

BE - sem-VIII (old) chemical- Environmental Engg
Environmental Engineering.

2/12/16

Q.P. Code : 616001

(3 Hours)

[Total Marks : 100

- N.B. : 1. Question No. 1 is compulsory.
2. Answer any four out of remaining questions.
3. Figures to the right indicate full marks

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| 1 | Attempt any four | 20 |
| 1) | The Hydrological cycle | |
| 2) | Noise pollution | |
| 3) | Classification of solid waste | |
| 4) | Temperature Lapse rate Stability in meteorology | |
| 5) | Water Act (Prevention & control of pollution Act) | |
| 2 (a) | How water pollutants are classified? List the major water pollutants, explain any one in detail | 10 |
| (b) | How the Air pollutants are classified? List the major types of Air pollutants, briefly | 10 |
| 3. (a) | Explain in detail activated sludge process | 10 |
| (b) | List the treatment methods for hazardous solid waste. Explain any one method in detail. | 10 |
| 4. (a) | What are different control methods used for air pollution control? Explain any one in detail. | 10 |
| (b) | Describe the factors affecting the dissolved oxygen in river water & derive an expression for dissolved oxygen sag curve. | 10 |
| 5 (a) | Classify & explain the types of ponds & lagoons used for domestic waste water treatment. | 10 |
| (b) | Explain in brief the "Sanitary Landfill" used for solid waste management. Draw the composition & main gases during refuse digestion in landfill. | 10 |
| 6 (a) | Explain in brief COD test carried out in Laboratory. | 10 |
| (b) | Draw & Explain construction & working principle of cyclone separator. | 10 |
| 7. | Write a short note on following: | 20 |
| 1) | Global warming | |
| 2) | Nitrogen cycle in Biosphere | |
| 3) | Anaerobic treatment of solid waste. | |
| 4) | Trickling filter. | |