259/Env.Sc.

UG/2nd Sem/ENVS-H-CC-L-03/20

## U.G. 2nd Semester Examination - 2020 ENVIRONMENTAL SCIENCE [HONOURS]

Course Code: ENVS-H-CC-L-03 (Water and Water Resources)

Full Marks : 40 Time :  $2\frac{1}{2}$  Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

- 1. Answer any **five** of the following:  $2 \times 5 = 10$ 
  - a) What are the different forms of precipitation?
  - b) Differentiate between flood control reservoir and multipurpose reservoir.
  - c) Distinguish between BOD and COD.
  - d) Cite examples of two benthos and two neckton found in a lake.
  - e) State the factors affecting evapotranspiration process.
  - f) Why do we need rain water harvesting?
  - g) Define integrated coastal zone management (ICZM).

[Turn over]

2. Write short notes on any **two** of the following:

 $5 \times 2 = 1 \ 0$ 

- a) Integrated watershed management
- b) Ramsar Convention
- c) Tehri dam controversy
- d) Ground water contamination
- 3. Answer any **two** questions of the following:

 $10 \times 2 = 20$ 

- a) Do you think interlinking of Indian rivers necessary? Discuss the issue critically with associated ecological and economic merits and demerits of such project.

  4+6=10
- b) Explain different types of aquifers with neat sketches. Give an account of different techniques used for ground water recharge.

5+5=10

with an illustration, explaining the following processes: (i) precipitation, (ii) runoff, (iii) infiltration, (iv) evaporation, and (v) evapotranspiration. How is the global hydrological cycle getting affected currently by human activities and climate changes?

1+5+4=10

d) What is meant by 'water quality'? Tabulate different water quality parameters under physical, chemical and biological categories considered for assessing the status of surface water bodies. Explain how addition of organic matter and domestic sewage into a lake can affect the above parameters. 2+4+4=10

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