

## 2022 Battery Examination - Part 4

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 volcanic landforms.

- 1. High islands are formed by volcanic action while the formation of low islands is related to which of these?
  - A. earthquakes
  - B. tides
  - C. coral reefs
  - D. construction by humans
- 2. Which of these is a high island?
  - A. Niue
  - B. Stromboli
  - C. Nauru
  - D. Henderson Island
- 3. A guyot is a volcanic mountain in which of the following locations?
  - A. near the poles
  - B. at the Equator
  - C. underwater
  - D. found only in Indonesia
- 4. Which of these is NOT true of mid-ocean ridges?
  - A. their formation is slowly causing sea levels to fall throughout the world
  - B. they are formed by plate tectonics
  - C. they are sites where seafloor spreading is taking place
  - D. they form at divergent plate boundaries
- 5. The first mid-ocean ridge was discovered in which of these oceans?
  - A. Indian
  - B. Atlantic
  - C. Arctic
  - D. Pacific

- 6. Hell's Half Acre, the Boring field, and the Harrat Rahat in Saudi Arabia are examples of what type of volcanic landform?
  - A. a cinder cone
  - B. a lava field
  - C. a volcanic neck
  - D. wall rocks
- 7. Which of these is the largest volcanic crater lake in the world?
  - A. Lake Tanginika
  - B. Lake Superior
  - C. Lake Toba
  - D. Lake Baikal
- 8. Which of these is NOT true of geysers?
  - A. they involve intermittent discharge of water and steam
  - B. their characteristic effect is due to proximity to magma
  - C. they only occur in a few places on Earth
  - D. only a few geysers are located in active volcanic areas
- 9. The only geyser field in Eurasia is the Valley of Geysers on the Kamchatka Peninsula in what country?
  - A. Russia
  - B. China
  - C. India
  - D. Japan
- 10. Which of these is large cauldron-like hollow that forms after a volcanic eruption?
  - A. cinder cone
  - B. caldera
  - C. fissure vent
  - D. parasitic cone

Questions 11-20 are about lakes.

- 11. Which of these is NOT true of lakes?
  - A. they are surrounded by land
  - B. they are not part of the ocean
  - C. they must be bodies of freshwater
  - D. they are part of the water cycle
- 12. Which of these distinguishes lagoons from lakes?
  - A. lagoons are always larger
  - B. lagoons are at higher altitudes
  - C. lagoons only have water part of the year
  - Iagoons are usually coastal parts of the ocean or connected to the ocean
- 13. Most lakes in the world are found in which of these locations?
  - A. in Asia
  - B. near the equator
  - C. in the Northern Hemisphere at higher latitudes
  - D. within forests

- 14. It is estimated that Canada has roughly how many lakes?
  - A. 2 million
  - B. 100,000
  - C. 10,000
  - D. 2,000
- 15. Lonar Lake in India, Lake Manicouagan in Canada, and Lake Bosumtwi in Ghana are large and rare lakes that have formed in what unusual place?
  - A. underground
  - B. in the middle of deserts
  - C. in meteor impact craters
  - D. at the sites of abandoned mines
- 16. Solution lakes, formed from dissolution of bedrock, are often found in what type of environment?
  - A. in areas of karst topography
  - B. near volcanoes
  - C. under glaciers
  - D. in otherwise arid climates like the American Southwest
- 17. Which of these, with a distinct curved shape, is often formed as a result of meandering rivers?
  - A. finger lakes
  - B. oxbow lakes
  - C. beaded lakes
  - D. plunge pools
- 18. Rift lakes are formed as a result of which of these?
  - A. volcanoes
  - B. rivers
  - C. glaciers
  - D. tectonic action
- 19. Which of these is an example of a rift lake?
  - A. Lake Baikal
  - B. Lake Huron
  - C. Lake Superior
  - D. Lake Ontario
- 20. Which of these is NOT a man-made lake?
  - A. Lake Nasser
  - B. Lake Kariba
  - C. the Aral Sea
  - D. Lake Volta
- Questions 21-30 are about geographical concepts.
- 21. Which of these best describes hierarchical diffusion?
  - A. the spread of ideas between friends and families
  - B. the prevention of the spreading of ideas
  - C. the failure to spread ideas to new populations
  - D. the spread of ideas from people of authority to others of lower standing

- 22. Which of these has been the most successful solution to global distance decay?
  - A. railroads
  - B. highway systems
  - C. the Internet
  - D. canals
- 23. A place that exists as part of cultural identity rather than geographic models is known as which of the following?
  - A. formal region
  - B. vernacular region
  - C. functional region
  - D. compressed region
- 24. Which of the following is an example of possibilism?
  - A. snow skiing in Dubai
  - B. kayaking in the Amazon River
  - C. hiking on the Inca Trail
  - D. snorkeling in the Maldives
- 25. Spatial analysis studies which of the following?
  - A. the evolution of technology
  - B. patterns of human behavior
  - C. surveying of hurricanes
  - D. the spread of disease
- 26. Which of the following best defines topography?
  - A. the arrangement of an area's physical features
  - B. the pattern of an area's settlement
  - C. the relationship between a population and its access to resources
  - D. the distribution of an area's infrastructure
- 27. Contour lines are used to display which of the following on a map?
  - A. area
  - B. volume
  - C. density
  - D. elevation
- 28. What type of map is mostly commonly used to demonstrate density of a population?
  - A. physical maps
  - B. topographic maps
  - C. dot density maps
  - D. political maps
- 29. What type of map distorts geography in order to convey some variable?
  - A. navigational chart
  - B. thematic map
  - C. geologic map
  - D. cartogram

- 30. Global Positioning Systems are used for what purpose?
  - A. negotiation
  - B. navigation
  - C. commerce
  - D. substitution

Questions 31-40 are about culture and religion.

- 31. Shintoism displays aspects of all of the following belief systems EXCEPT which of these?
  - A. polytheism
  - B. animism
  - C. atheism
  - D. ritualism
- 32. Which of the following best describes the process of syncretism?
  - A. the revival of ancient culture to improve society
  - B. the combining of two or more religions to create a new belief system
  - C. the infusion of religion into public education systems
  - D. the appointment of a new religious leader
- 33. What two faiths influenced the foundation of Sikhism?
  - A. Hinduism and Islam
  - B. Islam and Christianity
  - C. Christianity and Buddhism
  - D. Buddhism and Hinduism
- 34. Which of these nations has the highest percentage of Muslims today?
  - A. USA
  - B. Australia
  - C. Thailand
  - D. Indonesia
- 35. The presence of African religious traditions in the Americas can be attributed to which of these?
  - A. Indian Ocean Trade
  - B. Atlantic Slave Trade
  - C. Trans-Saharan Trade
  - D. the Silk Road
- 36. Which of these Bantu languages has the largest total number of speakers?
  - A. Spanish
  - B. Swahili
  - C. Javanese
  - D. Telugu
- 37. Which of the following has the most first language speakers in the world?
  - A. Mandarin
  - B. Dutch
  - C. Italian
  - D. Marathi

- 38. Which of the following is the cultural hearth of Judaism, Christianity, and Islam?
  - A. Western Europe
  - B. Southeast Asia
  - C. Central America
  - D. the Middle East
- 39. The architecture of Mexican churches is largely influenced by the culture of what former colonizer?
  - A. England
  - B. France
  - C. Spain
  - D. Netherlands
- 40. Although considered a dead language, which of these is still an official language of Vatican City?
  - A. Sudanese
  - B. Hindi
  - C. Polish
  - D. Latin

Questions 41-50 are about climate.

- 41. Sinking cities, which are urban environments in danger of disappearing due to rapidly changing landscapes, are almost all located in which of these areas?
  - A. mountain valleys
  - B. in Eastern Africa
  - C. coastal lowlands
  - D. in Western North America
- 42. Which of these is NOT a factor causing risk to sinking cities?
  - A. advances in building techniques
  - B. sea level rise
  - C. land subsidence
  - D. accelerated urbanization
- 43. Which of these is NOT a consequence of land subsidence on coastal cities?
  - A. increased risk of wildfires
  - B. increased risk of flooding
  - C. damage to roads and highways
  - D. damage to buildings
- 44. Which of these is a major environmental cause of land subsidence in major cities, particularly in Asia?
  - A. hurricanes
  - B. the weight of people
  - extraction of groundwater leading to compression of the soil
  - D. tornadoes
- 45. People who are displaced due to sudden or long-term changes in their weather or climate are known by what term?
  - A. internally displaced person
  - B. development-induced migrant
  - C. asylum seeker
  - D. environmental migrant

- 46. Which of these climate phenomena is NOT currently responsible for widespread migration?
  - A. disruption of seasonal weather patterns like monsoons
  - B. sea level rise
  - C. earthquakes
  - D. drought
- 47. Which of these is NOT a negative impact of global warming on human populations?
  - A. increased exposure to heatwaves and deaths from excessive heat
  - B. a potential increase in infectious diseases, especially those carried by mosquitoes
  - C. decreased birth rates
  - D. food insecurity and undernourishment
- 48. Roughly how many people currently live in areas with regular water security issues?
  - A. less than 100,000
  - B. about 1 million
  - C. about 10 million
  - D. about 2 billion
- 49. If global warming would reach  $4^{\circ}$  F, the number of people across the world experiencing water insecurity would change by roughly what percentage?
  - A. it would decrease by 25%
  - B. it would increase by 100%
  - C. it would increase by 10%
  - D. global warming would have no measurable effect on water insecurity
- 50. Which of these is NOT true of the impact of climate change on the water cycle?
  - A. total amount of freshwater available can change
  - B. there will be changes in the frequency, magnitude and timing of floods
  - C. snowfall will increase across the globe
  - D. evaporation will increase

Questions 51-60 are about population and demographics.

- 51. Which of the following is NOT considered a cause of lower birth and death rates in a nation?
  - A. increased access to education
  - B. increased access to healthcare
  - C. increased economic instability
  - D. increased access to food supplies
- 52. The economic success and resulting job opportunities in the US are examples of which of the following migration factors?
  - A. pull factor
  - B. run factor
  - C. go factor
  - D. move factor

- 53. What percentage of the world's population lives on the continent of Asia?
  - A. 20%
  - B. 40%
  - C. 60%
  - D. 80%
- 54. A population pyramid with a large base indicates which of the following about a nation?
  - A. The nation is a colony of another nation.
  - B. It's a developing nation.
  - C. The nation has a service-based industry.
  - D. It's a developed nation.
- 55. Japan has invested millions of dollars into pro-natalist programs that have what function?
  - A. to encourage people to have more children
  - B. to encourage people to apply for jobs
  - C. to encourage people to cultivate crops
  - D. to encourage people to adopt pets
- 56. The sex ratio is measured using which of the following?
  - A. number of males per 10 females
  - B. number of males per 100 females
  - C. number of males per 1,000 females
  - D. number of males per 10,000 females
- 57. What correlation exists between developed nations and life expectancy?
  - A. Developed nations have the lowest life expectancies.
  - B. Developed nation has lower life expectancies than developing nations.
  - C. Developed nations have the highest life expectancies.
  - D. Developed nations do not have a measurement of life expectancies.
- 58. Which of these has the highest fertility rates in the world?
  - A. Western Europe
  - B. East Asia
  - C. North America
  - D. Africa
- 59. People moving to a specific location because members of a similar background have already moved there is what type of migration?
  - A. personal migration
  - B. open migration
  - C. central migration
  - D. chain migration
- 60. Which of these is a stage 2 nation on the Demographic Transition Model?
  - A. United Kingdom
  - B. Niger
  - C. Portugal
  - D. Argentina

Questions 61-70 are about mass wasting and landslides.

- 61. Mass wasting involves the movement of rocks and soil down slopes due to which of these?
  - A. gravity
  - B. wind
  - C. ice
  - D. intentional human transport
- 62. Which of these is NOT a type of mass wasting?
  - A. landslides
  - B. rockfalls
  - C. dredging
  - D. creep
- 63. Solifluction is a type of mass wasting that generally takes place due to freezing and thawing cycles in what biome?
  - A. desert
  - B. temperate rainforests
  - C. savannah
  - D. tundra
- 64. Which of these is NOT a natural cause of mass wasting?
  - A. faults that weaken the rock
  - B. climate
  - stratigraphy, especially alternating layers of strong and weak rock
  - D. wind events like tornadoes
- 65. Which of these is a manmade cause of mass wasting?
  - A. overburden from buildings
  - B. hurricanes
  - C. floods
  - D. erosion
- 66. Which of these is NOT a method to control mass wasting?
  - A. planting trees or vegetation
  - B. increased construction of roads along hillsides
  - C. construction of fences or walls to contain debris
  - D. improving drainage
- 67. Soil liquefaction, a major cause of landslides, is usually tied to which of these natural phenomena?
  - A. earthquakes
  - B. tornadoes
  - C. windstorms
  - D. supercell thunderstorms
- 68. Which of these is NOT an area where landslides can occur?
  - A. on underwater mountains or volcanoes
  - B. on cliffs
  - C. in flat areas
  - D. on steep hillsides

- 69. Changes in LULC (land use and land cover) like abandoning farmland can cause landslides due to which of these?
  - A. increasing the frequency and severity of erosion
  - B. causing vibrations
  - C. increasing the amount of rainfall
  - D. increasing the amount of traffic in the area
- 70. Which of these is similar to a landslide but involves the transport of ice and snow?
  - A. pyroclastic flow
  - B. avalanche
  - C. huayco
  - D. washaway

Questions 71-80 are about economic development.

- 71. Which of these is not an example of an informal economy?
  - A. street performances
  - B. flea markets
  - C. corporate lawyers
  - D. babysitting
- 72. Which of these best describes a microloan?
  - A. a program to sponsor industrialization in an agrarian nation
  - a small loan given to people in developing countries to start small businesses
  - a measurement of an economy's growth over a specific period
  - D. a tool to study poverty within a community
- 73. What free trade agreement enacted in 1994 involved the US, Mexico, and Canada?
  - A. Association of Southeast Asian Nations
  - B. Asia-Pacific Economic Cooperation
  - C. Central American Free Trade Agreement
  - D. North American Free Trade Agreement
- 74. What nation voted to leave the European Union in January 2020?
  - A. Liechtenstein
  - B. Turkey
  - C. Norway
  - D. United Kingdom
- 75. Shenzhen and Zhuhai are special economic zones in what nation?
  - A. China
  - B. Malaysia
  - C. Belarus
  - D. Haiti
- 76. Which of the following is the target of ecotourists?
  - A. restaurants
  - B. museums
  - C. theaters
  - D. natural habitats and landmarks

77. The concept of blue economy describes the sustainable use			84. The nation marked number 11 on the map declared its		
of what resource?		independence from Serbia in what year?			
A.	forests	A.	1992		
В.	oceans and lakes	В.	1998		
C.	mountains	C.	2006		
D.	plains	D.	2015		
78. A situation in which a population is able to meet only its		85. Wh	at subsidiary of the Mediterranean Sea is indicated by		
basic needs of survival is referred to as which of the following?		the nur	mber 6?		
	absolute poverty	A.	Caribbean Sea		
	aggregate demand		Red Sea		
	agency costs		Arabian Sea		
D.	balanced trade	D.	Tyrrhenian Sea		
79. What theory claims that Less Developed Countries can't fully		86. Wh	at nation indicated by the number 1 on the map split		
develop because of their dependence on More Developed		from Slovakia in 1993?			
Countri	es?	A.	Denmark		
A.	Autonomy	В.	Czechia		
В.	Variable Theory	C.	Iceland		
	Self-Sufficiency	D.	Hungary		
D.	Dependency Theory				
		87. Wh	ich of these is indicated by the number 17 on the map?		
80. Whi	ich of these was not included in the UN's Millennium	A.	Georgia		
Develop	oment Goals created in 2015?	В.	Turkmenistan		
A.	reduce child morality	C.	Belarus		
В.	improve maternal health	D.	Russia		
C.	increase fossil fuel use				
D.	ensure environmental sustainability	88. Wh	ich of these serves as the capital of the nation marked		
		numbe	r 3 on the map?		
Questic	ons 81 to 100 refer to Image 1 in the resource section at	A.	Vienna		
the end	of the exam.	В.	Belfast		
		C.	Berlin		
	ich of these is the largest city and cultural capital of the marked number 15?	D.	Helsinki		
A.	Baku	89. Wh	ich of these is indicated by the number 12 on the map?		
В.	Kyiv	A.	Croatia		
C.	Istanbul	В.	Poland		
D.	London	C.	Bosnia and Herzegovina		
		D.	Belgium		
82. Whi	ich of the following does not border the nation marked		<u> </u>		
	r 13 on the map?	90. Wh	ich of the following is not true of the island marked		
	Serbia		r 7 on the map?		
В.	Lithuania		It's the largest Italian island by land area.		
C.	Hungary		It's the largest island in the Mediterranean Sea.		
	Ukraine		It's the largest island in Europe.		
			It houses the tallest volcano in Europe.		
83. Wha	at island nation is indicated by the number 8 on the				
map?	,	91. Wh	ich of these is indicated by the number 18 on the map?		
•	Cyprus		Kuwait		

B. Syria

C. Bahrain

D. Oman

B. Malta

D. Crete

C. Majorca

- 92. The Ottomans ended what empire when they captured the nation marked 15 in 1453?
  - A. Mongol Empire
  - B. Qing Dynasty
  - C. Mughal Empire
  - D. Byzantine Empire
- 93. Over half of the population in the nation marked 10 on the map practices what religion?
  - A. Islam
  - B. Hinduism
  - C. Buddhism
  - D. Shintoism
- 94. Which of the following is the most populous nation on the map?
  - A. Italy
  - B. Portugal
  - C. Moldova
  - D. Slovenia
- 95. What papal city state is indicated by the number 5 on the map?
  - A. Luxembourg
  - B. San Marino
  - C. Vatican City
  - D. Liechtenstein
- 96. North Macedonia was forced to change their name after their application to the United Nations was blocked by what nation?
  - A. 9
  - B. 10
  - C. 13
  - D. 15
- 97. Number 16 on the map indicates what body of water?
  - A. Bering Sea
  - B. Caspian Sea
  - C. Black Sea
  - D. Erythraean Sea
- 98. Which of these is indicated by the number 14 on the map?
  - A. Estonia
  - B. Finland
  - C. Germany
  - D. Bulgaria
- 99. The nation marked 4 on the map houses the headquarters for all of the following organizations except?
  - A. World Trade Organization
  - B. United Nations
  - C. FIFA
  - D. World Health Organization

- 100. The nations marked 2 and 3 on the map dissolved their union after which of the following conflicts?
  - A. Hundred Years War
  - B. Napoleonic Wars
  - C. World War I
  - D. World War II

2022 IGC Battery Part 4 Resource Section

