# COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025 DIPLOMA IN MEDICAL LAB TECHNICIAN COURSE PAPER - I

#### Pathology & Blood Banking

Exam Date: 14.07.2025

Time: 3hrs. Total Marks:80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Enumerate the different components of blood and their storage in blood bank.
- 2. Describe in detail about Leishman staining Procedure of Peripheral smear.
- 3. Describe in detail about steps of Tissue processing.
- 4. Classify Anemias & write a note on Hemolytic anemia.
- 5. Define cross matching. Types of cross matching.
- 6. Write about various methods of urine collection and preservatives used for storage of urine.
- 7. Draw figure of improved Neubauer chamber. Write Procedure to Count WBC.
- 8. What is the procedure to fix museum specimens?
- 9. What is FNAC? What are the different fixatives used in cytology?
- 10. Write the methods for estimation of Hemoglobin and its significance.
- 11. Describe about semen collection and procedure of semen analysis.
- 12. Write in detail about biomedical waste management.

# COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - July, 2025 DIPLOMA IN OPTHALMIC ASSISTANT COURSE PAPER - I

Anatomy & Physiology

Exam Date: 14.07.2025

Time: 3hrs. Total Marks:80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Explain Anatomy of Cornea with a diagram.
- 2. Explain Anatomy of Lens with embryology.
- 3. Discuss Theories of Accommodation.
- 4. Write about Anatomy of 3<sup>rd</sup> Cranial Nerve with neat diagram.
- 5. Discuss
  - a) Occlusion Therapy
  - b) Penalisation.
- 6. Write application of LASERS.
- 7. Discuss Tonometry.
- 8. Write about Bloody supply of Optic Nerve Head.
- 9. Write about Anatomy of Iris and Ciliary body with Bloody supply.
- 10. Discuss Binocular single vision and various tests.
- 11. Describe Visual pathway anatomy.
- 12. Discuss aqueous humour dynamics.

# COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025 DIPLOMA IN OPTOMETRY TECHNICIAN COURSE PAPER - I

Anatomy & Physiology, Pathology, Pharmacology

Exam Date: 14.07.2025

Time: 3hrs. Total Marks:80

Answer any **TEN** Questions All Questions carry equal marks

- 1. Explain Anatomy of EOM and various laws of EOM.
- 2. Enumerate layers of Cornea with diagram.
- 3. Write about Development of Lens with diagram.
- 4. Write about Anatomy of Eyelids with diagram.
- 5. Discuss Metabolism of Lens and cataractogenesis.
- 6. Write in detail theories of colour vision and testing of colour vision.
- 7. Explain about theories of accommodation.
- 8. Discuss Corneal transparency.
- 9. Role of Various dyes used in Ophthalmology.
- 10. Discuss Sturms Conoid.
- 11. Discuss Steriopsis and various test.
- 12. Discuss Optic Nerve functions and course.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025** DIPLOMA IN DIALYSIS TECHNICIAN COURSE

#### PAPER - I

Anatomy, Physiology, Infections & Communicable Diseases

Exam Date: 14.07.2025

Time: 3hrs. Answer any **TEN** Questions Total Marks: 80

All Questions carry equal marks

- 1. Describe the anatomy of Kidney.
- 2. Describe the excretory and hormonal functions of the kidney.
- 3. Discuss the blood supply of the kidney.
- 4. How do you measure blood pressure in a patient?
- 5. What do you mean by universal precautions?
- 6. Explain the various steps of hand washing.
- 7. What is the difference between AKI and CKD?
- 8. How do you give heparin in dialysis in a patient with high risk of bleeding?
- 9. What do you know about deceased donor program in Telangana (Jeevandan)?
- 10. Draw a Hemodialysis machine and label all its parts.
- 11. What vaccines are recommended for patients on dialysis?
- 12. How do you clean the machine after dialysis?

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

### DIPLOMA IN RESPIRATORY THERAPY TECHNICIAN COURSE PAPER - I

Cardio Pulmonary Anatomy, Physiology & Medical Terminology

Exam Date: 14.07.2025

Time: 3hrs.

Total Marks: 80

Answer any **TEN** Questions All Questions carry equal marks

- 1. Describe the types of respiration and their clinical significance.
- 2. Describe causes for bronchial breath sounds and its clinical significance.
- 3. Write about Spirometry.
- 4. Write about Anatomy and physiology of Diaphragm.
- 5. Write in detail about cardio pulmonary anatomy.
- 6. Write in detail about COPD and its management.
- 7. Write about various lung volumes and capacities.
- 8. Describe mediastinum. Mention its contents and applied anatomy.
- 9. Explain in detail about pleura and its functions.
- 10. Write notes on pulmonary circulation.
- 11. Explain in detail about pleural pressure.
- 12. Write notes on Stridor, Wheeze and Rhonchus.

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#### COMBINED PARAMEDICAL (Supplementary) EXAMINATIONS - July, 2025

# **DIPLOMA IN AUDIOMETRY TECHNICIAN COURSE**

Anatomy of the Human Ear

Exam Date: 14.07.2025

Time: 3hrs Total Marks:80 All Questions carry equal marks

Answer any **TEN** Questions

- 1. Explain details about the auditory pathway.
- 2. Describe the middle ear with neat diagram.
- 3. Which is the most important structure in hearing and how it works?
- 4. What are most using headphones during audiometry?
- 5. Explain in detail about Tympanic Membrane.
- 6. Describe about outer ear structures with diagram.
- 7. What are the bones in middle ear and how it works in hearing?
- 8. What are semi circular canals in inner ear and role in hearing?
- 9. Explain in detail about Auditory nerve.
- 10. What is the procedure in Audiometry testing?
- 11. What is mean by decibel? And describe about audiometer.
- 12. What are different types of headphones? What is the importance of headphones during audiometry?

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

#### DIPLOMA IN EMERGENCY PARAMEDIC TECHNICIAN COURSE PAPER - I

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

Exam Date: 14.07.2025

Time: 3hrs. Total Marks:80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Write about anatomy of the mammary gland, its relations, branches, and clinical importance.
- 2. Explain liver function tests.
- 3. Describe bronchopulmonary segments under general features and applied anatomy.
- 4. Explain coagulation of blood.
- 5. Describe the contents of the femoral triangle and its applied aspects.
- 6. Define arterial blood pressure and describe the methods of measuring it.
- 7. Write notes on
  - a) Universal safety measures
  - b) Personal Protective equipment (PPE).
- 8. Discuss about oxygen delivery devices and complications of oxygen therapy.
- 9. Discuss lung volumes and capacities in detail.
- 10. Write detailed notes on liver function tests.
- 11. Discuss the steps in Advanced Cardiac Life Support (ACLS).
- 12. Discuss blood transfusion and reactions (complications).

# COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025 DIPLOMA IN MEDICAL IMAGIOLOGY TECHNICIAN COURSE

#### PAPER - I

#### Dark Room & Radiographic Techniques

Exam Date: 14.07.2025

Time: 3hrs.
Answer any **TEN** Questions

Total Marks:80 All Questions carry equal marks

- 1. Construction of darkroom-dry and wet bench.
- 2. Technique and views in mammography.
- 3. A) Skyline view of patella
  - B) Axial View of Shoulder.
- 4. Construction and use of Grids.
- 5. Image formation in computed radiography (CR).
- 6. Construction of cassette in film screen radiography.
- 7. Direct Digital radiography.
- 8. Retrograde urethrography.
- 9. A) X-Ray of hand
  - B) X-Ray of cervical spine.
- 10. Bedside radiography of chest.
- 11. Intervenous urography.
- 12. Hysterosalpingography.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

### DIPLOMA IN MEDICAL STERILIZATION MANAGEMENT AND OPERATION THEATRE TECHNICIAN COURSE

#### PAPER - I

Anatomy, Physiology, Pathology, Microbiology, Definitions & Terminologies

Exam Date: 14.07.2025

Time: 3hrs.

Total Marks:80

Answer any **TEN** Questions

All Questions carry equal marks

- 1. Describe the structure and function of the Respiratory system with a neat labeled diagram.
- 2. List the parts of the central nervous system (Brain) and their function.
- 3. What is Blood grouping and typing? What is the role of red blood cells and white blood cells in the body?
- 4. Define sterilization. List any two methods and explain one in detail.
- 5. What is a sepsis? How is it maintained in the operation theatre?
- 6. What is meant by nosocomial infection? How can it be prevented?
- 7. What is the meaning of universal precautions in infection control? List any two examples.
- 8. Describe the biomedical waste management. Include classification, color coding.
- 9. What is the difference between sterilization and Disinfection? Give two examples of each.
- 10. What are the functions of the liver? Write about the liver function tests.
- 11. What is hand hygiene? Write about steps and chemicals used in the hand washing.
- 12. Explain the steps in cleaning and disinfecting surgical instruments.

# COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025 DIPLOMA IN RADIOTHERAPY TECHNICIAN COURSE

#### PAPER - I

Anatomy, Physiology, Pathology & Sources of Infection

Exam Date: 14.07.2025

Time: 3hrs.

Total Marks:80

Answer any **TEN** Questions

All Questions carry equal marks

- 1. Write about CELL CYCLE. Mention the most Radioresistant and most Radiosensitive phase of the cell cycle.
- 2. Write in detail about Respiratory system.
- 3. Define tumor. How do you differentiate between benign and Malignant tumors.
- 4. Draw the diagram of skin and label its parts. Write about its functions.
- 5. Write about function of kidney with a diagram of excretory system.
- 6. Write about different sources of infection.
- 7. Write about different types of Biopsy.
- 8. Describe TNM classifications.
- 9. Explain about Hormones and their functions.
- 10. Explain in detail about female reproductive system.
- 11. Write about different parts of Oropharynx and larynx and its functions.
- 12. Explain about Bones, Joints, and Locomotor System.

# COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025 DIPLOMA IN DENTAL TECHNICIAN COURSE

### PAPER - I Dental Mechanics

Exam Date: 14.07.2025

Time: 3hrs. Total Marks:80
Answer any **TEN** Questions All Questions carry equal marks

1. Classify casting defects. Explain porosity in detail.

- 2. What is a Twin Block Appliance? Discuss in detail the fabrication of Twin Block Appliance.
- 3. Discuss the steps in processing of waxed maxillary and mandibular complete dentures by compression molding technique.
- 4. Discuss various methods of fabrication of wax patterns for small castings.
- 5. Mention different materials used in fabrication of special trays and discuss steps in fabrication of maxillary and mandibular special tray.
- 6. Define spacer. Write about different types and functions of a spacer.
- 7. Define Surveyor and its procedure in surveying.
- 8. Classify casting defects and explain about porosity.
- 9. Define Articulator and give its classification and uses.
- 10. How to use shade guide in ceramic work dental laboratory?
- 11. What is Trial denture base and write in detail about the materials and procedures for preparing trial denture base.
- 12. What is Ratainer? Write in detail about direct retainers.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

# DIPLOMA IN DENTAL HYGIENIST TECHNICIAN COURSE PAPER - I

Oral and Dental Anatomy, Applied Physics Chemistry

Date: 14,07.2025

Time: 3hrs Total Marks: 80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Write dental formula of primary and permanent teeth, functions of teeth. Differences between primary and permanent teeth.
- 2. Write in detail about Tooth numbering systems.
- 3. Enumerate stages of tooth development and Discuss about Cap Stage.
- 4. Describe the articular surfaces, Ligaments, Nerve supply, Relations and movements of TMJ.
- 5. What is oral mucosa membrane? Classify OMM and describe histology of keratinized mucosa.
- 6. Describe the principal fibers of PDL.
- 7. What is deglutition and stages of deglutition?
- 8. Write in detail about muscles of mastication.
- 9. Morphology of maxillary central incisor and canine.
- 10. Write chronology of permanent dentition.
- 11. Discuss theories of tooth eruption.
- 12. Describe anatomy of tongue including its blood supply and Nerve supply.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

# DIPLOMA IN RADIOGRAPHIC ASSISTANT COURSE PAPER - I

Radiation hazards, Protection & Preventive Measures

Exam Date: 14.07.2025

Time: 3hrs.

Total Marks:80

Answer any **TEN** Questions All Questions carry equal marks

- 1. What is a) Roentgen b) Rad c) Seivert- Describe any two.
- 2. Inverse square law in radiation protection.
- 3. TLD badge.
- 4. Mention any 5 measures for radiation protection in your department.
- 5. Stochastic and non stochastic effects of radiation.
- 6. Radiation protection during fluoroscopy.
- 7. a) Filters b) Collimators.
- 8. ALARA principle and its application.
- 9. Construction of modern xray tube.
- 10. Procedure and films taken in MCUG.
- 11. Hysterosalpingogram.
- 12. Mention any 5 properties of X-rays.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

# DIPLOMA IN CARDIOLOGY TECHNICIAN COURSE PAPER - I

Clinical Cardiology & Congenial Heart Diseases

Exam Date: 14.07.2025

Time: 3hrs. Total Marks: 80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Write about cyanosis.
- 2. Explain in detail pericardial effusion/ pericardiocentesis.
- 3. Explain in detail about Acute Rheumatic fever.
- 4. Write the difference between Bradycardia & Tachycardia.
- 5. Write about cardiac cycle.
- 6. Explain in detail about common warning signs of heart diseases & treatment.
- 7. Write an essay on congenital heart diseases.
- 8. Write an essay on cardiac arrest and management.
- 9. Diagnosis of HTN & management.
- 10. Describe the symptoms & ECG findings, management of acute MI.
- 11. Write an essay on heart failure complications & management.
- 12. What is patent ductus arteriosus (PDA)? Describe its symptoms, complications & management.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

#### DIPLOMA IN CATH LAB TECHNICIAN COURSE PAPER - I

Cardiac Catheterization & Cardiac Physiology

Exam Date: 14.07.2025

Time: 3hrs. Total Marks: 80

Answer any **TEN** Questions All Questions carry equal marks

- 1. Describe the anatomy and conduction system of the heart.
- 2. Mention the cardiac procedures done in the cath lab.
- 3. Describe the emergency drugs used in cath lab.
- 4. What are the different angiographic views during angiography?
- 5. Describe the preparation of the patient for peripheral angiography.
- 6. Describe the different balloons used in coronary interventions.
- 7. Describe the procedure of percutaneous balloons mitral valvotomy.
- 8. Describe the procedure of pericardiocentesis.
- Describe the pressure waves and the equipment required for recording pressure waves. Mention what is dampening and ventricularization.
- 10. Describe the contrasts used in the cath lab and the adverse effects. How do you manage anaphylaxis?
- 11. Counselling of the patient before cardiac procedures.
- 12. Mention different measures to reduce radiation cath lab.

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

# DIPLOMA IN ECG TECHNICIAN COURSE PAPER - I

Electro Physiology, Operation & Maintenance of ECG Machines

Exam Date: 14.07.2025

Time: 3hrs.
Answer any **TEN** Questions

Total Marks: 80 All Questions carry equal marks

- 1. Write a note on ECG jelly.
- 2. Write a note on ECG machine cleaning.
- 3. Write a note on heart rate.
- 4. Write notes on 12 lead ECG.
- 5. Write short note an ST segment and what does it's elevation or depression suggest on ECG?
- 6. Write a note on Einthoven's triangle.
- 7. Describe the normal intervals in ECG.
- 8. What is standardization, various standardization defects?
- 9. Write notes on posterior lead.
- 10. Write a short note on Holter monitoring.
- 11. Describe role of ECG technician in ICCU.
- 12. What is the electrophysiology study (EPS) and how does it differ from standard ECG?

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

#### DIPLOMA IN ANAESTHESIA TECHNICIAN COURSE PAPER - I

Anesthesiology, types of Anesthesia

Exam Date: 14.07.2025

Time: 3hrs. Total Marks: 80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Write in detail about the 10 golden rules of Anaesthesia.
- 2. Write about the monitoring during Anaesthesia.
- 3. What is blood grouping and typing? Write the complications of blood transfusion.
- 4. Write in detail about the anatomy and physiology of the respiratory system?
- 5. Write about HBSAg? And precautions to be taken while handling HBSAg infected patient.
- 6. Write about spinal and epidural needles.
- 7. Explain in detail about the precautionary measures to be taken to prevent spread corona virus or COVID 19 infection.
- 8. What is chemical disinfection? Write in detail about any two agents used for chemical disinfection.
- 9. Write in detail about safety features of anesthesia work station.
- 10. What is endotracheal intubation? How do you assist anaesthetists during intubation?
- 11. How to prevent fire hazards in operation theatre?
- 12. What is spinal anaesthesia? How do you arrange a trolley during spinal anaesthesia?

#### **COMBINED PARAMEDICAL (SUPPLEMENTARY) EXAMINATIONS - JULY, 2025**

# DIPLOMA IN MULTIPURPOSE HEALTH ASSISTANT (MALE) COURSE PAPER - I

#### Health Problems

Exam Date: 14.07.2025

Time: 3hrs. Total Marks: 80
Answer any **TEN** Questions All Questions carry equal marks

- 1. Enumerate the universal immunization programmein detail.
- 2. What is first aid and write in detail the aim, objectives and precautions followed in delivering first aid?
- 3. Prevention of cancers in the community.
- 4. What are the controls measures to be taken for communicable diseases?
- 5. What are the most common sexually transmitted diseases and explain any one disease in detail,
- 6. What are the hazards of radiation and the control measures?
- 7. What are the vitamin A rich foods?
- 8. BCG protects against which disease? Write the government initiatives taken for the disease.
- 9. 37 cases of diarrhea and vomiting have been registered during the recent pushkaralu. How do you manage?
- 10.ORS composition.
- 11. Draw a neat flowchart for bio-medical waste management.
- 12. Enumerate the most common human disabilities.