**World Geography 3202 FINAL REVIEW**

**Unit I: Physical Geography**

**Unit 1:**

1) Define the following terms: (FLD = Fully Labelled Diagram)

|  |  |  |
| --- | --- | --- |
| Lithosphere | Exfoliation | Continental Glacier |
| Mantle |  | Tributaries |
| Core | Animal activity | Meanders |
| Compressional force | Root action | Oxbow lakes |
| Tensional force | Chemical weathering | Hydraulic pressure |
| Anticline & Syncline | Solution, | Corrosion |
| Normal fault | Hydrolysis | Abrasion |
| Reverse fault | Oxidation | Wave refraction, |
| Over-thrust fault | Erosion | Longshore drift |
| Volcano | Transportation | Spit |
| Physical weathering | Deposition |  |
| Frost fracture | Alpine Glacier |  |

**Answer the following Questions.**

**Plate Tectonics**

1) Explain how compressional forces are caused. (1.1.1 , 1.1.2) (k)

2) Construct a FLD to illustrate how plate movements are related to compressional and tensional forces (1.1.3) (a)

3) Construct a FLD to explain how compressional forces create fold mountains. (1.1.4) (k)

4) Construct a FLD to explain how tensional forces create a normal fault. (1.1.6) (k)

**Volcanos**

5) What causes a volcano to erupt? Give two reasons. 1.1.8 (k)

6) With the aid of three FLD’s, describe the characteristics of an ash-and-cinder cone, a shield cone, and a composite cone. 1.1.9 (k)

7) What is the relationship between the location of volcanoes & earthquakes to where plates meet? (1.1.10, 1.1.11) (k)

**Weathering**

8) Provide 2 examples that demonstrate the relationship between environmental conditions and the rate of physical and chemical weathering. (1.2.4) (a)

**Rivers**

9) With the aid of three FLD’s. describe the three stages in the life cycle of a river. (1.3.1) (k)

10) Use 2 FLD’s to show how a river erodes *laterally* (meanders & oxbows) & *vertically* (hydraulic, corrosion, abrasion).1.3.2 (k)

11) Explain how deltas are formed. (1.3.4) (k)

12) With the aid of three FLD’s. show the difference between an arcuate delta, digitate delta, and estuarine delta. (1.3.5) (k)

**Glaciers**

13) What is the difference between Alpine and Continental glaciers?

14) With the aid of several FLD’s, describe the formation of the following Continental features:

- an outwash plain

- a terminal moraine

-an erratic

- a drumlin (also, show direction of glacier flow)

- an esker. 1.4.1 (k)

15) With the aid of several FLD’s, describe the formation of the following Alpine features:

- Cirque

- Arête,

- Lateral moraine

- Terminal moraine

- Hanging valley

- Fiord (1.4.2, 1.4.2, 1.4.3) (k)

**Waves:**

16) With the aid of three FLD’s, explain how sea caves, sea arches and stacks are formed. (1.5.3, 1.5.3) (a)

17) Describe the 3 processes by which wave action erodes coastal areas. (1.5.4) (k)

**Unit II: World Climate Patterns**

**Chapter 4:**

1. ***Understand the concepts of the following and how the influence climate:***

|  |  |  |  |
| --- | --- | --- | --- |
| Weather | Solstice | Low pressure | Convectional rain |
| Climate | Cloud cover | Trade winds | Frontal rain |
| Rotation | Temperature range | Polar easterlies | Ocean currents |
| Revolution | Reversal of temp in N and S hemispheres | Westerlies | Monsoon |
| Tilt on axis | Winds | Coriolis force | Elevation |
| The seasons | Prevailing winds | Pressure belts around the world | Windward |
| Equinox | High pressure | Orographic rain | Leeward |
| Latitude | Rainshadow |  |  |

***b) What are the relationships between:***

18. weather & climate

19. revolution, and earth's tilt on its axis (hint: seasons)

20. temperature & latitude

21. how high & low pressure creates a convection cell

22. how land & sea breezes contribute to monsoons

23. the pressure belts of the world & the 3 main wind patterns

24. how the seasons create a shift in the pressure belts and prevailing wind systems

25. ocean currents and moderating temperatures

26. temperature range and distance from the coast

27. amount of precipitation and distance from the coast

28. temperature and elevation

29. precipitation and elevation

30. Know why winter & summer monsoons happen.

***c) Know why the following things happen:***

31. Why the earth's shape changes the intensity of solar radiation (latitude)?

32. Why does the length of day & night change as the seasons change?

33. What factors account for the differences in temperatures as seasons change?

34. Why does only 1\2 of the earth's solar energy reach its surface?

**Chapter 5:**

35. Know the difference between each of the climate regions & sub regions.

* Know the temperatures, temperature ranges, precipitation levels, winds, cloud cover, location, examples of where they are located in the world.
* Be able to identify each region by a description given
* Be able to identify each region by a set of temperature & precipitation statistics given.

36. Demonstrate by using examples how human activity is influenced by climatic conditions.

37. Argue a preference for the appeal of selected climatic conditions.

38. Examine threats posed by selected climatic conditions.

**Unit III: Ecosystems**

**Chapter 6:**

1. ***Define the following terms:***

|  |  |  |
| --- | --- | --- |
| ecosystem | secondary consumers | food pyramid |
| producers | decomposers | trophic level |
| consumers | food chain | climax vegetation |
| primary consumers | food web | succession |

***b) Know the following concepts:***

39. What is the interaction between producers, consumers & decomposers.

40. Describe the energy flow through an ecosystem.

41. Explain why there are fewer organisms at each trophic level.

42. Explain how pesticides can reach toxic levels for organisms at a higher trophic level.

43. Predict the effect on an ecosystem of the introduction of a new organism.

44. Describe the climax vegetation in the needleleaf ecosystem.

* What is the most predominant ecosystem in high latitudes.
* Name the forest ecosystems in low latitudes
* What continents do not have a tundra ecosystem.
* Effect of latitude and elevation on ecosystems.
* Effect of precipitation & temperature on ecosystems.

45. Describe the general characteristics of a given ecosystem.

46. Describe how plants & animals adapt in an ecosystem.

47. Analyze the pattern in the distribution of world ecosystems.

48. Predict which kind of ecosystem is likely to result from a stated set of climatic conditions.

**Chapter 7:**

49. What are the long term & short term impacts of a threat to an ecosystem?

* What are the negative impacts of economic activity on certain environments. Eg oil extraction up north, desertification.

50. What actions are required to reduce an environmental risk?

51. Which climate zones are related to areas of environmental risk. (eg: desertification, arctic pollution)

52. Analyze the value of positions taken on environmental issues.

53. How do traditional groups use their environment?

**Chapter 8:**

1. What are the factors that affect soil quality?
2. Analyze the quality of soil in terms of its soil texture. (Hint: pyramid)
3. What is meant by the term desertification and what is its affect on the globe?

***After Midterm***

**Unit 4 - Primary Resource Activities**

1. ***Define the following terms:***

|  |  |  |
| --- | --- | --- |
| inputs (human/natural) | clear-cutting | reservoir rock (example) |
| processes | strip-cutting | cap rock |
| outputs | selective cutting | aquaculture |
| commercial farming | coniferous trees | directional drilling |
| subsistence farming | deciduous trees | seismograph |
| extensive farming | directional drilling | climax vegetation |
| intensive farming | seismic survey | demersal fish (example) |
| shifting cultivation | hydrophone | pelagic fish(example) |
| agribusiness | porous rock (example) |  |
| nomadic herding | Non-porous rock (example) |  |

***b) Know the following concepts:***

1. What are the three conditions that determine if a natural material is potentially a resource.
2. Using two examples, explain how the use of a resource can be influenced by cultural practices.
3. What is the difference between a human and natural input in a farming operation?
4. List three examples of processes in a farming operation.
5. List three examples of outputs in a farming operation.
6. How are types of agriculture related to climatic regions? *(Relate types of crops to selected climatic conditions)*
7. Identify and briefly describe 3 physical factors that influence the decision to recover offshore oil and gas.
8. Identify and briefly describe 3 human factors that influence the decision to recover offshore oil and gas.
9. With the aid of FLDs, describe 3 kinds of technology used to recover off-shore oil and gas AND relate them to environmental conditions. (rig types and oil recovery depth for each)
10. Describe the economic importance of the off-shore oil and gas operations.
11. Describe three factors that affect the viability of the off-shore oil industry.
12. Explain how oil and gas are formed.
13. Describe two recent advances in techniques used to locate offshore oil and gas reserves.
14. Analyze data to arrive at patterns in the distribution of proven oil and gas reserves.
15. Construct FLDs of an anticline trap, fault trap, salt dome trap and a stratgraphic trap.
16. With the aid of FLDs describe the difference between clear-cutting, strip cutting and selective cutting.
17. What are the advantages and disadvantages of clear-cutting while harvesting timber?
18. What are the advantages and disadvantages of strip-cutting while harvesting timber?
19. What are the advantages and disadvantages of selective-cutting while harvesting timber?
20. Which method of timber harvesting so you think is most sustainable? Explain why.
21. List and briefly describe the major threats to forest resources.
22. List and briefly strategies for a sustainable forestry.
23. What is the relationship between climate and the extent of forest cover? (Ex: tropical forests, boreal forest an deciduous forest, tundra, etc.)
24. Describe global patterns in the depletion of forest resources.
25. Construct a chart to compare the differences between the inshore and offshore fishery.
26. Construct a FLD that illustrates the importance of upwellings for our fishery. Briefly describe the diagram.
27. With the aid of FLD, describe the technologies that are used to catch demersal fish.
28. With the aid of FLDs, describe the technologies that are used to catch pelagic fish.
29. List and describe two technologies that have had the largest negative impact on our marine ecosystem.
30. Describe two pros and two cons of aquaculture.
31. Develop an argument for the development of the acquacultural sector of the fishery.
32. Identify major sources of ocean pollution.
33. Describe three strategies for a sustainable fishery.
34. List and briefly describe several possible effects of a declining fish resource on the livelihood of fishers.

**Unit 5 - Secondary and Tertiary Activities**

1. ***Define the following terms:***

|  |  |  |
| --- | --- | --- |
| primary industry | light industry | agglomerating tendency |
| secondary industry | heavy industry | weight gain production |
| tertiary industry | site | weight loss production |
| quaternary industry | situation conditions | private tertiary activity |
| labour-intensive | resource oriented industry | public tertiary activity |
| capital-intensive | market oriented industry | Mass communication |

***b) Know the following concepts:***

1. Provide three examples of human and natural imputs in a manufacturing operation.
2. Compare the three processes in a manufacturing operation, giving an example for each.
3. What is the main difference between light industry and heavy industry?
4. Describe the influence that site conditions and situation may have on the location of an industry.
5. Provide two examples of resource-oriented industry and market-oriented. industry. Explain how you made your decision.
6. Using an example for each, describe the influence of weight-gain and weight-loss production on the location of an industry.
7. What are the advantages of agglomeration tendency? Provide an example.
8. Identify the characteristics of a labour force that make it attractive to industry.
9. Explain how government subsidies influence the location of a given industry.
10. Describe patterns in the distribution of highly industrialized areas on the earth’s surface.
11. Identify the four categories of service activities.
12. What’s an easy way to distinguish between private tertiary activity and public tertiary activity?
13. Describe two factors that affect the location of a tertiary activity.
14. Describe two factors that affect the location of a quaternary activity.
15. Explain how mass communication can affect the location of a work place.
16. Describe the economic importance of the quaternary sector
17. Define the term gross national product (GNP)
18. Define the term per capita GNP.
19. How is per capita GNP related to level of economic development?
20. How is employment structure related to level of economic development
21. Explain why it is beneficial to use more than one indicator when assessing a country’s level of economic development.

**Unit 6 - Population Distribution and Growth**

1. ***Define the following terms and provide formulas as needed***

|  |  |  |
| --- | --- | --- |
| population density (formula) | natural increase | emigration |
| densely populated | natural decrease | actual population change |
| sparsely populated | birth rate | push factor |
| absolute population growth | death rate | pull factor |
| population growth rate | dependency ratio | repel factor |
| Annual growth rate (AGR) | migration | intervening obstacle |
| natural change | immigration | census. |

***b) Know the following concepts:***

1. Explain why population density is not always an accurate indicator of population distribution.
2. Construct a diagram of the demographic transition model and explain how to classify a country as stage 1, 2, 3 or 4.
3. Describe how to classify a population growth rate as slow, moderate, or fast-growing populations.
4. Describe some of the problems that result from overpopulation.
5. Construct several FLDs too aid you in classifying a given population as expanding, contracting, or stationary.
6. How does the relationship between birth rate and death rate determine natural change in a population?
7. List 3 factors that affect birth rates.
8. List 3 factors that affect death rates.
9. Describe the factors that contribute to a graying of the population.
10. Know how the relationship among birth rate, death rate, emigration and immigration is used to determine the actual change in a population.
11. Describe the economic impact of immigration and emigration.
12. Provide three examples that census data could be used for.