



SY-4572 Seat No. _____
Diploma in Medical Laboratory Technology
Examination
April / May – 2006
General Microbiology, Serology &
Histopathology : Paper – III

Time : 3 Hours]

[Total Marks : 100

- Instructions :** (1) Figures on **right** side indicate **full** marks.
(2) Draw neat and clean diagrams wherever necessary.
(3) Write section-I and section-II in **separate** answer-books.

SECTION – I

- 1** Write short notes on : (any **three**) **18**
(a) Different theories for Gram's staining
(b) Motility of bacteria
(c) Methods of isolating pure cultures
(d) Chemical disinfectants.
- 2** Write short notes on : (any **three**) **18**
(a) IMVIC test
(b) Serum widal test
(c) Elek's gel precipitation test
(d) Contribution of Robert Koch in field of microbiology.
- 3** Write answers in **2-3** sentences : **14**
(a) Differences between Prokaryotes and Eukaryotes.
(b) Name three techniques used for anaerobiosis.
(c) Sterilizing temperatures used in Inspissator.
(d) Common features of Enterobacteriaceae.
(e) Define transport media. Give two examples.
(f) Name three spore bearing bacteria.
(g) Significance of Agar-agar in laboratory media.

SECTION – II

- 1** Write short notes on : (any **three**) **18**
- (a) Laboratory diagnosis of typhoid fever
 - (b) Antibiotic sensitivity testing
 - (c) Universal safety precautions taken in microbiology laboratory
 - (d) Blood agar.
- 2** Write short notes on : (any **three**) **18**
- (a) Superficial mycoses
 - (b) Sharpening of microtome knife
 - (c) Fixation of tissue in biopsy specimen
 - (d) Describe procedure of H and E staining.
- 3** Write answers in **2-3** sentences : **14**
- (a) Name four bacteria causing diarrhoeal diseases.
 - (b) Name two decalcification methods used in histopathology.
 - (c) What is significant bacteriuria ?
 - (d) Enzymes and substrates used in ELISA tests.
 - (e) Name four special stains used in histopathology.
 - (f) Name four bacteria responsible for meningitis.
 - (g) Current schedule for immunization.
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