

M.Sc.- I (Microbiology) (NEP Pattern) Semester-I  
**NEP-73 / 01MSCMB03 - Paper-III : Commercial Microbiology**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15127**

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.  
2. Draw diagram wherever necessary.

1. Discuss the geomicrobial methods of ore and petroleum exploration. 16

**OR**

Describe the followings:

- a) Bacteriological method of oil recovery. 8  
b) Microbial solubilization of coal. 8

2. Explain microbial production of Kojic acid and hyaluronic acid. 16

**OR**

- a) Monitoring of Astronauts microbial flora. 8  
b) ESA STONE experiment. 8

3. Describe in detail antimicrobial fabrics and antimicrobial garment. 16

**OR**

- a) Describe antimicrobial papers. 8  
b) Describe antimicrobial currency. 8

4. Describe in detail microbiology of rubber. 16

**OR**

Write notes on:

- a) Production of plastic materials from microorganisms. 8  
b) Production of fungistatic plastic. 8

5. Describe the following.

- a) Biogenesis of petroleum. 4  
b) Skin Whitening Composition. 4  
c) Antimicrobial carpets. 4  
d) Antiseptic plastic. 4

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