## M.Sc.(Microbiology) (CBCS Pattern) First Semester

## PSMBT-104 - Paper-IV : Commercial Microbiology

GUG/W/18/11174 P. Pages: 1 Time: Three Hours Max. Marks: 80 All questions are compulsory and carry equal marks. Notes: 1. 1. Discuss the geomicrobial methods of ore and petroleum exploration. 16 OR Describe the followings: 8 Bacteriological method of oil recovery. a) 8 Microbial solubilization of coal. b) 2. Describe the microbial production of Kojic acid and its use in cosmetics preparation. 16 OR Write note on followings: 8 Monitoring of Astronauts microbial flora. a) ESA STONE experiment. b) 8 **3.** Write note on followings. Antimicrobial garments. 8 a) Antibiotic paper production. 8 b) OR Discuss the Bacteriostatic sanitary napkins and towels. **16** Discuss the composition and production of antimicrobial plastic. 4. 16 OR Describe the followings. Production of plastic materials from microorganisms. a) 8 b) Composition of antimicrobial rubber. 8 5. Write short note on followings. Evidence regarding biogenesis of petroleum. a) Black yeast. b) c) Antimicrobial fabric. Antiseptic plastic. d) \*\*\*\*\*