

**M.D. DEGREE EXAMINATION**  
**BRANCH IV – MICROBIOLOGY**  
**PAPER IV – MYCOLOGY AND APPLIED MICROBIOLOGY AND**  
**RECENT ADVANCES**

*Q.P.Code: 202017*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Essay Questions:**

**(2 x 10 = 20)**

1. Define Nosocomial infections. Write in detail about Hospital infection control.
2. Enumerate the causative agents of Mycetoma. Describe the pathogenesis and laboratory diagnosis of Eumycotic mycetoma.

**II. Short Questions:**

**(8 x 5 = 40)**

1. Bioterrorism.
2. Laboratory diagnosis of Dermatophytes.
3. Rhinosporidium.
4. Antifungal susceptibility.
5. Bacteriology of milk.
6. National immunization schedule.
7. Blood stream infections.
8. Botulism.

**III. Reasoning Out:**

**(4 x 5 = 20)**

1. Cryptococcus neoformans is seen as black colonies on Bird seed agar.
2. Phage typing is used in epidemiological typing.
3. Superbugs are a great concern in health care system.
4. Subculture of Streptococcus pneumonia culture is difficult.

**IV. Very Short Answers:**

**(10 x 2 = 20)**

1. MMR vaccine.
2. Reynolds Braude phenomenon.
3. Nude mice.
4. Automated blood culture system.
5. Aflatoxin.
6. Ectothrix.
7. Causative agents of phaeohyphomycosis.
8. Asteroid bodies.
9. Thioglycollate medium.
10. Sabin vaccine.

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