OCTOBER 2016

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: $(2 \times 10 = 20)$

1. Classify medically important fungi and write in detail the laboratory diagnosis of fungi.

2. Discuss in detail the principle, methodology, merits and demerits of RT – PCR.

II. Short Questions:

 $(8 \times 5 = 40)$

Sub. Code:2017

- 1. Gene cloning.
- 2. Opportunistic parasitic infections in AIDS.
- 3. Cryptococcus neoformans.
- 4. Microbiome.
- 5. Bacteriology of Air.
- 6. Line probe assay.
- 7. Bacterial food poisoning.
- 8. Hydroclave.

III. Reasoning Out: $(4 \times 5 = 20)$

- 1. Laboratory workers are cautioned not to open fluffy white molds unless they are placed inside a biological safety cabinet.
- 2. Biomedical waste management is mandatory in health care settings.
- 3. Formaldehyde gas used in theatre sterilization is to be neutralized with ammonia.
- 4. Sterile solutions containing endotoxins can cause serious illness.

IV. Very Short Answers:

 $(10 \times 2 = 20)$

- 1. McFarland standard.
- 2. Pentavalent vaccine.
- 3. Gnotobiotic animal.
- 4. Causative agent of white piedra.
- 5. Air sampling methods.
- 6. Chlamydospore.
- 7. Endothrix.
- 8. Paradoxical carrier.
- 9. Skirrow's medium.
- 10. Shell viral assay.
