

Total No. of Questions : 4]

SEAT No. :

P887

[Total No. of Pages : 2

[5315] - 484
T.Y.B.Sc. (Semester - IV)
ENVIRONMENTAL SCIENCE (Theory)
Environmental Biotechnology - II
(2008 & 2013 Pattern) (Paper - VI)

Time : 2 Hours]

[Max. Marks :40

Instructions to the candidates:

- 1) All questions are compulsory and carry equal marks.*
- 2) Neat and labelled diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

Q1) Attempt the following in 1 - 2 lines each.

[10]

- a) Define Rhizofiltration.
- b) Enlist the advantages of bioleaching.
- c) Write full form of FBR and ABR.
- d) What is biomass gasification?
- e) What is electrolysis process in hydrogen production.
- f) Enlist any two demerits of biomethanation of MSN.
- g) Define in Situ bioremediation.
- h) Define fermentation.
- i) Enlist any two aquatic biomass used for biogas.
- j) Define hog fuel.

P.T.O.

Q2) Write a short note on ANY TWO of the following : **[10]**

- a) Biotechnology for air pollution control.
- b) Rotating biological contractor.
- c) In - Situ Leaching

Q3) Answer ANY TWO questions from the following : **[10]**

- a) What are the advantages of using immobilized enzymes.
- b) Explain the factors affecting methane formation.
- c) What are the advantages of anaerobic waste water treatment.

Q4) Attempt ANY ONE of the following : **[10]**

- a) What is bioremediation? In what ways it is good tool for environmental clean up.
- b) Explain the techniques used for removal of heavy metals from waste water.

