

(LF 120)

OCTOBER 2014

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 Questions:

(2 x 10 = 20)

1. Define the term pandemic. List out the diseases that caused pandemic and discuss in detail morphology, etiology, pathogenesis, lab diagnosis and preventive measures of severe acute respiratory syndrome.
2. Describe the morphology, cultivation, pathogenesis and lab diagnosis of Candidal infection. Add a note on recent trends in the lab diagnosis of fungal infection.

II. Short Questions:

(8 x 5 = 40)

1. Spores in fungi.
2. Mycotoxicosis.
3. Pseudallescheria boydii.
4. Etiological agents and lab diagnosis of keratomycosis.
5. Phaeoid fungi.
6. Sterilisation of operation theatres.
7. Beta – lactamases.
8. Tests in the examination of milk.

III. Reasoning Out:

(4 x 5 = 20)

1. Another important emerging bacterial infection is Clostridium difficile.
2. Diagnosis of Penicillium marneffeii infection is easy when typical skin lesions appear.
3. Normal microbial flora play an important role in the body.
4. Standard suspension of insoluble barium sulphate precipitates have been described by Mc Farland.

IV. Very Short Answers:

(10 x 2 = 20)

1. Fungal wet mount.
2. Name the various skin tests and fungal antigens used.
3. Ectothrix infection.
4. Hair perforation test.
5. Common causative agents of Eumycetoma with characters of grains.
6. Bio typing.
7. Define density gradient centrifugation and mention the methods.
8. Good buffers.
9. Redox indicators.
10. Radio allergosorbent test.
