

KATHMANDU UNIVERSITY  
End Semester Examination [C]  
May/June, 2019

Marks Scored:

Level: B.Sc.

Year : II

Course : ENVS 207

Semester: I

Exam Roll No. :

Time: 30 mins.

F. M. : 20

Registration No.:

Date 06 JUN 2019.

SECTION "A"

[20Q. × 0.5 = 10 marks]

Choose and encircle the most appropriate answer.

1. \_\_\_\_\_ is a biomass energy.  
a. Tar sands                      b. Oil shales                      c. Methanol                      d. Biogas
2. Gently sloping bunds (0.5 – 2%) to divert excess water from one area to another is called \_\_\_\_\_.  
a. Graded bunds                      c. Trapezoidal bunds  
b. Semi-circular hoops                      d. Contour bunds
3. \_\_\_\_\_ Sulfur content in coal is main pollutant.  
a. Sulfur                      b. Nitrogen                      c. carbon                      d. arsenic
4. Moors in \_\_\_\_\_ CE distilled kerosene.  
a. 19th century                      b. 20th century                      c. 17th century                      d. 1st century
5. Some philosophers and classical authors regarded the earth similar to a living being subject to aging, illness and even \_\_\_\_\_.  
a. natality                      b. mortality                      c. growth                      d. reproduction
6. Forest soils typically have organic surface layers, a dark but shallow surface horizon and an exuviated white-colored layer near the surface; often somewhat \_\_\_\_\_.  
a. basic                      b. organic                      c. inorganic                      d. acidic
7. Sand & coarse silt fractions are predominantly \_\_\_\_\_; some primary silicate minerals.  
a. feldspar                      b. hornblende                      c. micas                      d. quartz
8. PV panels are equipped in \_\_\_\_\_.  
a. Passive solar energy                      c. Wind turbines,  
b. Active solar energy                      d. Hydro-electrical turbine
9. \_\_\_\_\_ predicted insufficient food, material and energy resources if population continued to grow exponentially.  
a. Engels                      c. Stephen Hales  
b. Malthus                      d. Garrett Hardin
10. At the national and regional planning levels, WOCAT helps to efficiently consolidate and apply relevant \_\_\_\_\_ knowledge for institutions, planners, co-ordinators and decision-makers.  
a. database                      c. SWC  
b. questionnaires                      d. IT

11. The six global diversity maxima Chocó-Costa Rica Centre, Tropical Eastern Andes Centre, Atlantic Brazil Centre, Eastern Himalaya-Yunnan Centre, Northern Borneo Centre, NewGuinea Centre all are located in the humid tropics and \_\_\_\_\_.
- a. subtropics                      b. temperate                      c. tundra                      d. tropic
12. Exploratory drilling of hydrocarbons is called \_\_\_\_\_.
- a. *wild-cattling*                      c. Marine drilling  
b. Rotary drills and                      d. gushers.
13. Energy Demand \_\_\_\_\_ between 1943 and 1973, and grown a further 35% since then.
- a. doubled                      b. tripled                      c. maintained                      d. quadrupled
14. \_\_\_\_\_, advisor to president Theodore Roosevelt, organized one of most influential environmental meetings at the US White House in 1908.
- a. John Muir                      c. Gifford Pinchot  
b. John Evelyn                      d. Geographer George Perkins
15. \_\_\_\_\_ define as Large areas of shrub-cum-grass lands used mainly for game herds and livestock grazing.
- a. High land                      b. Grass land                      c. Range lands                      d. Wild land
16. The upper few meters of the land surface which has a most important role in determining the nature and quality of the land resource base is called
- a. Land                      b. Soil                      c. Biosphere                      d. Farm
17. \_\_\_\_\_ is a system for diversified cropping and fodder production on marginal and steep lands reduce the grazing impacts.
- a. terracing                      c. irrigation  
b. Agro-forestry                      d. stall-feeding
18. Methane gas in Kathmandu valley is associated with ground water that exists in the lake sediment of the Kathmandu valley\_\_\_\_\_.
- a. solid waste                      b. petroleum                      c. aquifers                      d. lake
19. \_\_\_\_\_ a reawakening led to widespread concern over possible exhaustion of fossil fuel.
- a. 1940s                      b. 1960s                      c. 1980s                      d. 2000s
20. Variation of genes/genomes within living organisms; genetic differences between populations of a single species and between individuals within a population is called
- a. Genetic diversity:                      c. Species diversity  
b. Biological diversity                      d. Ecological diversity

SECTION "B"

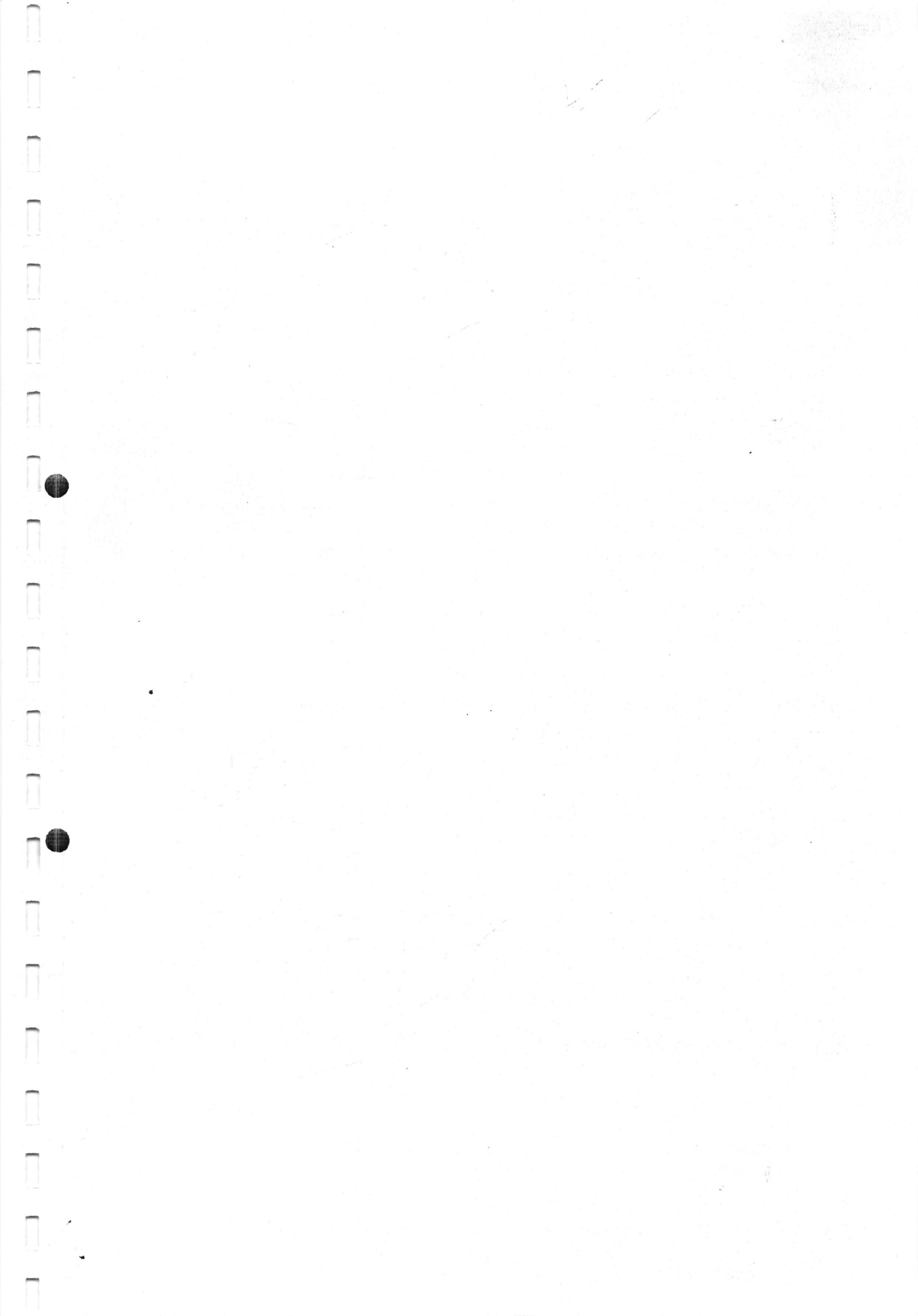
[20Q. × 0.5 = 10 marks]

*Fill in the blanks.*

21. \_\_\_\_\_ King Edward I of England passed law against burning coal due to smoke pollution in 1273.
22. \_\_\_\_\_practices, technology or knowledge may be relatively new and still evolving.
23. The world largest producer of zinc is \_\_\_\_\_.

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24. Volume of recoverable hydrocarbons =  $V \times P \times R$ , where, Reservoir volume =  $R$ ,  
\_\_\_\_\_ =  $V$ , Recovery factor =  $R$ .
25. MDC's addiction to energy resources has been a major source of political tension and changed patterns of \_\_\_\_\_ and production.
26. The sunlight, wind, water, aesthetics, recreation resources are difficult to place an exact \_\_\_\_\_ value.
27. What may be a \_\_\_\_\_ of great intrinsic value to one may be of no significance or merely a costly hindrance to another person.
28. WOCAT's vision is that land and livelihoods are improved through sharing and enhancing knowledge about \_\_\_\_\_ management.
29. Measures of future availability of renewable resources usually based on notion of resource \_\_\_\_\_ or potential to produce useful products/services in a certain period of time.
30. Throughout recent history \_\_\_\_\_ values have been risen & fallen periodically in response to fluctuation in world business cycle.
31. Organisms, both animals and plants are important in \_\_\_\_\_ stability & overall quality of soil.
32. Organic soils are formed in swamps, bogs or marshes thus are very high in OM i.e 80-95% which makes soil very \_\_\_\_\_.
33. \_\_\_\_\_ are group/clusters of individual soil particles in intimate association forming a cohesive unit.
34. 180 million tons of \_\_\_\_\_ deposit is known in Kharidhunga (Dolakha district).
35. Pink, gray and white coloured \_\_\_\_\_ deposit is located in Godavari, Lalitpur district.
36. Resource \_\_\_\_\_ is defined as total quantity of a substance or property within the geo-system.
37. If a renewable resource must be allocated over time to provide equality of opportunity to future \_\_\_\_\_, then the potential that can be sustained indefinitely into the future represents the sustainable capacity or yield.
38. Although the total amount of material on earth is fixed, actually available resources are \_\_\_\_\_.
39. Historically, resource use has always been based on continuous discovery with an ever widening \_\_\_\_\_ of the resource base.
40. Land capability or suitability classes may be distinguished for \_\_\_\_\_ and management purposes.



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SECTION "C"

[3Q. × 7 = 21 marks]

Answer *ANY THREE* questions.

1. What is resource base? Give an account of different types of resource reserve.
2. What do you understand by land assessment? Explain how Land capability or suitability classes may be distinguished for planning and management purposes?
3. How do you classify energy from water? Is there any possibility that this energy?
4. How many ways you are depending on biodiversity resources for you survival? Give an essay on Biodiversity resource of Nepal.

SECTION "D"

5. Write short description (*ANY THREE*): [3 × 3 = 9]
  - a. Soil Moisture Belt
  - b. Principal of water harvesting for irrigation
  - c. Gemstones resource in Nepal
  - d. OPEC
6. Justify (*ANY FOUR*): [4 × 4 = 16]
  - a. Bottom –up process is a participatory approach
  - b. Sustainable development is possible.
  - c. The structure/organization of society redefines the natural resources.
  - d. Exploration for minerals/ores is not a single activity
  - e. Caring for Earth is in fact a sustainable living.
7. Differentiate clearly (*ANY THREE*): [3 × 3 = 9]
  - a. Mineral and Organic Soils
  - b. Malthus and Engels views
  - c. Foot slope and toe slope
  - d. Species lost and ecosystem lost

