



Roll No.

Answer Sheet No. \_\_\_\_\_

Sig. of Candidate. \_\_\_\_\_

Sig. of Invigilator. \_\_\_\_\_

## MICROBIOLOGY HSSC-II SECTION – A (Marks 10)

**Time allowed: 10 Minutes**

**NOTE:-** Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 10 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

**Q. 1** Circle the correct option i.e. A / B / C / D. Each part carries one mark.

- (i) Which of the following is directly related to the useful magnification of a microscope?
- A. Refractive index  
B. Resolving power  
C. Equivalent Focal Length  
D. Total magnification
- (ii) Which of the following is **NOT** a zoonotic infection?
- A. Balantidiasis  
B. Leishmaniasis  
C. Echinococcosis  
D. Taeniasis
- (iii) Which of the following exhibits indirect life cycle?
- A. Trichomonas  
B. Entamoebae  
C. Trypanozomes  
D. Giardia lamblia
- (iv) Which arthropod group serves as a vector for human parasites?
- A. Insects  
B. Crustaceans  
C. Arichnides  
D. Mites
- (v) Which of the following species causes malignant tertian malaria?
- A. P.vivex  
B. P.ovale  
C. P.falciparum  
D. P.malariae
- (vi) Which of the following groups contains flat leaf-like helminths?
- A. Cestodes  
B. Trematodes  
C. Nematodes  
D. Schistosomes
- (vii) What is the mode of reproduction in most of the pathogenic fungi?
- A. Cyst formation  
B. Spore formation  
C. Seed formation  
D. Ovum formation
- (viii) Which of the following helminth can exist freely for few generations?
- A. T.trichura  
B. S.mansoni  
C. Hookworm  
D. S.stercoralis
- (ix) What is the infective stage of malarial parasite to human?
- A. Trophozoite  
B. Merozoite  
C. Oocyst  
D. Sporozoite
- (x) What is the importance of common house fly in parasitology?
- A. It transmits the infective forms  
B. Serves as intermediate host  
C. Serves as vector  
D. Serves as definitive host

**For Examiner's use only:**

**Total Marks:**

**10**

**Marks Obtained:**

2010



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

- (i) What is Commensalism ?
- (ii) Define Numerical aperture of an objective.
- (iii) What is meant by Cutaneous Amoebiasis?
- (iv) Draw and label the infective stage of trichomonas vaginalis.
- (v) What is Xenodiagnosis?
- (vi) What is the difference between Infection and Disease?
- (vii) Enumerate four routes of Parasitic transmission to human.
- (viii) What is meant by Hermaphrodite? Name any two hermaphroditic helminths?
- (ix) Enumerate the types of asexual spores produced in fungi.
- (x) What is the difference between Oviparous and Viviparous parasite?
- (xi) Enumerate the morphological forms of haemoflagellates.
- (xii) Differentiate diagrammatically between the Fertilized and Unfertilized egg of *A. lumbricoides*.
- (xiii) What is the route for heart lung migration in human parasites?
- (xiv) Classify the fungi on morphological basis.
- (xv) Differentiate between Complete and Incomplete metamorphosis in insects.
- (xvi) What is meant by Autoinfection of parasites in human? Give two examples.
- (xvii) Why and when is the oil immersion used in microscopic studies of parasites?

### SECTION – C (Marks 14)

**Note:-** Attempt any TWO questions. All questions carry equal marks.

( 2 x 7 = 14 )

- Q. 3** Define Geohelminths. Explain the transmission, life cycle and pathogenicity of *Anchylostoma duodenale*.
- Q. 4** What is Mycosis? Explain the different types of mycosis with mode of transmission. Also give examples.
- Q. 5** Differentiate between Sporogony and Schizogony? Diagrammatically explain the schizogony of *Plasmodium falciparum*.