P. Scie V.P. & R.P.T.P. Science College VI SEMESTER, B.Sc. Examination, LIBRAF March- 2018, MICROBIOLOGY; US06CMIC05 Agricultural and Environmental Microbiology 16.03.18; Friday Time: 11.00-12.30 p.m. Total Marks: 25 Q.1. Attempt the following multiple choice questions. (03)1. Dinitrogenase reductase is encoded by (a) nif D (b) nif H (c) nif K (d)nif A 2. Commercial methods of bioleaching are (a) Slope leaching (b) heap leaching (d) all of the above (c) in situ leaching 3. Which of the following is an example of biodegradable herbicide? (b) DDT (a) Propham (c) Propachlor (d) aldrin Q.2. Attempt any two out of the following briefly. (04)1. Explain the significance of nod genes. 2. How can the bio deterioration of wood be prevented ? 3. Differentiate recalcitrant and xenobiotic compounds. Q.3. (i) Explain nitrogen fixing symbiosis with non leguminous plants. (04)(ii) Define bio fertilizer. (02)OR Q.3. Write a note on microbial insecticide citing an example. (06)Q.4. Write a note on bioremediation of petroleum hydrocarbons. (06)OR Q.4. Define bio deterioration. Explain bio deterioration of metal. (06)Q.5. Describe the biodegradation of chlorinated compound. (06)OR

Q.5. Explain biomagnification with an example.

(06)