





# MICROBIOLOGY HSSC-II

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

**NOTE:** Answer any thirteen parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

## SECTION – B (Marks 26)

**Q. 2** Answer any THIRTEEN parts. The answer to each part should not exceed 2 to 4 lines. ( 13 x 2 = 26 )

- (i) Describe the term tinea and its types.
- (ii) Draw brief life cycle of household fly.
- (iii) Draw, label and describe egg of *Schistosoma intercalatum*.
- (iv) Narrate the difference between direct and indirect life cycle of parasites with example.
- (v) Write preventive measures to control infection by *Entamoeba Histolytica*.
- (vi) Enlist the organisms for which dark field illumination is helpful.
- (vii) What general safety precautions are required to take while handling specimens possibly infected with parasites?
- (viii) Name the organism(s) causing chagas disease. What sample type is required for its diagnosis?
- (ix) How enterobiasis is diagnosed and what specimen is used?
- (x) What is the difference between cysts of *Entamoeba histolytica* and *Entamoeba coli*?
- (xi) Name the hook worms and their laboratory diagnosis.
- (xii) A stool specimen is processed through formal ether sedimentation concentration technique. After centrifugation draw and label the tube contents.
- (xiii) Narrate the difference between Host and Vector in life cycle of parasite with example.
- (xiv) Name the parasites as trophozoite, microfilaria or any other form, may observe in blood.
- (xv) Draw, label and describe egg of *Hymenolepis nana*.
- (xvi) Mosquito play role as vector in transmission of parasitic pathogens. Enlist name of pathogens.
- (xvii) What is difference between perfect and imperfect fungi?

## SECTION – C (Marks 14)

**Note:** Attempt any TWO questions. All questions carry equal marks. ( 2 x 7 = 14 )

**Q. 3** Classify fungi with examples. Describe briefly different techniques to identify fungi from clinical specimens.

**Q. 4** Describe the life cycle, pathogenicity and laboratory diagnosis of plasmodium species.

**Q. 5** Discuss the life cycle, pathogenicity and laboratory diagnosis of *Ascaris lumbricoides*.