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63/2 (SEM-3) GGY 304

2021

(held in 2022)

GEOGRAPHY

(Theory Paper)

Paper Code : GGY-304

(Environmental Geography)

Full Marks—80

Time—Three hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct options : $1 \times 10 = 10$

(i) The size of the particles that form a soil is known as :

- | | |
|------------------|--------------|
| (a) Humus | (b) Texure |
| (c) Soil profile | (d) Alluvium |

[Turn over

(ii) A lower p^H value indicates

- (a) low degree of acidity
- (b) high degree of alkalinity
- (c) high degree of acidity
- (d) low degree of alkalinity

(iii) Transition between the forest biome and grassland biome is

- (a) Savanna biome
- (b) Tundra biome
- (c) Desert biome
- (d) Evergreen forest biome

(iv) High concentration of sulphur particles combined with rainwater produces

- (a) Chemical pollution
- (b) Acid rain
- (c) Ozone depletion
- (d) Global warming

(v) The term 'Ecology' was first used by

- (a) Jean Brunhes (b) G. Taylor
- (c) De Martonne (d) Tansley

(vi) Environmental determinism as approach to the study of environment was advocated by

- (a) Karl Ritter (b) Vidal de la Blache
- (c) Hattner (d) Bowman

(vii) An ecosystem includes

- (a) Plants and their environment
- (b) Animals and their environment
- (c) Organisms and their environment
- (d) Man and his environment

(viii) Which one of the following is not an abiotic component of an ecosystem ?

- (a) Topography (b) Soil
- (c) Tree (d) Energy

(ix) Which one of the following is not an example of natural air pollution ?

- (a) Spores released by plants
- (b) Wind-blown dust
- (c) Ash from volcanic eruptions
- (d) Nuclear test

(x) Wildlife (Protection) Act for environmental protection was enacted in India in the year

- (a) 1986 (b) 1972
- (c) 1974 (d) 1980

2. Answer in brief any *four* : $2 \times 4 = 8$

- (i) What is a biome ?
- (ii) What are aerosols ?
- (iii) What is soil taxonomy ?
- (iv) What is ecotone ?
- (v) What is food chain ?
- (vi) What is terrestrial ecosystem ?

3. Answer in brief any *four* : $5 \times 4 = 20$

- (i) Differentiate between environment and ecology.
- (ii) State the various issues related to noise pollution.
- (iii) Explain the scope of environmental management.
- (iv) Analyse the characteristics of old and new alluvial soils.
- (v) Examine the impacts of air pollution on human health.
- (vi) State the role of parent materials in the formation of soil with suitable example.

4. Answer in detail any *two* : $9 \times 2 = 18$

- (i) Explain the concept of biodiversity and establish why biodiversity conservation is essentially needed. $3 + 6 = 9$
- (ii) Write a note on any of the approaches for the study of environment. 9
- (iii) Describe the ways of plant-animal association in a habitat in protected areas. 9
- (iv) State the measures to be adopted for conservation of degraded soils. 9

5. Answer in detail any *two* : $12 \times 2 = 24$

(i) While mentioning the objectives of environmental education, explain the need and importance of environmental education.

$2+5+5=12$

(ii) Discuss the various sources and management issues of solid wastes in urban environment.

$4+8=12$

(iii) Describe the meaning and expanding scope of environmental geography in the present day context.

$3+9=12$

(iv) Describe the physical and chemical properties of soils.

$6+6=12$

(Theory Paper)

Paper Code : GGY-304 (old course)

(Research Methodology)

Full Marks – 80

Time – Three hours

The figures in the margin indicate full marks for the questions.

1. Multiple choice questions (answer *all*) : $1 \times 10 = 10$

(i) What do you consider as the main aim of interdisciplinary research ?

(a) To bring out holistic approach to research.

(b) To reduce the emphasis of single subject in research domain.

(c) To over simplify the problem of research.

(d) To create a new trend in research methodology.

(ii) Scientific research operates at

(a) Theoretical level

(b) Observation level

(c) Methodological formulation

(d) None of the above

5.

(iii) The depth of any research can be judged by

- (a) Title of the research.
- (b) Objectives of the research.
- (c) Total expenditure on the research.
- (d) Duration of the research

(iv) Pure research means

- (a) A longitudinal research
- (b) Gathering knowledge for knowledge
- (c) Solution for an immediate problem
- (d) A research with socio-economic objective

(v) Which of the following is a non-probability sampling method ?

- (a) Random Sampling
- (b) Systematic Sampling
- (c) Stratified Sampling
- (d) Snowball Sampling

(vi) Ethical norms in research do not involve guidelines for

- (a) Thesis format
- (b) Copyright
- (c) Patenting policy
- (d) Data sharing policies

(vii) Bibliography means

- (a) Foot Note
- (b) List of books referred
- (c) End Note
- (d) Reference

(viii) Assigning numbers or symbols to the responses in questionnaire is called

- (a) Editing
- (b) Coding
- (c) Classification
- (d) Tabulation

(ix) A common test in research demands much priority on

- (a) Reliability
- (b) Useability
- (c) Objectivity
- (d) All of the above

(x) Identify the odd one

- (a) Data base and methodology
- (b) Review of relevant literature
- (c) Questionnaire design
- (d) Hypothesis or research question

2. Answer any *four* questions : $2 \times 4 = 8$

- (i) Define the term scientific research.
- (ii) State the distinction between Applied and Fundamental research.
- (iii) What do you mean by sample design ?

(iv) What are the necessary steps taken in data processing ?

(v) Write the important source of secondary data used in geographic research.

(vi) State how hypothesis is different from that of proposition?

3. Answer any *four* questions : $5 \times 4 = 20$

(i) State the significance of research in today's era of globalization.

(ii) Write the important characteristics of a scientific method.

(iii) Write the characteristics of a good research.

(iv) State the distinction between research methods and methodology.

(v) Write the need and importance of pilot survey in research.

(vi) Differentiate referencing and bibliography in geographic research.

4. Answer any *two* questions : $9 \times 2 = 18$

- (i) What do you mean by a research design ? State how a good research design should be formulated.
- (ii) "Inductive process is known as theory building research while deductive process is known as theory testing research". Explain the statement.
- (iii) What do you mean by proposition and hypothesis? Explain the different tests used in hypothesis testing.
- (iv) What do you mean by scientific knowledge ? Explain the two important pillars of scientific knowledge.

5. Answer in detail any *two* : $12 \times 2 = 24$

- (i) What is a research problem ? What are the necessary conditions or steps that one has to follow while selecting a research problem ? Explain the components of a research proposal with a hypothetical research problem. $2+4+6=12$
- (ii) What do you mean by theory ? State the four important building blocks of a theory formulation. Explain how it differs from law and models. $2+4+6=12$

(iii) Write the meaning of interpretation and report writing. State the necessary steps that should be taken in drawing interpretation and report writing on a research work. $2+10=12$

(iv) What do you mean by research ethics and plagiarism ? What are the ethical measures considered in doing scientific research ? $4+8=12$