

COMPETITIVE ENTRANCE EXAMINATION INTO HTTC BAMBILI	
<u>CYCLE: 1st CYCLE</u> <u>LEVEL: 1st</u> <u>DEPARTMENT: GEOGRAPHY</u>	Session: 2015/2016
DURATION: 3hrs	

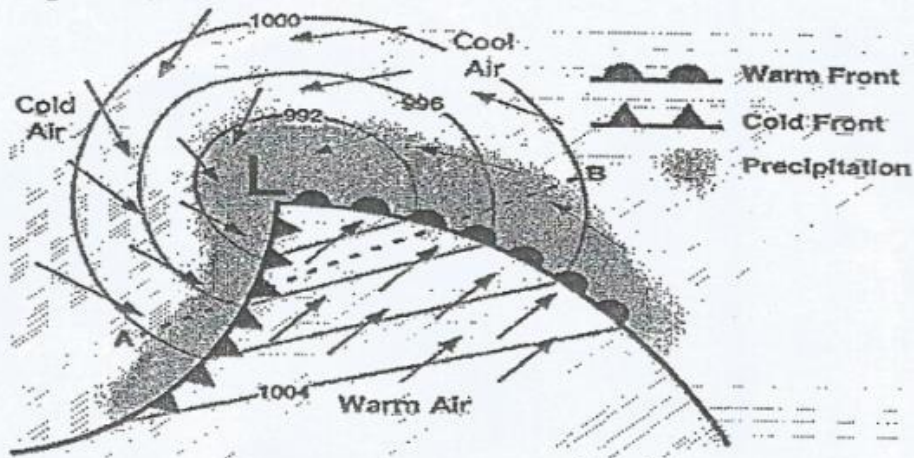
Instructions: Answer all the questions in section 1 (Major Paper) and all the questions in section 2 (Minor Paper). Selecting the most appropriate answer (letter A, B, C or D) for each item and write it on the corresponding number space provided in your Answer Booklet. Make sure you insert the question paper inside the answer Booklet before you leave the Examination Hall. Good Luck! Time allowed: 3 Hours.

SECTION 1: MAJOR PAPER: GEOGRAPHY: Answer all the Questions

- Which of the following are meteorological factors affect the rate of evaporation from one place to the other
 - Solar energy, winds, vapour pressure gradient, salinity
 - Moisture availability, solar energy , wind, type of vegetal cover
 - Cloudiness, vapour pressure gradient, salinity, winds, solar energy
 - Moisture availability, nature of land surface, winds, vapour pressure gradient
- The Cameroon Volcanic Line is a good example of
 - Continental divergent zone
 - Continental convergent zone
 - Continental conservation zone
 - Continental collision zone
- Identify the element that is not an aerial photo product
 - Single prints
 - Uncontrolled photomosaic
 - Orthophotomaps
 - Stereoscopic pairs

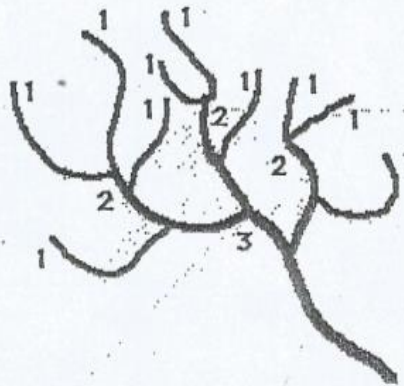
4. In cultural geography, who is the main proponent of the capitalist market system in replacement of the mercantile that developed in Europe in the 17th to 18th century
- A. John Maynard Keynes C. Karl Marx
B. Adam Smith D. Paul Krugger
5. Which of the following statements best explains the nature of volcanic eruption associated with the development of shield volcanoes?
- A. A violent eruption associated with the emission of fluid basic lava that travels over a long distance
B. A violent eruption associated with the emission of pyroclastic materials that travels over a long distance before solidifying
C. A quiet eruption associated with the emission of ash and cinder
D. A quiet eruption characterised by the emission of fluid basic lava that travels over a long before solidifying
6. Isostasy theory in tectonic geomorphology explain the state of
- A. Equilibrium between the core and crust
B. Equilibrium between the mantle and the core
C. Equilibrium between the lithosphere and the asthenosphere
D. Disequilibrium between the mantle and the upper crust
7. Of the following atmospheric gases, there is one whose percentage volume is not influenced by human activities. Identify it
- A: Ozone B: Methane C: Carbon dioxide D: Oxygen
8. A climax vegetation in which its characteristics reflect the influence of human activities is considered as
- A. Climatic climax B. Plagio-climax C. Sub –Climax D. Mono –climax
9. Which of the following soil PH values is suitable for agriculture?
- A. 1-4 B. 10-12 C. 6-8
D. 12- 14

10. The diagram below shows a cross section of a low pressure cell. What do the circular lines represent?



- A. Isotherms
B. Isobars
C. Isohyets
D. Isohels
11. In a given drainage basin, the total length of stream is 20km and the surface area covered by this stream length is 12 km². What is the drainage density?
- A. 1.66
B. 0.66
C. 1.44
D. 1.88
12. A process by which sand and rock particles carried by wind in desert is blasted against rock outcrop resulting in scratching and removal of particles is called
- A. Attrition
B. Abrasion
C. Corrosion
D. Deflation
13. Which of the following is the dominant texture of a soil in a region dominated by high intensity physical weathering?
- A. Clay
B. Sand
C. Silt
d. Loam
14. Isolate from the following the source that provides continuous data on some aspects of population
- A. Sample survey
B. Census
C. Migration records
D. Vital registration

15. Study the diagram of the stream morphometry below



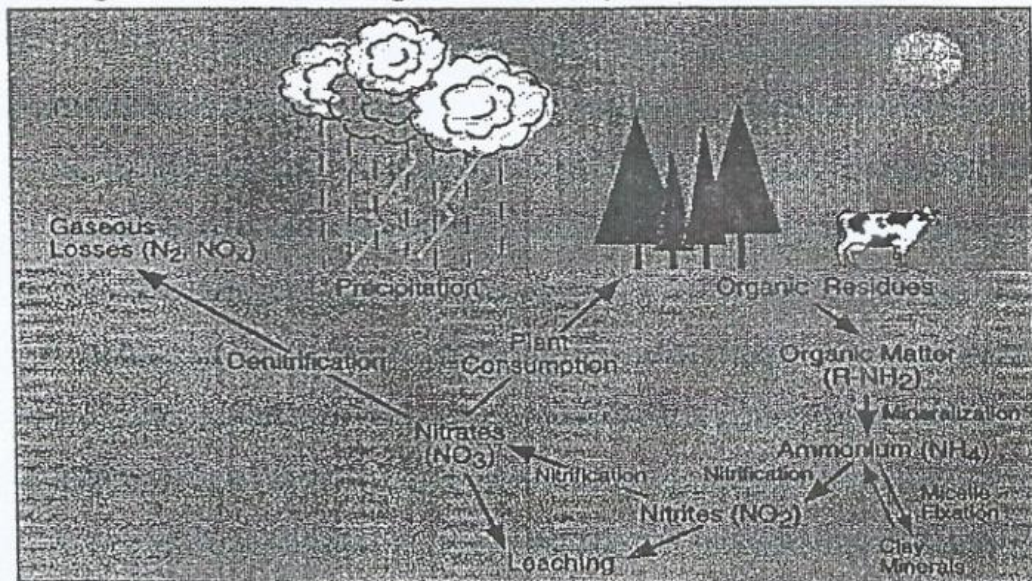
Determine the bifurcation ratio of the highest stream orders

- A. 3 C. 6
B. 3.1 D. 10.6
16. Why is it that the proportion of the inorganic content of the soil increases with depth?
- A. The process of leaching carries all substances into the ground
B. Organic substances occupy much of the horizon A
C. Capillary action is concentrated mainly in the lower layers of the soil
D. The inorganic content is influenced by the parent material which is the foundation on which soils develop
17. The flow of energy through an ecosystem reflects the structure of a pyramid because
- A. The composition of species at each trophic level increases from the producer through the omnivore
B. At each trophic level, 90% of the energy available is used and 10% passes to the next higher trophic level
C. The number of species reduces from the producer through the detritivore levels
D. Detritivore are more numerous than any of the trophic levels
18. Which of the following processes are characteristic of soils developed in semiarid and hot arid regions
- A- Salinization and calcification B. Calcification and podzolisation
B- Salinisation and gleization D. Ferrallitisation and calcification

19. Isolate the facts which justify that the troposphere is the weather making layer of the atmosphere

- A. It has the highest concentration of water vapour, aerosols and temperature reduces with increase in height
- B. It is the zone of concentration of ozone gas with low amount of water vapour
- C. It is the zone where temperatures increase with increase in height leading to rising and expanding air
- D. It is the zone that is closest to the earth surface

20. Study the diagram below of a biogeochemical cycle



Determine the correct sequence through which nitrogen is cycled

- A. Nitrogen in the air → soil → animals → plants
 - B. Nitrogen in the air → soil → plants → animals
 - C. Nitrogen in the air → plants → soil → animals
 - D. Nitrogen in the air → animals → plants → soil
21. The general circulation (planetary wind) of the atmosphere is organised around a series of cells. Identify the cell that controls wind circulation in the tropics
- A. Polar cell
 - B. Ferrel cell
 - C. Hadly cell
 - D. Tropical cell
22. Which of the following models of urban structure suits the pattern of Douala
- A. Concentric model
 - B. Multiple nuclei
 - C. Sector model
 - D. Linear model

23. Which of the following statements explains why Mountain (katabatic) winds occur during the night.
- A. Mountain tops are colder leading of dense air, high pressure with winds moving towards the valley
 - B. Mountain tops are warmer leading to rising air
 - C. Valley are warmer leading to rising air towards mountains
 - D. Valley are colder and therefore pulling warm air from mountain tops
24. What will be the dependency ratio of a population with the following qualities:
 Youths: 50% Adults: 40% Old: 18%
- A. 170% B. 125% C. 66.7% D. 150%
25. In which of the following regions is high population density due to early human colonization
- A. The Eastern sea board of USA B. The Western highland of Cameroon
 - C. The Nile valley
 - D. The East African highland
26. An influx of people between 15-40 years will cause the shape of the age-sex pyramid to
- A. Bulged in the middle C. Bulged at the apex
 - B. Indent in the middle D. Indent at the base
27. According to Malthus, the positive checks of rapid population growth refers to
- A. Limiting population growth by abstinence and postponement of marriage
 - B. Reduction of population by famine, disease and wars
 - C. Reduction of population by natural disasters such as earthquakes, floods, and bush fires
 - D. Drop in population by the prevalence of epidemics

28. Which of these statements is true about the relocation of industries from continental coal basins to coastal location in the 20th Century in Europe?
- A. Availability of land at coastal locations
 - B. Regional development policy of government
 - C. Availability of land, proximity to foreign markets and
 - D. Escaping from congested old industrial areas because of pollution, lack of space for expansion
29. A network in which all the vertices are linked but there are no circuits is
- A. Complete graph
 - B. Sub-graph
 - C. Tree graph
 - D. Connected graph
30. The model of spatial interaction which combines the three variables of complementarity, intervening opportunities and transferability was proposed by
- A. Harry Ullman
 - B. Edward Ullman
 - C. Stouffer
 - D. G.K. Zipf
31. Settlement situations in which buildings are too far apart to be considered as clustered at the same time too close together to be dispersed are referred to as:
- A: open B: Looseknit C: Regular D: Random
32. According to the Sinclair's model of agricultural land values, why are the land values at the fringes of the urban center not attractive to agriculture?
- A. Competition from story buildings
 - B. Low land values for agriculture
 - C. Absence of fertile soils
 - D. Blight effect due to competition with other urban land uses
33. What does a detour index value of 2 imply?
- A. The actual road is just half of the length of the most direct road
 - B. The actual road is twice as long as the direct road

- C. The direct road is twice as long as the actual road
- D. The most direct road has distance that is longer than the actual road
34. Which of these combinations of land uses most appropriately corresponds to the pattern proposed by von Thunen as distance increases with distance from the center of a settlement?
- A. Milk, Wheat, Potatoes C. Potatoes, Milk, Wheat
- B. Milk, Potatoes, Wheat D. Wheat, Potatoes, Milk
35. The material index (MI) for a certain industrial product is 0.99. This means that
- A. The raw material used was heavier than the finished product
- B. The raw material was lighter than the finished product
- C. The raw material and finished product weighed the same
- D. The raw material was almost pure
36. Which of the following factors is indicative of residential segregation in large urban centers?
- A. Economic and social differences
- B. Government land use zoning policy
- C. Bid rent theory
- D. Degree of accessibility
37. Which of the following factors is not a major determinant of changing locations of industrial location since the 1950s?
- A. New and flexible energy sources B. New and accessible raw material sources
- C. New and improved means of transport
- D. New and improved production technologies
38. A nearest neighbor index with a value of 0 means the settlement pattern is
- A. Clustered B. Random C. Regular D. Random clustering

39. How many stages are in the John Friedmann's economic development model?

- A: 3 B: 4 C: 5 D: 6

40. The bid-rent theory is the urban equivalent of von Thune's land use theory

because both are based on

- A. Population size of settlements C. Locational rent
B. Settlement rent D. Concentric functional zones

SECTION 2: MINOR PAPER: HISTORY & ECONOMICS

Answer All the Questions

1. To reshape the political, economic and social life of Cameroon, the opposition political parties in the early 1990s requested for

- A. The dissolution of the national army B. A change in the national assembly
C. A sovereign national conference D. A new president for the nation

2. All the following factors were responsible for population movements in the Western Grasslands EXCEPT

- A. The search for grazing B. The search of fertile soil
C. The jihads in North Cameroon D. The role of middlemen monopoly

3. The following were political consequences of population movements in Cameroon during the 19th century EXCEPT

- A. Establishment of composite kingdoms B. Separation of families
C. Intensification of inter tribal war
D. Increase in insecurity and boundary disputes

4. The most important benefit of the 19th century jihads to the indigenous population of the North Cameroon was

- A. Islamic rule was established throughout the region
B. There was the emergence of strong central government
C. There were lots of migrations to the North Cameroon

- D. Excessive exploitation by unscrupulous leaders ended
5. Which of the following missionS was established by Joseph Merrick at Bimbia before the German annexation in 1884?
- A. Basel mission
B. Presbyterian mission
C. Bethel mission
D. Jubilee mission
6. The scramble of Cameroon in the 1880s was the by-product of
- A. The commercial rivalry among Britain, France and Germany
B. The repeated appeal of the Baptist mission
C. The activities of the British court of justice and equity
D. The rivalries between Hewett of Britain and Nachtigal of Germany
7. Native resistant of German penetration was due to all of the following factors EXCEPT
- A. Heavy taxation and fines
B. Imposition of artificial chief
C. Force labour and whippings
D. The rejection of foreign trade
8. A significant turning point in the fortunes of the Germans in Cameroon during the First World War was
- A. Their victory at Nsanakang
B. Numerical disadvantage
C. The capture of DUOALA
D. The capture of Yaounde
9. Indirect rule was based on all the of the following EXCEPT
- A. The prominence of British administrators B. The use of traditional rulers
C. The reduction of the cost of administration D. The preparation of self-rule
10. The French medical doctor who is reputed for his fight against sleeping sickness in the south of French Cameroon was

- A. Dr Eugene Jamot
- B. Dr Bebey Eyidi
- C. Dr Charles Okala
- D. Dr Felix Roland Moumie

11. Which of the following would **not** lead to a decrease in the supply of a product can be stored?

- A. An increase in the demand for a joint product
- B. A rise in the price of another input
- C. Decrease in the number of firms supplying the product
- D. An expected rise in the price of the product

11. The difference between earning from exports and payment for imports of visible goods only is referred to as

- A. Balance of trade
- B. Balance of payment
- C. Trade gap
- D. Term of trade