



desertification phenomenon directly  
 non is that they are arid, or dry.  
 precipitation.  
 desert exceeds the annual rainfall.  
 effective  
 on people.  
 5) Concerned with the protection of the  
 desertification phenomenon  
 increase the formation of clouds.  
 the dunes, peaks, rock formations, and canyons  
 water in a desert.  
 Rangelands Established agro-climatic stations

- 1- All legislations do not address the
- 2- One thing all deserts have in comr
- 3- Deserts are areas that receive no p
- 4- The amount of evaporation in a de
- 5- Combat Desertification laws are e
- 6- Deserts are home to around 1 billi
- 7- The Agriculture Law No.53 (196
- environment and the control of de
- 8- The great evaporation in the deser
- 9- Deserts have usual landscapes, lik
- 10- Rain is usually the main source of
- 11- Programme for Rehabilitation of F

Date: 16/1/2024

Faculty of Science

Time: 2 hours

Environmental Sciences Department



Final Exam of First Semester: Desert and desertification  
 Third level students of Environmental Sciences /Environment  
 and Chemistry

Answer all the following questions (90/70 marks)

(60/45 marks)

Question 1:

Determine if the following statement Correct or false.

- 1- and land use planning and environmental monitoring stations.
- 12- Desert plants grow far apart for adaptation.
- 13- The Food and Agricultural Organization (FAO) trials an soil and water conservation works in Wadi Sidiyah and Wadi Tawella.
- 14- Expanding cultivation of field crops, especially winter crops followed by fallow summer, resulting considerable degradation of the natural ecosystem.
- 15- Animals that have adapted to a desert environment are nocturnal.
- 16- Most desert birds are restricted to river banks.
- 17- Salinity build-up has reduced fisheries production, the productivity of the land base, and the palatability.
- 18- Coastal Deserts caused by the circulation patterns of air masses.
- 19- Lowering of water table used to Combat Desertification.
- 20- Hot dry air rises into the atmosphere near the Equator.
- 21- When moisture-laden air hits a mountain range, it is precipitated.



- 22- Parts of the Arctic and the Antarctic are classified as deserts.
- 23- The largest desert in the world is the coldest.
- 24- Human activities are a primary cause of desertification.
- 25- Developing new technologies causing desertification.
- 26- Decrease in vegetation cover is one of desertification Physical indicators.
- 27- Reduction in fertilizer and pesticides combat desertification
- 28- Egypt is endowed with three main agro-ecological zones.
- 29- Egypt ratified UNCCD in 1997.
- 30- The UNCCD defined desertification as land degradation in the arid, semi-arid, and sub-humid areas resulting from various factors, including climatic variations and human activities.

**Question 2:**

**(22/17 marks)**

**Complete the following sentences**

- 1- The first commitment of the countries that ratified the UNCCD is ..... to .....
- 2- UNCCD defined combating desertification as activities that aimed at ....., ..... and .....
- 3- Egypt has a total area of about ..... under ..... and ..... climatic
- 4- A process of turning the productive land into desert is .....
- 5- Change in land use/water use is ..... indicators of desertification while alteration of key species distribution and frequency is ..... indicators
- 6- ..... is deplete (soil) by growing crops continuously on it.
- 7- ..... is a new technology are also being developed to combat desertification
- 8- ..... are a primary cause of desertification
- 9- ..... and ..... remove plants that anchor the soil
- 10- The UNCED defined desertification as ..... in ....., ....., and ..... resulting from various factors, including ..... and .....

**Question 3:**

**(8 marks)**

**Illustrate effects of desertification using flowchart only.**

**Best wishes Dr. Doaa Elemam**