Program: \_\_\_CIVIL Engineering
Curriculum Scheme: Rev2016
Examination: Third Year Semester VI

Course Code: CEC604 and Course Name: Env. Engg-II

Time: 1 hour Max. Marks: 50

For the students:- All the Questions are compulsory and carry equal marks .

| Q1.       | Which of the following is infectious waste                   |
|-----------|--|
| Option A: | Biomedical waste   |
| Option B: | Agricultural waste   |
| Option C: | Commercial waste   |
| Option D: | Domestic waste   |
|           |  |
| Q2.       | This type of waste collection system used in congested area  |
| Option A: | Set out- set back system                                     |
| Option B: | Alley system   |
| Option C: | Curb side collection system                                  |
| Option D: | Backyard collection system                                   |
| -         |  |
| Q3.       | Toxicity is the characteristics of solid waste               |
| Option A: | Physical   |
| Option B: | Chemical   |
| Option C: | Biological   |
| Option D: | Hazardous  |
|           |  |
| Q4.       | Completion of composting process is checked by               |
|           |  |
| Option A: | MNK value  |
| Option B: | NPK value  |
| Option C: | CNK value  |
| Option D: | DMK value  |
|           |  |
| Q5.       | This is the hygenic method for collection of sewage          |
| Option A: | conservancy system   |
| Option B: | water carriage system  |
| Option C: | partially combined sysyem                                    |
| Option D: | seperate system  |
| 0.6       |  |
| Q6.       | This is the attached growth process                          |
| Option A: | trickling filter   |
| Option B: | septic tank  |
| Option C: | aerated lagoon   |
| Option D: | activated sludge process                                     |
| Q7.       | F/M ratio for the activated sludge process should be between |
|           | 1  |

| Option A: | 0.5- 0.7   |
|-----------|--|
| Option B: | 0.4-0.6  |
| Option C: | 0.6-0.8  |
| Option C: | 0.3-0.4  |
| Орион D.  | 0.3-0.4  |
| 00        | DO level in water should be maintained for a quetie life   |
| Q8.       | DO level in water should be maintained for aquatic life  |
| Option A: | less than 0.4 mg/l   |
| Option B: | more than 0.4 mg/l   |
| Option C: | less than 4mg/l  |
| Option D: | more than 4mg/l  |
| 00        | DOD 11-6   |
| Q9.       | BOD demand is measured after   |
| Option A: | 5 days   |
| Option B: | 7 days   |
| Option C: | 10 days  |
| Option D: | 21 days  |
| 0.10      |  |
| Q10.      | For self-cleansing effect in the sewer velocity should be  |
| Option A: | more than 0.3 m/minute   |
| Option B: | less than 0.3 m/minute   |
| Option C: | less than 3m/sec   |
| Option D: | more than 3m/sec   |
|           |  |
| Q11.      | Imhoff cone is used to determine   |
| Option A: | settle able solid  |
| Option B: | fixed solid  |
| Option C: | dissolve solid   |
| Option D: | volatile solid   |
|           |  |
| Q12.      | sludge volume index is measured in   |
| Option A: | mg/l   |
| Option B: | 1/mg   |
| Option C: | gm/ml  |
| Option D: | ml/gm  |
|           |  |
| Q13.      | surface loading rate in trickling filter is given by   |
| Option A: | Q/surface area   |
| Option B: | 5 day BOD/ surface area  |
| Option C: | Q/ volume  |
| Option D: | 5 day BOD/ volume  |
|           |  |
| Q14.      | The ratio of BOD5/BOD of domestic sewage per capita per day is called  |
| Option A: | ultimate BOD   |
| Option B: | COD  |
| Option C: | relative stability   |
| Option D: | population equivalent  |
| - F       | The state of the s |
| Q15.      | nitial DO of water sample is 8 mg/l and final DO is 4.5 mg/l. find the 5 day BOD   |
|           |  |

|           | Examination 2020   |
|-----------|--|
|           | if dilution factor is 50   |
| Option A: | 200 mg/l   |
| Option B: | 150 mg/l   |
| Option C: | 175 mg/l   |
| Option D: | 125 mg/l   |
|           |  |
| Q16.      | Velocity of sewage flow through the sewer is determined by           |
| Option A: | Lacy's formula   |
| Option B: | chezy's formula  |
| Option C: | friction formula   |
| Option D: | Manning's formula  |
|           |  |
| Q17.      | Recirculation ratio is denoted by                                    |
| Option A: | R  |
| Option B: | R/I  |
| Option C: | I/R  |
| Option D: | I  |
|           |  |
| Q18.      | soak pits are provided for   |
| Option A: | sedimentation tank   |
| Option B: | sludge digestion tank  |
| Option C: | septic tank  |
| Option D: | imhoff tank  |
| 010       |  |
| Q19.      | two pipe system has number of pipes                                  |
| Option A: |  |
| Option B: | 2  |
| Option C: | 3 4  |
| Option D: | 4  |
| Q20.      | minimum water level maintained in traps                              |
| Option A: | 25- 75mm   |
| Option B: | 50-100mm   |
| Option C: | 75-125mm   |
| Option C: | 100-150mm  |
| <u> </u>  | 100-13011111   |
| Q21.      | Dilution and dispersion is the forces of self purification of stream |
| Option A: | Chemical   |
| Option B: | Physical   |
| Option C: | Biological   |
| Option D: | Mechanical Mechanical  |
| Орион Б.  | 17100Hallion   |
| Q22.      | Oxygen content increases in self purification process by             |
| Option A: | Sunlight   |
| Option B: | Reduction  |
| Option C: | Dilution   |
| Option D: | sedimentation process  |
| Sprion D. | Seamenanion process  |
|           | I.   |

| Q23.      | Depth of the Oxidation pond should be                                   |
|-----------|---|
| Option A: | 1-1.5M  |
| Option B: | 2 3 M   |
| Option C: | 1.5- 2.5M   |
| Option D: | 2.5-3.5M  |
|           |   |
| Q24.      | The gas which is evolved in sludge digestion tank is mainly composed of |
| Option A: | Nitrogen  |
| Option B: | Methane   |
| Option C: | Hydrogen sulphide   |
| Option D: | Ammonia   |
|           |   |
| Q25.      | Manhole is classified as deep manhole if depth is more than             |
| Option A: | 1.5 M   |
| Option B: | 2.5M  |
| Option C: | 3.5 M   |
| Option D: | 4.5M  |