3 (Sem-6/CBCS) GGY HE 1/2

2022

# GEOGRAPHY

(Honours Elective)

Answer the Questions from any one Option.

OPTION-A

(Geography of Health)

Paper: GGY-HE-6016

OPTION-BOO SONE

(Hydrology)

Paper: GGY-HE-6026

Full Marks: 60

Time: Three hours

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

#### OPTION-A

#### (Geography of Health)

Paper: GGY-HE-6016

- 1. Answer any seven of the following questions:  $1 \times 7 = 7$ 
  - If a disease is relating to genes or heredity, then it is termed as
    - (a) Zoonotic disease
    - Infections disease
    - (c) Congenital disease
    - (d) Genetic disease
  - The first recorded pandemic called the (ii) 'Black Death' is -
    - (a) Leprosy
    - (b) COVID 19
    - Plague
    - Rabies (d)
  - (iii) Malaria is spread due to -
  - (a) Anopheles mosquito
    - (b) Culex mosquito
    - Aedes mosquito
    - House fly (d)

- (iv) Which of the following is a Nodal institution for implementation of SDGs in India?
  - (a) Planning Commission
  - Disinvestment Commission (b)
  - NITI Aayog (c)
  - Finance Commission (d)
  - AIDS day is observed in -(v)
    - 1st May (a)
    - 5th June (b)
    - 17th September (c)
    - 1st December (d)
    - The Sustainable Development Goals (SDGs) were adopted by the United Nation in the year -
      - (a) 2015
      - 2016 (b)
      - (c) 2017
      - (d) 2018

- (vii) What is the other name of infectious diseases?
  - (a) Non-communicable diseases
  - (b) Communicable diseases
  - (c) Non-transmissible diseases
  - (d) Heredity diseases
  - (viii) What is the main aim of Janani Suraksha Yojana run by Family Welfare programme?
    - (a) Reducing maternal and neonatal mortality
    - (b) To encourage couples to have two children
    - (c) To provide pensions to widow women
    - (d) To provide shelters to poor people
  - (ix) The BCG vaccine is administered for immunity against
    - (a) Malaria
    - (b) Tuberculosis
    - (c) Jaundice
    - (d) Hepatitis

- (x) What is/are the main argument/s for a universal health system?
  - (a) A uniform standard of care
  - (b) Lower costs for citizens and health care providers
  - (c) An overall healthier population
  - (d) All of the above
- 2. Answer **any four** of the following questions in very short: 2×4=8
  - (i) What are the approaches to study geography of health?
  - (ii) Which physical factors are most closely related to malaria?
  - (iii) What is immunization?
  - (iv) How does climate change add additional risks to health and safety?
  - (v) How does poor nutrition affect human health?
  - (vi) Differentiate communicable and noncommunicable diseases.

- (vii) How do vaccines provide better immunity than natural infections?
- (viii) What are the health issues arisen due to workplace stress?
- 3. Answer any three of the following questions: 5×3=15
  - (i) What are the health impacts of prolonged exposure to air pollution? Elucidate your answer citing examples.
  - (ii) How health indicators are used to estimate facets of the health of a group of population?
  - (iii) Which organisation implements family welfare programmes in India? What are their programmes?
  - (iv) How do vaccines protect humans from disease-causing organisms?
  - (v) Is it true that individual vaccination also ensures protection of community at large? What is herd immunity?
  - (vi) What are the major goals of the National Health Mission?

- (vii) What do you think are the biggest challenges in healthcare in India during COVID-19 pandemic?
- (viii) How does local physical environment of a place influence the disease transmission?
- 4. Answer any three of the following questions:
  - (i) How is spatial variation of disease studied? Explain about the factors which are mainly responsible for such variations.
  - (ii) Under ecological approach to study of health, what are the most important factors need to be mentioned? Explain each one of them.
  - (iii) Diffusion of diseases in influenced by varied factors. How a cultural environment of a region decides the diffusion process? Write your answer giving suitable examples.
  - (iv) "The relationship between health and wealth at the global scale is strong across all countries". Explicate your answer.

- (v) "The destruction of wild spaces facilitates the emergence of zoonotic diseases." Justify your answer with proper examples. 10
- (vi) What are the programmes run under National Health Mission? How does it differ from National Rural Health Mission? 6+4=10
- (vii) What are the biggest challenges for healthcare system in India? What can be done to overcome these challenges? in are mainly responsible for such 6+4=10
- (viii) What is your opinion on positive behaviour change especially in food habits and life style on general wellbeing and diseases during COVID pandemic?

### OPTION-B

## (Hydrology)

Paper: GGY-HE-6026

- Answer any seven from the following questions:
  - (a) Which one of the following is the product of river erosion?
    - Drumlines (i)
    - Cirques (ii)
    - (iii) Canyons
    - (iv) None of the above
    - A broad channel where the water of a river and a sea mingle is called (b) Estuary/Delta/Harbour.
    - Choose from the following, which is good enough to drink-(c)
      - Potable water (i)
      - Ground water (ii)
      - (iii) Surface water
      - (iv) Artesian water

- (d) Pick up the correct statement from the following:
  - (i) Hydrograph is a plot of discharge and time
  - (ii) Hydrograph is a plot of water velocity
  - (iii) Hydrograph is a plot of maximum rainfall
  - (iv) All of the above
- (e) Choose the correct statement:
  - Rivers, Lake, Ocean get water from
  - (ii) Rain water is obtained by evaporation from rivers, Lakes and Oceans
  - (iii) Water remains in the atmosphere as vapours
  - (iv) All of the above
- (f) What is river meander?
- (g) What is a river basin?
- (h) What is doab?
- (i) In which stage does a river completely stop its erosional work?
- (j) Which river is known as Sorrow of Bihar?

- 2. Give very short answer to the following questions: (any four) 2×4=8
  - (a) What do you mean by hydrology?
  - (b) What are the different types of flood?
  - (c) What do you mean by channel morphology?
    - (d) What is hydrograph?
    - (e) Write two differences between hydrology and fluvial geomorphology?
    - (f) Define flood hazard.
    - (g) What is surface runoff?
  - (h) What is meant by base level of erosion?
- 3. Write short notes on **any three** of the following: 5×3=15
  - (a) Groundwater table
  - (b) Concept of aquifer
  - (c) Groundwater recharge
  - (d) Water velocity
  - (e) Importance of groundwater
  - (f) Water budget
    - (g) Basin catchment
    - (h) Flood plain formation

- 4. Answer any three from the following questions: 10×3=30
  - (a) What do you understand by the concept of hydrological cycle? Explain the water budget in detail with a suitable diagram. 4+6=10
  - (b) What do you mean by runoff? Discuss the factors affecting surface runoff.
  - (c) Discuss the importance of Hydrology as a branch of physical geography.
  - (d) Write a note on Brahmaputra floods and its enhancing factors and mitigation measures. 4+6=10
  - (e) "Human activities cause anomalies in river system". Justify the statement with local example.
    - (f) Define flood and discuss its various types with examples.
    - (g) What is river basin hydrology? Explain the effect of water discharge on river channel morphology. 4+6=10
    - (h) What do you mean by stage-discharge hydrograph? Explain the effects of stage-discharge on river channel.