This examination paper consists of 19 pages.

INSTRUCTIONS

A After you have completed this examination paper, you should hand in the following:
   • This examination paper
   • The mark-reading sheet with your answers for Section A
   • Your examination book with your answers for Section B

B Make sure that your student number and all the other required information are entered on your examination book and mark-reading sheet. Where the module code is requested, write GGH1501.

C Note that the unique number of the examination paper for GGH1501 is 473041 (provided on the cover page of the examination paper, in brackets, following the module code). Importantly this unique number has to be written and marked on the mark reading sheet.

D Allocation of marks:
   • Section A — 60 marks (44 multiple choice questions: Answer all of them)
   • Section B — 40 marks (Select and answer 4 questions of 10 marks each)

E It is recommended that you utilise your time as follows:
   • Section A — Approximately 60 minutes
   • Section B — Approximately 60 minutes

F Read the instructions and follow them carefully.

G Do your best, good luck!
Instructions

- Answer all the questions in this section.
- The questions in this section must be answered on a mark-reading sheet.
- Write your student number, the unique number of the examination paper and all other required information on the mark reading sheet.
- Put the mark-reading sheet in the front of your examination book when handing in everything at the end of the examination.

Questions

The nature of geography and geographical thinking

Figure 1: Maps showing spread of Euro through France

1. The series of maps provided in Figure 1 illustrates the diffusion process through which the Euro as currency spread through France. What type of diffusion can this be referred to?

   (1) hierarchical
   (2) relocation
   (3) contagious
   (4) stimulus
   (5) expansion
2. Which one of the following statements best describes the distribution pattern displayed by the two subdivision plans for 32 homes in Figure 2?

(1) The plans are of the same pattern but differ in concentration.
(2) The homes are dispersed similarly.
(3) The plans have the same density but differ in concentration.
(4) The plans differ in density but are the same in concentration.
(5) The plans are of the same density and concentration.

3. In a geographical context, the term "projection" refers to … .

(1) imaginary lines drawn on maps for the purpose of describing location
(2) the methods used to represent the spherical Earth on a flat surface
(3) the expected geographical outcome of specific events or processes
(4) the generally accepted shape of the Earth as presented on maps

4. A uniform region is defined by …

(1) politicians
(2) common natural or human characteristics that occur throughout the region
(3) the amount and type of natural resources available in the region
(4) a central focus or node in the region
5. An event that makes headlines in the media can be regarded as geographical if it meets certain important requirements. Which one of the following alternatives can be regarded as an absolute requirement in this regard?

(1) The event is only about human activities.
(2) The event is only about natural processes.
(3) The event is connected to a location that can be described in absolute or relative terms.
(4) It is a very important event.
(5) It is a very recent event.

6. The argument that favourable climatic conditions in a region or country leads to better performance by humans is referred to as … .

(1) fundamentalism
(2) environmental determinism
(3) possibilism
(4) area analysis

Key processes of the physical environment

7. Which one of the following statements about global temperature variations is true?

(1) The highest temperatures throughout the year are found in the interiors of big continents in the Mid-latitude zone.
(2) The range of global temperature variations is smaller closer to the Equator.
(3) Land and water has little influence on global temperature variations because the Sun is the main source of the Earth’s energy.
(4) The length of a day does not influence temperatures because temperatures are only influenced by the angle of incidence of the Sun.

8. Where will an explorer most probably start his/her search for the wettest place on Earth?

(1) in the vicinity of the Equator
(2) in areas where high atmospheric pressure is the most dominant weather phenomenon
(3) in coastal areas washed by cold ocean currents
(4) at the North or South Pole
9. Study Figure 3 carefully. A landscape such as this, eroded by streams which created networks of valleys in which water and sediment are carried downstream, is referred to as a/an … landscape.

(1) volcanic
(2) tectonic
(3) steep
(4) weathered
(5) fluvial

Figure 3: Landscape profile
10. Earthquakes and volcanoes originate in the ….
   (1) atmosphere
   (2) hydrosphere
   (3) lithosphere
   (4) biosphere
   (5) ionosphere

11. Which one of the processes mentioned below is definitely not involved in chemical weathering?
   (1) acid released by decaying vegetation
   (2) oxidation of iron minerals
   (3) breakdown of calcium carbonate into soluble ions
   (4) expansion of water during freezing
   (5) a change in the mineral composition of the affected rock material

12. Which one the following alternatives describe the five major factors of soil formation in the best way?
   (1) climate, parent material, biological activity, topography and time
   (2) water movement, parent material, chemicals, topography and time
   (3) climate, organic material, biological activity, topography and plants
   (4) erosion, weathering, slope, stream flow and precipitation
   (5) climate, drainage, biological activity, nutrients and time

13. Which one of the following biomes is not found in South Africa?
   (1) Mediterranean woodland shrub and grassland
   (2) Desert shrub
   (3) Tropical savannah, mixed grassland and woodland
   (4) Broadleaf or mixed broadleaf and coniferous forest
Patterns and trends of the global population

14. Which one of the following statements about the world’s population distribution is false?
   (1) Generally speaking, humans avoid clustering in harsh environments.
   (2) Dry lands generally lack sufficient water to sustain large populations.
   (3) The population is spread uniformly across all regions of the world.
   (4) Large populations are frequently concentrated along fertile floodplains of big rivers.

15. Study the population pyramid provided in Figure 4 attentively. This pyramid is most likely characteristic of the population structure of a developing country because … .
   (1) of the relatively high crude birth rate and declining natural increase rate
   (2) of the relatively low crude birth rate and negative natural increase rate
   (3) the percentage of young and elderly people is almost equal
   (4) the crude birth rate and crude death rate are roughly equal

![Population pyramid](image.png)

**Figure 4:** Population pyramid
16. The annual number of deaths among babies under one year of age for every 1000 live births is known as the ... .
(1) total fertility rate
(2) infant mortality rate
(3) crude death rate
(4) natural decrease rate
(5) dependency ratio

17. Which one of the following explanations for the anticipated increased crude death rate during Stage 5 of the epidemiologic transition is false?
(1) re-emergence of infectious and parasitic diseases
(2) evolving infectious disease microbes
(3) crude death rate rising because the population is younger
(4) infectious diseases more prevalent in poor areas
(5) increased global mobility

18. Which one of the following statements about migration is true?
(1) A significant proportion of international refugees are from the Middle East.
(2) A South Africa citizen seeking work in Europe due to turbulent labour markets can be classified as a refugee.
(3) In the context of migration IDP is an abbreviation for Internationally Displaced Person.
(4) The number of international tourist arrivals to South Africa is higher than that for the United States of America.

19. ... is the process of people exiting their current homeland to go and live in another country, while ... is the process of people moving between cities in the same region of a country.
(1) Interregional migration; emigration
(2) Intraregional migration; immigration
(3) Immigration; intraregional migration
(4) Emigration; interregional migration
The global cultural mosaic

20. The term “creole” refers to … .
   (1) a regional variety of language, differing in terms of spelling, pronunciation and vocabulary
   (2) a language combining the languages of the indigenous population and the foreign colonizing population
   (3) an extinct language
   (4) religious beliefs related to the origin of the Earth

21. Consider the map of Southern Africa provided in Figure 5. The presence of Swaziland and Lesotho within the borders of South Africa means that South Africa is a … state.
   (1) prorupted
   (2) compact
   (3) perforated
   (4) fragmented
   (5) elongated

Figure 5: Map of Southern Africa
22. The predominant religion of South America is … .
   (1) Eastern Orthodoxy
   (2) Roman Catholic
   (3) Protestant
   (4) Animist
   (5) Buddhism

23. A regional variation of English, as found in India and Australia, and distinguished by distinctive vocabulary, pronunciation and spelling, is known as a … .
   (1) street language
   (2) vernacular
   (3) dialect
   (4) jargon
   (5) lingo

24. A sovereign state cannot claim ownership and control over the … .
   (1) land within its territory
   (2) lakes and rivers within its territory
   (3) ocean waters further than 12 nautical miles from the state's baseline
   (4) airspace over its territory
   (5) nature conservation areas within its territory

25. A … boundary is created using the geographic grid in areas where no cultural features exist to define a boundary and the Himalaya mountain range is an example of a … boundary.
   (1) geometric; cultural
   (2) arithmetic; mountain as a
   (3) physical; water as a
   (4) physical; physical
   (5) geometric; physical
Making (and earning) a living

26. Considering the world map of GNI per capita ppp in Figure 6, which one of the following observations on the distribution pattern of GNI is false?

(1) Africa shows a high concentration of countries with a GNI below $5000.
(2) On average the GNI of countries in North America is much higher than for countries in Africa.
(3) All countries in the Southern Hemisphere have a GNI below $5000.
(4) Most of the countries with a GNI of $20000 and above are located in the Northern Hemisphere.

Figure 6: World map of Gross National Income (GNI) per capita purchasing power parity (ppp)

27. Which one the following characteristics are generally not associated with a developed country?

(1) less than 10 expected schooling years
(2) high literacy rate
(3) high healthcare expenditure
(4) high value for the Human Development Index (HDI)

28. Which **one** of the following statements about different development paths is **false**?

(1) Development through self-sufficiency is characterised by low numbers of imported goods.
(2) An international trade approach to development is characterised by investing in local industries and ensuring that they are successful.
(3) Development through self-sufficiency requires a sophisticated administrative system.
(4) A country following an international trade approach to development would have very few government interventions and regulations.

29. Which **one** of the following alternatives **cannot** be regarded as a Millennium Development Goal (MDG)?

(1) ending poverty and hunger
(2) promoting gender equality
(3) reducing child mortality
(4) ensuring environmental sustainability
(5) reducing developmental aid

30. Which **one** of the following statements about factors determining the location of industries is **true**?

(1) In the early phase of the Industrial Revolution, multi-storey factories were frequently located in the hearts of cities.
(2) Land, capital and labour are unimportant site factors.
(3) Health care and other benefits contribute significantly to wages in developing countries.
(4) Industries located in countries perceived as unstable, easily get loans.

31. Which **one** of the following alternatives is **not** an example of a consumer-based service?

(1) education
(2) health care
(3) transportation

**TURNOVER**
(4) retail
(5) hospitality

32. Which one of the following alternatives presents an aspect of sustainable agriculture?
   (1) increased use of chemicals
   (2) ridge tillage
   (3) single-product (mono culture) farms
   (4) elimination of all cattle farming

Resources: Use and abuse

33. Food preferences and taboos serve as an example of how … influences determine the value of a natural resource.
   (1) technological
   (2) economical
   (3) cultural
   (4) natural

34. Which one of the following alternatives is not associated with using coal to provide energy?
   (1) increased CO₂ emissions
   (2) acid depositions
   (3) coal is cleaner to burn than gas
   (4) damage by mining to the environment

35. An example of a renewable source of energy is power generated from utilising … .
   (1) coal
   (2) natural gas
   (3) wind
   (4) petroleum
   (5) peat
36. An environmental substance is only classified as a resource when … .
   (1) the chemical composition of the substance is known
   (2) religious scriptures allow the use of the substance
   (3) the utilisation of the substance will not lead to pollution
   (4) society has a need for the substance

37. What is the greatest problem associated with nuclear energy?
   (1) energy production is relatively environmentally friendly
   (2) energy production emits large amounts of carbon dioxide
   (3) there is a risk of radioactive leakage and contamination
   (4) energy production requires large amounts of fossil fuels

38. Sustainable development implies that … .
   (1) development should meet the needs of the present generation without compromising the ability of future generations to meet their needs
   (2) development must promote the needs of the present generation without considering future generations
   (3) development should focus entirely on meeting the needs of the future generation rather than considering the needs of the present generation
   (4) development should be concerned solely with the economic growth of multinational corporations

Geographical data: nature, sources and representation

39. A client has requested you to provide him/her with a 1:25 000 map of a holiday resort on which the scale is indicated by means of a word scale. Which one of the following phrases (word scales) would you be able to add to the map?
   (1) 1 centimetre in reality represents 25 000 centimetres on the map
   (2) 1 centimetre on the map represents 25 000 centimetres in reality
   (3) 1 centimetre on the map represents 25 meters in reality
   (4) 1 centimetre on the ground represents 2 500 meters on the map
40. To answer this question you need to refer to the map supplied in Figure 7. The absolute location of Point Y on the map is approximately … .

1. $22^\circ37'45''; 32^\circ18'$
2. $22^\circ37'45''S; 32^\circ18'E$
3. $32^\circ18'S; 22^\circ37'35''E$
4. $32^\circ18'S; 22^\circ37'45''E$
5. $32^\circ18'E; 22^\circ37'50''S$

**Figure 7:** Basic contour map

41. Which one of the following statements regarding map projections is true?

1. By using modern GIS technology one can draw a map that has no distortion.
2. The Mercator projection is conformal implying that it preserves shapes of features.
3. The correct choice of a projection is more critical at large scale mapping than at small scale mapping.
4. Shapes of features are preserved on equivalent projections.
42. The distance between Place A and Place B on a 1:10 000 map is 5 cm. This implies that these two places are … apart in reality.

(1) 5 000 m  
(2) 500 m  
(3) 0.05 m  
(4) 5.5 km

43. Which one of the following statements about the geographic grid is false?

(1) Every meridian has the same length and the same beginning and end points.

(2) Parallels are drawn around the globe parallel to the Equator at right angles to the meridians.

(3) The Equator represents 0° longitude, and the North and South Poles 90° North and 90° South longitude respectively.

(4) The Equator is the parallel with the largest circumference and all places on this line have approximately 12 hours of daylight every day.

44. 360 000 m² is equivalent to … hectares.

(1) 36  
(2) 3600  
(3) 3.6  
(4) 360

[Total of Section A: 60 marks]
SECTION B

Instructions

- This section consists of six (6) questions.
- You have to answer **ANY FOUR (4)** of these questions.
- The questions must be answered in your examination book.
- Length guideline:
  - For 4 marks: About 6 to 8 written lines
  - For 6 marks: About 10 to 12 written lines

Questions

Question 1

1.1 Compare the scales that have been used for the maps in respectively Figure 2 (p. 3), Figure 5 (p. 9) and Figure 6 (p. 11) in this examination paper by:
   - firstly converting the line scales for each of these maps to word scales
   - secondly explaining why different scales were used for each of these maps

*Tip: For the purpose of this exercise, you can assume that for all three of the referred to line scales, the tick marks on the scales are 1 cm apart.

1.2 List and very briefly explain any two important differences that exist between sustainable agriculture and general commercial agriculture.

Question 2

2.1 Provide a short explanation on the use of area analysis as analytic method by modern day geographers in their research about contemporary issues in the world.

*Tip: Use examples of area analysis (at least two), to illustrate your answer.

2.2 Certain physical environments are sparsely populated. Discuss any **ONE** of these environments by providing a brief explanation of the relationship between the environment and population for this specific environment that you have chosen.

Question 3

3.1 Debate the benefits and drawbacks of implementing controls for international labour migration.

*Tip: Refer to examples of countries affected by labour migration, to illustrate your answer.
3.2 Briefly explain how the world political map has been or might still be changed by either the role of ethnicity or nationalism. (4)

Tip: Refer to a relevant example to illustrate your answer.

Question 4
4.1 Choose any language and then briefly explain the process how this language diffused from its area of origin to other areas in the world. Also very briefly comment on the current distribution of your chosen language in the world. (6)

Tips:
- First mention the language you have chosen.
- Then explain the process of its diffusion.
- Lastly mention its current distribution.

4.2 Name and briefly describe any one of the three major biomes that can be found in South Africa, with specific reference to the role of climate in the characteristics of the biome that you have chosen. (4)

Question 5
5.1 Name and very briefly describe any three of the five major factors that determine soil properties. (6)

5.2 Explain why each location on Earth is unique and how locations are interrelated. (4)

Question 6
6.1 Explain how development varies amongst regions in the world with reference to your choice of one less developed country (LDC) and one more developed country (MDC) and by using the information on the global spatial patterns of:
- Gross National Income (GNI) per capita ppp (Figure 6 on p. 11)
- Human Development Index (HDI) (Figure 8 on p. 19)
- Literacy level (Figure 9 on p. 19)

6.2 What makes a Geographical Information System (GIS) unique? Also provide an example of how a GIS is used in a location-based application of your choice. (4)

[Total of Section B: 40]
[Total of Paper: 100]
Figure 8: World map showing the Human Development Index (HDI)

Figure 9: World map showing literacy rate