



Department of Environmental Sciences
Faculty of Biological Sciences
Quaid-i-Azam University, Islamabad

PhD Entry Test
Total Marks: 100

Fall 2020
Time allowed: 90 min

Name: _____ CNIC #: _____

Field/Supervisor Name: _____ (Please select from the "Fields" file)

Note: Part A consists of subject related multiple choice questions (MCQs), while part B consists of subject related descriptive questions. Part B is compulsory.

PART A

Multiple Choice Questions

Encircle the most appropriate answer.

- Environmental Impact Assessment is usually required for a development project when
 - A small area is expected to be affected by the project
 - There are potentials for trans-boundary impact
 - Limited impacts are expected in the environment
 - All a, b & c
- The human ear can detect sound pressures ranging from as low as _____ N/m².
 - 2×10^{-7}
 - 4×10^{-7}
 - 2×10^{-5}
 - 4×10^{-5}
- Scanning electron microscopy can be used to study
 - Surface chemistry
 - Surface area
 - Surface functional groups
 - Surface morphology
- The release or removal of the adsorbate from adsorbent surface is called
 - Desorption
 - Adsorption
 - Absorption
 - Separation
- Sulphur and Nitrogen cycles can interact with air, water and soil media on
 - Local scale
 - Regional scale
 - Global scale
 - none of above
- Increase in bioremediation of pollutants as result of environmental modifications is termed as
 - Bioaugmentation
 - Bioventing
 - Biostimulation
 - Bioslurping
- Hollow cathode lamp in atomic absorption spectrometer contains
 - Hollow cathode lamp
 - Tungsten anode
 - Sealed glass tube with inert gas
 - All a, b & c
- Heavy metals are _____ times denser than water.
 - 5
 - 10
 - 2
 - 4
- Enteric pathogens are transmitted by _____ route
 - Waterborne
 - Fecal-oral
 - Airborne
 - Human to human
- Microorganisms capable of producing disease in healthy and immunocompromised individuals are called
 - Opportunistic pathogens
 - Facultative pathogens
 - Frank pathogens
 - both b & c

PART B

Question: What are the human consequences of global environmental change for key life support systems, such as water, health, and agriculture?

SAMPLE