

# DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FIRST YEAR) EXAMINATION

#### COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

TIME: 3 Hours

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) Define Gender?
  - 2) What is meant by adverb?
  - 3) Define types of sentences?
  - 4) Define kinds of Adverbs?
  - 5) Define kinds of verbs?
  - 6) Define adjectives of number?
  - 7) Define kinds of countable Nouns?
  - 8) What is meant by weak verbs?
  - 9) Key board
  - 10) Enter
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) Language
  - 2) Active form
  - 3) Write the usage of Transformation?
  - 4) What is Hardware?
  - 5) Explain cut, copy and paste?
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Explain 'WH' type question words?
  - 2) Define common conjunctions
  - 3) Write a letter to the inspector of police about the theft of your bicycle
  - 4) Memory
  - 5) Explain 'find', 'replace' and 'go to'.
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Describe MS Windows
  - 2) Write the types of Charts in EXCEL.
  - 3) Introduction to Pagemaker? Explain
  - 4) Describe MS Windows

Marks: 100



## DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FIRST YEAR) EXAMINATION

CLINICAL BIO CHEMISTRY - I

Marks: 100

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) What are the properties of co-enzymes?
  - 2) Wavelength
  - 3) Explain Any two (a) Flasks (b) Beakers (c) Funnels (d) Cylinders
  - 4) Define Pipettes .Any two? (a)volumetric pipettes? (b)Graduated pipettes? (c)Blood pipettes? (d) Pasteur Pipettes?
  - 5) Components of colorimeter any two?
  - 6) Define photoelectric colorimeter light sources?
  - 7) Define the Universal Indicators?
  - 8) Define Blood Chemistry?
  - 9) Aqueous solutions
  - 10) Cholestrol
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) What is Hay's Test?
  - 2) Define Enzymes
  - 3) Fasting serum/plasma glucose
  - 4) Flame photometry
  - 5) Glucose Test
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Use and care of an Incubator?
  - 2) Procedure for water bath.
  - 3) Role of medical laboratory and its Integration into the health service.
  - 4) Cleaning Methods.
  - 5) Optical path in a photoelectric colorimeter and wavelength in nanometer
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Blood sugar level and its clinical significance.
  - 2) Write about solution and its Types
  - 3) Test for free and Total acid in G.J.
  - 4) Explain Ferricyanide method



Marks: 100

#### DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FIRST YEAR) EXAMINATION

CLINICAL MICRO BIOLOGY - I & PARASITOLOGY

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) Define Agglutination?
  - 2) Define epitope.
  - 3) Define Procaryotes & give example.
  - 4) Filtration
  - 5) Write about Heterotrophic organisms?
  - 6) What is pinocytosis?
  - 7) Write about spirilla
  - 8) Define Actinomycetes
  - 9) What is the composition of nutrient agar medium?
  - 10) What are the steps involved in preparation of Loeffler serum medium?
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) What is mucus?
  - 2) Write about yeasts fungi.
  - 3) Give example for Intestinal parasites.
  - 4) Define Parasitology
  - 5) Protozoa
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Loeffler serum slope
  - 2) Indole test? Explain.
  - 3) Write about Trophozoite
  - 4) Types of specimen received in laboratory
  - 5) Lab. Diagnosis of intestinal amoebiasis.
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Detailed notes on Immunoglobulin?
  - 2) Explain about Kingdom concept with diagram.
  - 3) Explain about nutrient agar medium and inoculation
  - 4) Explain in detail about gram staining method.



# DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FIRST YEAR) EXAMINATION

HAEMATOLOGY, BLOOD BANKING & HISTOPATHOLOGY - I

TIME: 3 Hours

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) Haematology?
  - 2) Capillary blood
  - 3) What is Antigen and give definition?
  - 4) What are the components of Leishman's stain
  - 5) What is cylology? Explain
  - 6) Write the use of potassium oxalate
  - 7) What is the reason for sickle cell Aneamia
  - 8) Write the principle of ESR test
  - 9) Describe Mayer's Egg albumin FIXAFIVE
  - 10) What is Anti-D Serum.
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) Write any 3 anticoagulants you know and explain.
  - 2) Schilling test
  - 3) PCV
  - 4) Leucocytes
  - 5) Prothrombin Time
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Write about the methods of Histopathology processing.
  - 2) What is Haemolytic Anaemia explain
  - 3) Which are the blood parasites.
  - 4) What are the functions of blood.
  - 5) Write the calculation of Leucocyte count.
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Explain the process of biopsy examination.
  - 2) Explain E.S.R with neat diagram.
  - 3) Explain the organization of a blood bank
  - 4) Describe the determination of hemoglobin.

Marks: 100



## DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FINAL YEAR) EXAMINATION

CLINICAL BIO CHEMISTRY - II

Marks: 100

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) Clinical biochemistry
  - 2) Define Enzymes
  - 3) PH
  - 4) Molecular weight
  - 5) Fasting serum/plasma glucose
  - 6) Aspartate transaminase
  - 7) What is tests to measure renal plasma flow(RPF)
  - 8) Difference between the Normal & abnormal consituents of urine?
  - 9) Define "polyuria"?
  - 10) Define "Anuria"?
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) Function of the kidney?
  - 2) Define Alkaptonuria?
  - 3) Fouchet's test
  - 4) VMA
  - 5) Rothera's test
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Preparation of patients for GTT
  - 2) Blood urea estimation
  - 3) Lipid profile
  - 4) What is the radioactive uptake studies?
  - 5) Types of enzyme?
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Describe the BCG method of Albumin estimation
  - 2) Explain about the methods of serum uric acid
  - 3) Estimation of uric acid?
  - 4) Define proteinuria. Write in detail about the Laboratory investigations done to diagnose proteinuria.



## DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FINAL YEAR) EXAMINATION

CLINICAL MICRO BIOLOGY - II

Marks: 100

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) Methylene blue
  - 2) Define Nutrient Agar.
  - 3) Define Nutrient Broth.
  - 4) Write about the limitations of Antibiotic sensitivity Test.
  - 5) Write about Bacillus anthracis
  - 6) Write about the size of virus.
  - 7) Write about IgM
  - 8) Write about IgD
  - 9) What is VDRL?
  - 10) What is specimen?
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) Cocci
  - 2) Medical Microbiology
  - 3) Negative stain
  - 4) KOH mount
  - 5) Decolorisation
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Bacteria
  - 2) VDRL test
  - 3) C- reactive protein test
  - 4) Antibiotic sensitivity test
  - 5) Explain bile solubility test.
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Write about the structure & Growth of fungi.
  - 2) Write about fungal toxins & Allergy.
  - 3) Write about replication of virus.
  - 4) Write about Immunoglobulins and its structure.



Marks: 100

## DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY TWO YEARS (FINAL YEAR) EXAMINATION

HAEMATOLOGY, BLOOD BANKING & HISTOPATHOLOGY - II

- I. SHORT ANSWER QUESTIONS: (10X2 = 20)
  - 1) Blood transfusion
  - 2) Fixatives
  - 3) Coagulation time
  - 4) Define blood transfusion?
  - 5) The reason for Haemophilia in blood.
  - 6) Write about Erythropoeisis
  - 7) Give full definition for CSF
  - 8) What is CML.
  - 9) Write the function of liver.
  - 10) What is DPX. Explain.
- 2. WRITE SHORT NOTES ON: (5X3 = 15)
  - 1) ABO grouping
  - 2) How will you separate the serum
  - 3) Histopathology
  - 4) ICT
  - 5) Fresh Frozen plasma.
- 3. WRITE SHORT NOTES ON: (5X5 = 25)
  - 1) Define the Donar's secreening?
  - 2) Draw the picture of normal sperm.
  - 3) Write short note about klima's needle.
  - 4) How can you maintain musedms specimen.
  - 5) Explain the methods of B.T. and C.T
- 4. ESSAY QUESTIONS: (4X10 = 40)
  - 1) Explain histopathology techniques
  - 2) Describe blood coagulation factors.
  - 3) What is Anaemia and how will you diagnose in a lab?
  - 4) Describe about different Blood groups & Explain the methods of detecting Blood groups in a Clinical Laboratory