

Seat No.	
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M.Phil./Ph.D. Entrance Examination, October - 2021
ENVIRONMENTAL SCIENCE (For M.Sc. Students)

Day and Date : Wednesday, 27 - 10 - 2021**Total Marks : 100****Time : 01.00 p.m. to 03.00 p.m.**

- Instructions :**
- 1) All questions are compulsory.
 - 2) Each question carries 2 marks.
 - 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
 - 4) Use black ball point pen only for marking the circle. Do not make any stray mark on the OMR Answer Sheet.
 - 5) Follow the instructions given on OMR Sheet.
 - 6) Rough work shall be done on the sheet provided at the end of question paper.
 - 7) Only non programmable calculators are allowed.

1. Short summary of technical report is called _____

- | | |
|----------------|----------------------|
| A) Article | B) Research abstract |
| C) Publication | D) Guide |

2. What are the core elements of a dissertation?

- A) Introduction; Data Collection; Data Analysis; Conclusions and Recommendations
- B) Executive Summary; Literature Review; Data Gathered; Conclusions; Bibliography
- C) Research Plan; Research Data; Analysis; References
- D) Introduction; Literature Review; Research Methodology; Results; Discussions and Conclusions

P.T.O.

3. Final stage in the research process is _____
- A) Problem formulations B) Data collection
C) Data analysis D) Report writing
4. The act of presenting someone else's work or idea as own is considered as _____.
- A) Plagiarism B) Academic dishonesty
C) Wrongful appropriation D) All of the above
5. Literature collected for review includes _____ sources.
- A) Primary and secondary B) Secondary and tertiary
C) Primary and tertiary D) Only tertiary
6. A blueprint of research work is called _____.
- A) Research problem B) Research design
C) Research tools D) Research methods
7. Camera, tape recorder, video tape etc. are _____ devices of observation.
- A) Casual B) Mechanical
C) Technical D) Manual
8. Why do you need to review the existing literature?
- A) To make sure you have a long list of references
B) Because without it, you could never reach the required word-count
C) To find out what is already known about your area of interest
D) To help in your general studying

9. Questionnaire is a _____.
A) Research method
B) Measurement technique
C) Tool for data collection
D) Data analysis technique
10. _____ are those which are already in existence and which might be collected for some purpose other than the answering of the question in hand.
A) Direct data
B) Basic data
C) Primary data
D) Secondary data
11. 'Which of the following is not a "Graphic representation"?'
A) Pie Chart
B) Bar Chart
C) Table
D) Histogram
12. A research paper is a brief report of research work based on _____.
A) Primary Data only
B) Secondary Data only
C) Both Primary and Secondary Data
D) Personal Data
13. _____ are those which are already in existence and which might be collected for some purpose other than the answering of the question in hand.
A) Direct data
B) Basic data
C) Primary data
D) Secondary data

14. Research is _____.

- A) Searching again and again
- B) Finding solution to any problem
- C) Working in a scientific way to search for truth of any problem
- D) None of the above

15. A sampling frame is _____.

- A) A summary of the various stages involved in designing survey.
- B) An outline view of all the main clusters of units in a sample.
- C) A list of all the units in the population from which a sample is selected.
- D) A wooden frame used to display tables of random numbers.

16. A schedule is generally filled up by _____.

- A) Researcher
- B) Informant
- C) Government
- D) Educational institutes

17. The primary purpose of literature review is to facilitate detailed background of _____ studies.

- A) Present
- B) Previous
- C) Future
- D) Present and future

18. Sampling is advantageous as it _____.

- A) Saves time
- B) Help in capital saving
- C) Both A and B
- D) Increase accuracy

19. Which one of the following is an indication of the quality of a research journal?

- A) Impact factor B) h-index
C) g-index D) i10-index

20. Which of the following statement is correct?

- A) Objectives should be pin-pointed
- B) Another word for problem is variable
- C) Objectives can be written in statement form
- D) Objectives can be written in statement question form

21. Which of the following sampling methods is based on probability?

- A) Convenience sampling B) Quota sampling
C) Judgement sampling D) Stratified sampling

22. _____ is one of the most common tasks of a researcher.

- A) Creating specific problem
- B) Starting business using research data
- C) Solving specific problems
- D) Using research for marketing

23. Which one of the following is not a non-parametric test?

- A) t-test
B) Sign test
C) Chi-square test
D) Run test

24. The Friendly relationship between Interviewer and respondent is called as _____.

- A) Morale B) Management
C) Rapport D) Conclusion

25. In the _____ research the researcher has to use facts for research.

- A) Analytical B) Descriptive
C) Applied D) Distinctive

26. A trophic level refers to _____.

- A) an area in the tropics
- B) an organism's position in a food chain
- C) an organism's position in an ecosystem
- D) an organism's position in a biome

27. The Activated Sludge Process is a _____ wastewater treatment process.

- A) Chemical B) Biological
- C) Physical D) Biochemical

28. The number of organisms of same species per unit area is _____.

- A) Dispersion B) Competition
C) Density D) mortality

- 29.** Dunes are the most spectacular land forms of _____ ecosystem.
A) Marine B) Desert
C) Grassland D) Forest
- 30.** Highest level of species richness is observed in _____.
A) Tropical rain forest B) Temperate grass lands
C) Coniferous forests D) Alpine pastures
- 31.** The viruses which infect bacteria are _____.
A) Cyanophages B) Mycophages
C) Bacteriophages D) Macrophages
- 32.** A compound that is foreign in nature to biological system is _____.
A) Halogenated compound B) Aromatic compound
C) Xenobiotic compound D) Organic compound
- 33.** Desalinization is the process of distillation of _____ by using solar energy.
A) Potable water B) Mineral water
C) Marine water D) Rain water
- 34.** Which of the bacteria is not involved in the nitrification process during nitrogen cycle
A) *Nitrosomonas* B) *Nitrococcus*
C) *Bacillus ramosus* D) *Nitrospira*

- 35.** _____ are the three R's in environmental protection.
- A) Read, Register, Recall B) Random, Register, Recollect
C) Reduce, Rebuild, Restrict D) Reduce, Reuse, Recycle
- 36.** Eutrophication is a process of _____.
- A) Water purification
B) Enrichment of plant nutrients in water bodies
C) Neutralization of wastewater
D) Treatment of wastewater
- 37.** In RDT introduction of vector into a suitable organism / cell is _____.
- A) Translation B) Transformation
C) Transduction D) Translocation
- 38.** Black lung disease is found in the people working in _____.
- A) Electroplating industry B) Paint industry
C) Organic solvent industry D) Coal mines
- 39.** Cd, Pb and Hg are nephrotoxic metals as they cause harm to _____ organ.
- A) Liver B) Kidney
C) Pancreas D) Lungs
- 40.** Atomic absorption spectroscopy is used to analyze _____.
- A) Dissolved gases B) Dissolved organic compound
C) Heavy metals D) Dissolved ions

- 41.** Flood which is caused due to heavy rain or dam break within 6 - 12 hours of beginning of rainfall is _____.
- A) River Floods B) Flash Floods
- C) Lag Time Floods D) Coastal Floods
- 42.** Disaster Management Act of India is formed in the year _____.
- A) 2002 B) 2003
- C) 2004 D) 2005
- 43.** Montreal Protocol is related with _____.
- A) Acid rain B) Global warming
- C) Ozone depletion D) Forest fire
- 44.** Tendency of pollutants to become concentrated in the trophic level is _____.
- A) Bioremediation B) Biomagnification
- C) Bio piracy D) Biorhythm
- 45.** The animals which consume decaying organic matter are _____.
- A) Consumers B) Producers
- C) Detrivores D) Parasites

- 46.** What is the role of chlorine in water treatment?
- A) To remove hardness B) To remove ions
C) To remove bacteria D) Coagulant agent
- 47.** The World Wetland Day is celebrated on _____.
- A) 22nd March B) 5th June
C) 16th September D) 2nd February
- 48.** Smog is _____.
- A) A natural phenomenon
B) A combination of smoke and fog
C) Colourless
D) Coloured
- 49.** Five days-biochemical oxygen demand (BOD_5) is taken at a temperature of _____.
- A) 0°C B) 5°C
C) 15°C D) 20°C
- 50.** The area to which a species is biologically adapted is called as _____.
- A) Niche B) Habitat
C) Succession D) Community



Rough Work

Rough Work