

[LQ 120]

AUGUST 2020
(MAY 2020 SESSION)

Sub. Code: 2017

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: **(2 x 15 = 30)**

1. Define hospital acquired infections (HAI). Discuss in detail the microbiological approach to blood stream infections.
2. Enumerate the fungi causing opportunistic infections. Discuss in detail the pathogenesis, virulence factors and laboratory diagnosis of Cryptococcal meningitis.

II. Short notes: **(10 x 5 = 50)**

1. Bacteriology of water.
2. Phaeohyphomycosis.
3. IRIS.
4. Invasive Aspergillosis.
5. Ventilator associated pneumonia.
6. Pneumocystis jirovecii.
7. Carbohydrate assimilation test.
8. Effluent treatment plant.
9. Dermatophyte test medium.
10. Plasma pyrolysis.

III. Reasoning Out: **(4 x 5 = 20)**

1. Cycloheximide in Sabouraud dextrose agar.
2. Nitrofurantoin has no role in upper UTI.
3. Slide culture is preferred than adhesive tape in identification of fungi.
4. Lysis centrifugation is a preferred blood culture technique.
