COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021 Diploma in Medical Lab Technician Course (DMLT)

PAPER I

Exam date-14/12/2021

- 1. What is meant by Decalcification? How do you decalcify a bony bit?
- 2. Explain the procedure for staining tissue sections by H & E stain?
- 3. Explain honing and stroping in sharpening of Microtome knives.
- 4. What is the procedure to fix museum specimens?
- 5. What are the reagents used in PAP stain? How is it done?
- 6. What is the procedure for Perl's stain?
- 7. Write in detail about CSF cell count?
- 8. How is urine sugar estimated?
- 9. What is CBP, how is peripheral smear prepared and stained?
- 10. What is Blood grouping, what are transfusion reactions?
- 11. Explain blood sample collection by vaccutainer method.
- 12. Write in detail about segregation and disposal of biohazard waste materials with color codes.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN MEDICAL IMAGING TECHNICIAN COURSE PAPER I

Dark Room & Radiographic Techniques

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. Describe construction of darkroom?
- 2. Write in detail about grids and their uses.
- 3. Write in detail about patient preparing and the procedure of IVU.
- 4. Micturating cystourethrography?
- 5. Write in detail about direct and indirect digital radiography?
- 6. Write about a) focal spot b) intensifying screens.
- 7. Describe the technique of a) Axial view of shoulder b) skyline view of patella.
 - 8. Draw a labelled diagram of small and large intestine and describe procedure of BMFT.
- 9. Describe various measures taken for radiation protection?
- 10. What are KVP and MAS? How do these factors affect image quality and exposure?
- 11. Write about production and properties of x-rays. Draw a labelled diagram of modern x-ray tube
- 12. Draw a neat labelled diagram of kidneys, ureters and urinary bladder?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021 DIPLOMA IN OPHTHALMIC ASSISTANT COURSE

PAPER I

Anatomy, Physiology

Exam date-14/12/2021

- 1. What are the layers of Tear Film and its functions & Diagram?
- 2. Write about Aqueous Humor & its pathway with diagram.
- 3. Give examinations a) Face b) Ocular adnexa
- 4. Describe the anatomy of Eye lid and its functions?
- 5. Diagram of Visual pathway & describe its field reflect at various level?
- 6. Write briefly about retinal function test.
- 7. Write about extra ocular muscles & their action.
- 8. What are the indications of laser?
- 9. What briefly about a) Occlation therapy & b) penalization?
- 10. Describe the anatomy of orbit & its contents?
- 11. Write anatomy of Retina?
- 12. Write briefly about a) colour blindness b) night blindness

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN DIALYSIS TECHNICIAN COURSE PAPER I

Anatomy, Physiology, Infections & Communicable Diseases

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. Anatomy of Kidney.
- 2. Functions of Kidney.
- 3. Universal precautions in dialyis unit.
- 4. Management of Hepatitis B in dialysis unit?
- 5. Causes of AKI?
- 6. Diet treatment of CKD.
- 7. Hemodialysis machine diagram with labeling.
- 8. Dialysis for COVID positive patient.
- 9. Heparin anticoagulation?
- 10. Air embolism in dialysis patient and management?
- 11. Blood leak during dialysis and management.
- 12. Precautions to prevent blood borne infections in dialysis unit.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN RESPIRATORY THERAPY TECHNICIAN COURSE PAPER I

Cardio Pulmonary Anatomy, Physiology & Medical Terminology

Exam date-14/12/2021

- 1. Write notes on humoral neutral control of respiration?
- 2. Draw a neat diagram of intercoastal space. Write in detail about thoracocentesis?
- 3. Write about muscle of inspiration and expiration. What is paradoxical breathing?
- 4. Write about various lung volumes and capacities?
- 5. What are various methods of sterilization? How do you apply it in ICU?
- 6. Describe the following terms: A) Hypoglycemia B) Hypercarbia C) Pulmonary edema D) Hypovolemic shock?
- 7. Mechanism of cough. What are the various causes of cough?
- 8. Describe Oxygen Dissociation curve?
- 9. Describe mediastinum. Mention contents and applied anatomy.
- 10. What is respiratory acidosis? Its causes and management?
- 11. Write about computer aided diagnosis in RICU.
- 12. Describe Bronchopulmonary segments and label diagrams with applied anatomy and clinical importance.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN MEDICAL STERILZATION MANAGEMENT AND OPERATION THEATRE TECHNICIAN COURSE PAPER I

Anatomy, Physiology, Pathology, Microbiology, Definitions & Terminologies

Exam date-14/12/2021

- 1. What are the duties & responsibilities of Operation Theatre Technician?
- 2. Write in detail about designing of Operation theatre.
- 3. Explain about Central Sterilization department?
- 4. Write about Universal precautions?
- 5. What is Sterilization? What are different methods?
- 6. How do you monitor the ICU Post-operative patient?
- 7. What is CPR? And recent guidelines?
- 8. Indications for blood transfusion & complications?
- 9. Write in detail about Circulatory system & its importance?
- 10. Explain the physiology of Respiratory system?
- 11. Write about Hbs Ag & precautions you take while handling the HBV infected patient?
- 12. Precautionary measures for COVID-19 or corona virus?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN PERFUSION TECHNICIAN COURSE PAPER I

Anatomy, Physiology & Basics of Diagnostic Techniques **Exam date-14/12/2021**

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. Draw a neat diagram of the heart, label and discuss the function of each part.
- 2. With a neat diagram discuss the anatomy of coronary artery and its circulation.
- 3. What is conduction system? Explain the role it plays in the normal functioning of the heart.
- 4. Draw a cut section of kidney and label it. How is urine formed?
- 5. Where is the heart situated in the body? With a neat diagram discuss the external frontal aspect of the heart.
- 6. What is ventilation? Describe mechanism of respiration?
- 7. Write about various types of blood groups. What is Rh factor and its importance. How will you cross match the blood for open heart surgery procedures.
- 8. Define Blood clot. Write about the intrinsic and extrinsic mechanism of clot formation.
- 9. Discuss the normal electrocardiograph.
- 10. Discuss flow-pressure-resistance. What is Laminar flow?
- 11. What do you mean by oxygen capacity, oxygen saturation and oxygen content in the blood? Discuss.
- 12. What is cardiac catheterization and its role in diagnosing cardiac diseases? Explain.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN OPTOMETRY TECHNICIAN COURSE

<u>PAPER I</u>

Anatomy & Physiology, Pathology, Pharmacology Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. Draw the diagram of eye & mark the parts? Write in details about function of eye.
- 2. Explain in detail about the visual acuity.
- 3. Explain the anatomy of lens with diagram.
- 4. Name the Extra-Ocular Muscles and their actions with diagram.
- 5. Discuss the Anatomy of Eyelids and Eyebrows.
- 6. Explain about various color vision.
- 7. Describe about 1) pinwhole test 2) Autorefractometer 3) Interpupillary distances 4) Lensometer?
- 8. What is NCPB what are the functions in control of blindness rate?
- 9. Explain in detail about the different types of pupillary reactions.
- 10. Write anatomy of retina.
- 11. Explain in detail about the Anatomy and Physiology of aqueous humor.
- 12. Define cornea explain the layers with diagram.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN RADIOTHERAPY TECHNICIAN COURSE PAPER I

Anatomy, Physiology, Pathology & Sources of Infections

Exam date-14/12/2021

- 1. Draw the diagram of a cell and label its parts? Explain about different types of cell division in detail?
- 2. What are the components of blood? Explain in detail about properties and functions of blood?
- 3. What is tissue? Explain in detail about different types of tissues?
- 4. Draw a neat and labeled diagram of the respiratory system? Explain in detail about the mechanism of respiration?
- 5. Write about different sources of infection?
- 6. Define inflammation? What are the different types of inflammation? What are the signs of inflammation?
- 7. Draw the diagram of skin and label its parts? Write about its functions?
- 8. Name all the endocrine glands in the body? Write about anatomy and functions of thyroid gland with the diagram?
- 9. Write short notes on biopsy and different types of biopsies?
- 10. Describe the structure of the heart with a diagram and write about its functions?
- 11. Define tumors? How do you differentiate between benign and Malignant tumors?
- 12. Draw and label the diagram of neuron? Write about various parts of the Central and peripheral nervous system.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021 DIPLOMA IN RADIOGRAPHIC ASSISTANT COURSE

PAPER I

Radiation Hazards, Protection & Preventive Measures

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. What are the radiation protection measures to be taken in Radiology Department?
- 2. Describe about darkroom construction.
- 3. Write about a) TLD Badge b) Lead apron.
- 4. Various positions for chest X-Ray and their importance.
- 5. Write about grids and their uses.
- 6. Draw neat labeled diagram of X-ray tube.
- 7. Discuss about CR. What are the advantages of CR over conventional radiography.
- 8. What are hangers and different types of hangers?
- 9. What is Hysterosalpingogram?
- 10. Discuss about Barium swallow.
- 11. Discuss about mammography technique and uses.
- 12. Write about a) Towne's view b) X-Ray CV junction.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN CARDIOLOGY TECHNICIAN COURSE PAPER I

Clinical Cardiology & Congenial Heart Diseases

Exam date-14/12/2021

Time: 3hrs. Total Marks: 80 Answer any **TEN (10)** Questions only Each Question carries 8 marks

Write short notes on:

- 1. Pulse Rate.
- 2. Diastolic Blood Pressure.
- 3. First Heart Sound.
- 4. Pedal Edema.
- 5. Atrial septal defect.
- 6. Pulmonary veins.
- 7. Interventricular septum.
- 8. Aortic Valve.
- 9. Systolic murmur.
- 10. Tachycardia.
- 11. Pericardium.
- 12. Coronary sinus.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN CATHLAB TECHNICIAN COURSE PAPER I

Cardiac Catheterization & Cardiac Physiology

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- **1.** Describe about the various catheters used in coronary angiography.
- **2.** Describe about the preparation of patient and procedure of coronary angiography.
- **3.** Describe about the contrast agents used in Cath lab.
- **4.** Write in detail about prevention of contrast induced kidney injury.
- **5.** Describe about the coronary anatomy of the heart.
- **6.** Describe about the coronary sinus and venous drainage of the heart.
- **7.** Describe about the measures of radiation safety in Cath lab.
- **8.** Describe about cardiopulmonary resuscitation (CPR).
- **9.** Describe about the various angiographic views used during cardiac procedures in Cath lab.
- **10.** Describe about the various stents used for coronary artery disease.
- **11.** Preparation of patient for peripheral angiography. Image acquisition techniques in peripheral angiography.
- 12. Management of anaphylaxis in Cath lab.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021 DIPLOMA IN ECG TECHNICIAN COURSE

PAPER I

Electro Physiology, Operation & Maintenance of ECG Machines

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. Write a note on Wilson central terminal.
- 2. Write a note on Rhythm strip.
- 3. Write a note on Standardization.
- 4. Write a note on ECG Jelly.
- 5. Write a note on Precautions while recording ECG on a female patient.
- 6. Write a note on Holter monitoring.
- 7. Write a note on Posterior leads.
- 8. Write a note on ECG machine cleaning.
- 9. Write a note on Left Ventricle.
- 10. Write a note on Heart rate.
- 11. Write a note on LBBB.
- 12. Write a note on Angina.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN ANESTHESIA TECHNICIAN COURSE PAPER I

Anesthesiology, types of Anesthesia

Exam date-14/12/2021

- 1. What is general anaesthesia? What are the various drugs administered during G A.
- 2. Write briefly about immediate and delayed complications of Apinal Anaesthesia.
- 3. Write about various types of Regional Anaesthesia methods briefly.
- 4. Write in detail about Anaesthesia Technician duties?
- 5. Write about methods of Sterilization?
- 6. Describe in detail about Autoclaving?
- 7. Write in detail about Anatomy & Physiology of Resporatory system?
- 8. Write about Anaesthesia Machine briefly.
- 9. Write in detail about Laryngoscope & its parts with diagrams?
- 10. Write about rapid sequence induction, intubation & indications.
- 11. Describe in detail about Endotracheal tubes?
- 12. Write about Preoperative assessment.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN AUDIOMETRY TECHNICIAN COURSE PAPER I

Anatomy of Human Ear

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. What is the procedure in Audiometry testing?
- 2. Describe about Outer Ear Structure.
- 3. Describe about Inner Ear Structure.
- 4. What is mean by decibel and Describe about Audiometer?
- 5. What are the types of earphones which is the most referable type?
- 6. Explain in detail about the Auditory pathway.
- 7. Explain in detail about Auditory nerve.
- 8. Describe Cochlear with neat diagram.
- 9. Explain about Pinna and how is works in hearing.
- 10. Explain in detail about Tympanic Membrane with Diagram.
- 11. Explain in detail about Tympanic Membrane.
- 12. Explain in detail about the Audiotory Central Nervous System.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN DENTAL TECHNICIAN COURSE PAPER I

Dental Mechanics

Exam date-14/12/2021

Time: 3hrs.

Answer any **TEN (10)** Questions only

Each Question carries 8 marks

- 1. What is relining and rebasing. Explain the iindications and contraindications of the same?
- 2. Describe Anchorage. Explain Baker's Anchorage in detail.
- 3. Define and describe in detail about soldering and welding?
- 4. Explain the procedure to repair broken debenture.
- 5. Describe in detail about different components of Hawley's appliance and its fabrication.
- 6. Define various classifications of partially Edentulous ridges. Explain Kennedy's classification of partial dentures.
- 7. Discuss in detail about the classification of springs and boxing of springs.
- 8. Describe various methods of fabrications of wax patterns for small casting.
- 9. Classify casting defects Explain in detail about porosity.
- 10. Give a detailed description of Canine Retractors?
- 11. Discuss in detail the principles of teeth setting for maxillary and mandibular complete dentures.
- 12. Explain in detail about fabrication of Twin Block Appliance.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN EMERGENCY PARAMEDIC COURSE PAPER I

Anatomy, Physiology, Pathology, Microbiology, definition & terminologies, BLS/ACLS

Exam date-14/12/2021

- Write about brachial plexus, formation, branches, clinical imporatance?
- 2. Anatomy of mammary gland, relations, branches, clinical importance?
- 3. Liver function tests?
- 4. Blood transfusion and reactions following (complications)?
- 5. Coagulation of blood?
- 6. What is shock? Types of shock, elaborate about pathogenesis of hypovolemic shock and management
- 7. Define hypoxia types of hypoxia complications O2 therapy?
- 8. Describe bronchopulmonary segments under
- a) General features b) Applied amatomy.
- 9. Describe knee joint under-type of joint
- a) Ligaments b) Muscles attached c) Applied anatomy?
- 10. Contents of femoral triangle and applied aspects?
- 11. Anatomy of para nasal air sinuses.
- 12. Define arterial blood pressure. Give its value in normal adult. Describe how it is regulated?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN DARKROOM ASSISTANT COURSE PAPER I

Radiation Hazards, Protection & Preventive Measures

Exam date-14/12/2021

Time: 3hrs.
Answer any **TEN (10)** Questions only

- 1. Explain in detail about various Radiation Hazards and preventive measures for protection from radiation.
- 2. Draw neat and labelled diagram of X-ray tibe.
- 3. Write short notes on a) X-ray eect abdomen b) Water's view.
- 4. Write about the difference between conventional radiography and digital radiography?
- 5. Write short notes on a) Anode heel effect B) Grids.
- 6. Explain in detail about the structure of Dark Room with diagram?
- 7. Write brief notes on devices used for radiation protection.
- 8. Write about TLD badge.
- 9. Write about x-ray artefacts.
- 10. Explain in detail about retrograde urethrogram.
- 11. Briefly explain about mobile X-ray units.
- 12. Explain in detail about the role of radiographic assistant.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN MPHA (MALE) COURSE PAPER I

Health Problems

Exam date-14/12/2021

Time: 3hrs.

Answer any **TEN (10)** Questions only

Total Marks: 80 Each Question carries 8 marks

- 1. Define Diarrhoea, Classify Diarrhea dehydration add a note on how to prepare ORS(2+3+3)?
- 2. Write about Universal Immunization program?
- 3. Discuss about pulse polio program?
- 4. Role of MPHA in preventing Tuberculosis?
- 5. What are the different types of cancers and what are their symptoms.
- 7. What are the symptoms of severe pneumonia and how to prevent it?
- 8. Write about importance of spraying operations?
- 9. Role of MPHA in providing safe drinking water to the community?
- 10. First aid given to a burns victim?
- 11. Role of MPHA during an epidemic outbreak?
- 12. Role of MPHA in maintaining environmental sanitation?

6. Define Pandemic! Add a note on COVID-19. Role of MPHA in Preventing COVID-19.