



GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT (GITAM)

(Deemed to be University)

(Estd. u/s 3 of the UGC Act, 1956), NAAC Accredited with 'A+' Grade

Visakhapatnam | Hyderabad | Bengaluru

GITAM Institute of Science

Department of Environment Science

PhD Entrance Test 2020-21

Model-Question paper

Duration: 2 hours

Max Marks 140

Note : This is a sample paper. The main examination paper will be online and consists of 35 questions each in section A and section B

Section A: Research Methodology

1. Research is
 - a. ability to teach a given topic
 - b. obtaining information in a particular field
 - c. ability to analyze
 - d. a scientific and systematic data collection and analysis

2. Which of the following is the first step in starting the research process?
 - a. Searching sources of information to locate problem.
 - b. Survey of related literature
 - c. Identification of problem
 - d. Searching for solutions to the problem

3. Which of the following regarding research is true
 - a. Its, defining problems, formulating hypothesis or suggesting solutions;
 - b. Collecting, organizing and evaluating data;
 - c. Making deductions and reaching conclusions
 - d. All the above

4. The purpose of research is best described as
 - a. Formulating questions and finding answers
 - b. Discovering lacunae in available knowledge
 - c. Obtaining data by observation or experiments
 - d. Identifying pertinent questions and obtaining answers through the application of scientific procedures.

5. Research design strategy encompasses all of the components below except _____.
 - a. data collection design
 - b. sampling design
 - c. instrument development
 - d. data analysis
 - e. all of the above are part of the design strategy

6. Research design strategy encompasses all of the components below except _____.
 - a. data collection design
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 - e. all of the above are part of the design strategy

7. Which one of the following is not true of the Descriptive research
- Research carried out to using questionnaires and survey
 - Researcher has control over the variables
 - Study is only observation and data collection
 - Study is used to assess the states of affairs, for a particular object
8. What purpose do clearly stated objectives serve
- state clearly how the research will be done and what conclusions are expected
 - state clearly what the research intends to contribute and justifies the research being carried out
 - state clearly what the research intends to contribute and details how the research will be done
 - states clearly in detail how research will be done and justify why research is being carried out
9. Taking the idea that the more under stress a person is the more he is depressed, who would be the correct hypothesis
- people under more stress are likely to be less depressed
 - greater stress is associated with low levels of depression
 - stress is positively linked with depression
 - none of these
10. "Individuals who face malnutrition as a child show low immunity" If this is the alternate hypothesis, which of the below statements would be the correct null hypothesis?
- Individuals who face malnutrition as a child show high immunity.
 - Individuals who are well nourished as a child show low immunity"
 - Individuals who face malnutrition as a child have similar immunity as, well nourished ones.
 - None of the above

Section B: Environmental Science

1. The inherent property of all living organisms to resist change is called
- Adoptation
 - Homeostasis
 - Competition
 - Co-action
2. Which element is used in manufacturing solar cells
- Silicon
 - Nickel
 - Strontium
 - Lead
3. Which of the following is not a world heritage site
- Manas wildlife sanctuary
 - Nanda Devi national park
 - Kaziranga National park
 - Periyar National park
4. One of the following is not used for ex situ plant conservation
- Field gene banks

- b. seed banks
- c. shifting cultivation
- d. Botanical gardens

5. Which of the following represent maximum number of species among global biodiversity

- a. Algae
- b. Lichens
- c. Fungi
- d. Mosses and ferns

6. Organisms inhabiting a common environment belong to the same

- a. Species
- b. Genus
- c. Population
- d. Community

7. A community that starts the process of succession in a habitat is called

- a. pioneer community
- b. biotic community
- c. abiotic community
- d. artificial community

8. Typical modern municipal landfills contain which of the following?

- a. monitoring wells
- b. methane retrieval systems
- c. leachate treatment facilities
- d. all of the above

9. Effect of increasing CO₂ in air is

- a. Heating
- b. Cooling
- c. Increasing pollution
- d. None of above

10. Forests prevent soil erosion by binding soil particles in their

- a. Leaves
- b. Roots
- c. Buds
- d. Stems