

October 2018

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
Answer any FOUR questions from the remaining in each PART – A
and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and
10 marks in PART – C.]

PART – A

1. What is meant by percapita demand or rate of demand?
2. Name any four water borne diseases.
3. Name the different types of service reservoir.
4. What is meant by conservancy system of carrying waste water?
5. Name any four sewage appurtenances.
6. Name the classification of solid waste.
7. Name any four sources of soil pollution.
8. What is continuous system of water supplying?

PART – B

9. Mention any three precautions to be taken in collecting water sampling.
10. What are the effects of pipe corrosion?
11. What is meant by coagulation? Name any four coagulants which are commonly used.
12. Define the terms sewage, sullage and garbage.
13. Define trap. State its function in house drainage system.
14. State the advantages of trickling filter.
15. Write short notes on rainwater harvesting.

[Turn over.....

16. What are the methods of sludge disposal?

PART - C

17. (a) Explain pumping test and recuperation test of yield of well.

(Or)

(b) Explain Jackson turbidity meter and turbidity rod with neat sketches.

18. (a) Explain horizontal flow type sedimentation tank with a neat sketch.

(Or)

(b) Explain grid iron and radial methods of layout of water distribution pipes with neat sketches.

19. (a) Explain with sketches of a circular sewer and a non circular sewer.

(Or)

(b) What are the principles of house drainage system?

20. (a) Describe with sketch of a grit chamber.

(Or)

(b) Explain the activated sludge process with the help of flow diagram.

21. (a) Describe the effects of air pollution on human beings and animals.

(Or)

(b) (i) What are the consequences of deforestation?

(ii) Describe any two methodologies of environmental impact assessment.
