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: $(2 \times 15 = 30)$

1. What is endemic mycosis? Mention the fungal agent of endemic mycosis. Write in detail about Subcutaneous Dimorphic fungal infection.

2. Enumerate Lab acquired infections. Classify biological agents based on biohazard category. Discuss various biosafety measure in laboratory.

II. Short notes: $(10 \times 5 = 50)$

- 1. Indicator medium used for Fungal culture.
- 2. Virulence factors for Cryptococcus.
- 3. Fungal mycetoma.
- 4. Invasive Fungal staining.
- 5. Compare Mycotoxins and Mycetismus.
- 6. Flowcytometry.
- 7. Traveller's Diarrhoea.
- 8. Typing methods of Bacterial diagnosis.
- 9. Kirby-Bauer method.
- 10. Pathogenicity islands.

III. Reasoning Out:

 $(4 \times 5 = 20)$

- 1. Fungal culture medium is not suitable in cultivation of Rhinosporidium seeberi from clinical samples.
- 2. Chlamydospore production in Candida species not demonstrable in Sabouard's Dextrose agar.
- 3. How do clinical Microbiologist determine which test and services to offer for any given specimen?
- 4. Biosafety level are determined based on pathogens.