Which of the following best describes acculturation?

- A. the adoption of cultural traits by one group under the influence of another
- B. the absence of belief systems in a specific society
- C. the decimation of a population because of their religion or ethnicity
- D. the enslavement of a native population by a colonizer

42. Which of these began with Siddhartha Guatama's enlightenment under a bodhi tree?

- A. Mormonism
- B. Gnosticism
- C. Buddhism
- D. Hinduism

43. Which of the following best describes the Confucian principle of filial piety?

- A. commitment to one's education
- B. adoration for romantic partners
- C. dedication to one's career
- D. devotion to parents and ancestors

44. Zoroastrianism, which many believe was the first monotheistic religion, originated in what Middle Eastern nation?

- A. Iran
- B. China
- C. Armenia
- D. Italy

45. Which of these has the largest population of believers in the world?

- A. Taoism
- B. Judaism
- C. Christianity
- D. Baha'i Faith

46. What South Asian nation has the world's largest diaspora with over 15.5 million people living outside the country?

- A. Nigeria
- B. India
- C. Mexico
- D. Greece

47. Which of the following is NOT a member of the Slavic language family?

- A. Ukrainian
- B. Polish
- C. Bengali
- D. Czech

48. Chinatown and Little Italy in New York City are examples of which of the following?

- A. convict communities
- B. independent microstates
- C. refugee camps
- D. ethnic neighborhoods

49. Which of the following best describes the living patterns practiced by early civilizations?

- A. They settled near water sources.
- B. They settled in deserts.
- C. They settled on islands.
- D. They settled in tundras.

50. Which of these architectural features are prominent in most Muslim mosques around the world?

- A. steeples
- B. domes
- C. angels
- D. cherubs

Questions 51-60 are about mountains.

51. What criteria do scientists use in declaring a volcano extinct?

- A. the volcano no longer has a magma supply
- B. the volcano has erupted in the last year
- C. the volcano is completely underwater
- D. the volcano is surrounded by larger volcanoes

52. The 79 CE eruption of Mount Vesuvius destroyed what Roman city?

- A. Cadiz
- B. Marseille
- C. Carthage
- D. Pompeii

53. A reduction in global temperatures caused by volcanic ash obscuring the Sun is referred to as which of the following?

- A. summer solstice
- B. global dimming
- C. solar eclipse
- D. volcanic winter

54. In what Oceania nation has Mount Yasur been erupting since 1774?

- A. Bahamas
- B. Vanuatu
- C. Sri Lanka
- D. Cabo Verde

55. The Seven Natural Wonders of the World include the Paricutin volcano found in what nation?

- A. Romania
- B. Somalia
- C. Mexico
- D. Jordan

56. The Tian Shan range in Central Asia does NOT pass through which of the following nations?

- A. Lebanon
- B. China
- C. Kyrgyzstan
- D. Uzbekistan

57. What Russian peak is the tallest mountain in Europe?

- A. Cerro de Cozum
- B. Kinnerly Peak
- C. Mount Miranjani
- D. Mount Elbrus

58. Mount Kailash in Tibet is considered sacred by all of the following EXCEPT?

- A. Hinduism
- B. Christianity
- C. Buddhism
- D. Jainism

59. Which of the following ranges is contained completely within the nation of Pakistan?

- A. Ural Mountains
- B. Zagros Mountains
- C. Hindu Raj
- D. Balkan Mountains

60. Which of these is the longest mountain range in the world?

- A. Karakoram
- B. Sette-Daban
- C. Mid-Atlantic Ridge
- D. Sutter Buttes

Questions 61-70 are about plate tectonics and earthquakes.

61. How many major tectonic plates are there on Earth?

- A. 15 or 16
- B. 7 or 8
- C. 5
- D. 3

62. Which of these is NOT one of the major tectonic plates?

- A. North American
- B. Eurasian
- C. Pacific
- D. Funta

63. Which of these microplates meets the North American Plate near the Pacific Northwest of the United States?

- A. Anatolian Plate
- B. Juan de Fuca Plate
- C. Iranian Plate
- D. Timor Plate

64. A major plate has an area that is roughly how large?

- A. over 20 million square km
- B. between 1 million and 5 million square km
- C. between 500,000 and 1 million square km
- D. under 500,000 square km

65. Which of these is NOT a major type of plate boundary?

- A. convergent
- B. backward
- C. divergent
- D. transform

66. Plate tectonics and continental drift are essential to studying the distribution of species, which is key to what field of geography?

- A. hydrology
- B. biogeography
- C. climatology
- D. social geography

67. Which of these is the most powerful type of earthquake?

- A. megathrust
- B. uplift
- C. focal
- D. intraplate

68. Which of these is the term for earthquakes of smaller magnitude that happen after a larger earthquake in the same area?

- A. undershocks
- B. overshocks
- C. aftershocks
- D. earthquake herd

69. Which of these is a common cause of man-made earthquakes?

- A. highway construction
- B. fracking
- C. wildfires
- D. residential construction

70. What is the term for long-period, long-wavelength waves often caused by earthquakes?

- A. estuaries
- B. floods
- C. tsunamis
- D. riptides

Questions 71-80 are about coastal geography.

71. Which of these is the primary agent of change in coastal geography?

- A. avalanches
- B. volcanoes
- C. earthquakes
- D. waves

72. Strong waves, also known as destructive waves, have what effect on beaches?

- A. they shrink beaches by carrying sediment away
- B. they make no changes to beaches
- C. they create new beaches
- D. they protect beaches from erosion

73. The net movement of beach material laterally is referred to as which of the following?

- A. static beach
- B. beach drift
- C. beach decay
- D. dormant beach

74. Which of the following best describes a barrier island?

- A. a landform created by volcanism
- B. an island inhabited by only flora and fauna
- C. a constantly changing deposit of sand that forms parallel to the coastline
- D. a wall built to protect a settlement from high tides

75. Which of these is composed of beach sand deposited by wind or water?

- A. molehills
- B. dunes
- C. buttes
- D. pingos

76. What ocean water agent can bind sediments together to form beachrock?

- A. oxygen
- B. hydrogen
- C. nitrogen
- D. salt

77. Coastal geography studies the relationship between which of the following?

- A. an ocean and land
- B. a lake and a river
- C. a river and an ocean
- D. an ocean and a lake

78. What underwater ecosystem helps to reduce coastal flooding and erosion?

- A. hydrothermal vents
- B. coral reefs
- C. geysers
- D. hot springs

79. Which of the following is the shallow area of the sea surrounding a large landmass?

- A. continental shelf
- B. ocean trench
- C. sea chasm
- D. submarine range

80. Deltas are coastal landforms that appear in which of the following shapes?

- A. crescents
- B. straight lines
- C. triangles
- D. rectangles

Questions 81 to 100 refer to Image 1 in the resource section at the end of the exam.

81. The number 9 on the map is in the approximate location of what Indian capital?

- A. Kathmandu
- B. New Delhi
- C. Thimphu
- D. Dhaka

82. Which of these is represented by the number 16 on the map?

- A. Zagros Mountains
- B. Tian Shan
- C. Himalayas
- D. Ural Mountains

83. What river named after a Hindu god is indicated by the number 18 on the map?

- A. Brahmaputra River
- B. Luni River
- C. Chambal River
- D. Yamuna River

84. What island nation is indicated by the number 12 on the map?

- A. Sri Lanka
- B. Taiwan
- C. Brunei
- D. Singapore

85. Number 2 on the map is within the borders of what nation?

- A. Iran
- B. Kazakhstan
- C. Russia
- D. Afghanistan

86. What feature, named Deccan, is indicated by the number 10 on the map?

- A. valley
- B. volcano
- C. plateau
- D. lake

87. Number 14 on the map indicates which of these?

- A. South China Sea
- B. Bay of Bengal
- C. Persian Gulf
- D. Gulf of Aqaba

88. What largest peak in the world is indicated by the number 17 on the map?

- A. Mount Everest
- B. Mount Lamlam
- C. Mount Elbrus
- D. Mount Meru

89. What capital of Pakistan is indicated by the number 7 on the map?

- A. Tehran
- B. Muscat
- C. Islamabad
- D. Damascus

90. Number 6 on the map indicates which of the following?

- A. Mojave Desert
- B. Thar Desert
- C. Gobi Desert
- D. Sahara Desert

91. Which of these is indicated by the number 13 on the map?

- A. Red Sea
- B. Strait of Malacca
- C. Gulf of Aden
- D. Palk Strait

92. What second highest peak in the world is indicated by the number 8 on the map?

- A. Mount Speke
- B. Mount Kenya
- C. K2
- D. Mount Bona

93. Number 4 on the map indicates which of these named for a peninsula to its west?

- A. Arabian Sea
- B. Gulf of Oman
- C. Mediterranean Sea
- D. Black Sea

94. Number 3 on the map indicates the approximate location of what capital city?

- A. Moscow
- B. Ulaanbaatar
- C. Kabul
- D. Ankara

95. Which of the following is indicated by the number 15 on the map?

- A. Nile River
- B. Euphrates River
- C. Yangtze River
- D. Ganges River

96. What second longest river in India is indicated by the number 11 on the map?

- A. Arvari River
- B. Nan River
- C. Mekong River
- D. Godavari River

97. What range named for the consequences of its harsh climate is indicated by the number 1 on the map?

- A. Dykh-Tau
- B. Hindu Kush
- C. Shkhara
- D. Toubkal

98. The range indicated by the number 16 on the map spans all of the following nations except?

- A. Nepal
- B. Bhutan
- C. Pakistan
- D. Iraq

99. Which of the following is not true of the feature indicated by the number 19 on the map?

- A. It is the largest river delta in the world.
- B. Most of the area is included in the borders of Bangladesh.
- C. Its known as the Green Delta because of its fertile soil.
- D. It includes the flow of the Krishna River.

100. An ancient civilization from this area shares its name with what river indicated by the number 5 on the map?

- A. Indus River
- B. Tigris River
- C. Yellow River
- D. Mali River

2022 IGC Battery Part 3
Resource Section

Image 1 (Questions 81-100)

