



# 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 Microbiology & FST

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
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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: Food Science & Technology**

1. Which drug is not used to treat high blood pressure ?
- ACE inhibitors
  - Allopurinol
  - Beta blockers
  - Diuretics
2. Customers in growth stage of life cycle of products are classified as
- innovators
  - early adopters
  - middle majority customers
  - laggards
3. Which of the following packaging materials is chemically inert?
- glass
  - metal
  - paper
  - plastics
4. The percentage of total calories obtained from carbohydrates should be between
- 15-20%

- b. 20-35%
- c. 50-60%
- d. 5-10%

5. Stage of product life cycle in which product has achieved acceptance from its potential buyers is called

- a. maturity stage
- b. productive stage
- c. improved market stage
- d. profit achieved stage

6. Canned meat and fish exhibit spoilage by

- a. Bacillus species
- b. Clostridium species
- c. both (a) and (b)
- d. Saccharomyces

7. Migration of cancerous cells from site of origin to other part of the body causing secondary tumours is called

- a. diapedesis
- b. proliferation
- c. metastasis
- d. none of these

8. As soon as ideas are shortlisted, best idea leads to development of

- a. product concept
- b. production phase
- c. production screening
- d. none of above

9. Deterioration of fat in the presence of oxygen is due to the enzyme

- a. Lipase
- b. Protease
- c. Lipoxygenase
- d. Peptidase

10. What unit is used to measure the blood pressure in clinical practice?

- a. mg/dl
- b. mbar
- c. mmHg
- d. N