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

PAPER II

Ultra Sonography & Color Doppler

Exam date-15/12/2021

- 1. What is ultrasound? Write about piezoelectric effect.
- 2. Write about different types of ultrasound probes in routine use.
- 3. Write about CT angiography of brain.
- 4. Write about transrectal ultrasound probe, procedure and its applications.
- 5. Colour Doppler examination of lower limbs.
- 6. Ultrasound guided procedures.
- 7. What is the principle of Doppler Effect? What are the applications of colour Doppler.
- 8. Write about ultrasound of breast and its applications.
- 9. What are the various advantages of Ultrasound compared to other radiologic modalities?
- 10. Describe various generations of CT scanners.
- 11. Preparation and procedure of ultrasound of abdomen.
- 12. What are various artefacts in CT and methods to reduce their effect?

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

Health Education, Community Ophthalmology, Common Eye Disorders

Exam date-15/12/2021

- 1. What are the investigations for Cataract surgery?
- 2. What is Nutritional blindness and how will you educate the community?
- Discuss briefly about a)Lubricants of Eye drops b)Anti allergic drugs.
- 4. Write about Iridocyclitis and its treatment.
- 5. Write about role of Ophthalmic assistant in organizing cataract screening camp.
- 6. Discuss briefly about signs and symptoms of acute congestive glaucoma?
- 7. What are the causes of epiphoea in newborn child & its management?
- 8. Define Glaucoma. Explain in detail about anti Glaucoma Drugs.
- 9. What are the functions of eye bank?
- 10. What are the stages of diabetic retinopathy & its management?
- 11. Discuss school Health programme?
- 12. Discuss ocular emergencies?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN DIALYSIS TECHNICIAN COURSE

PAPER II

Pharmacology, Pathology & Dialysis Management

Exam date-15/12/2021

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

Total Marks: 80 Each Question carries 8 marks

- 1. What is Plasmapheresis procedure?
- 2. Write about CRRT procedure types and indications?
- 3. What are the Complications of peritoneal dialysis?
- 4. Write the Steps of handwashing?
- 5. What are the responsibilities of dialysis technician in the water processing plant?
- 6. How do you manage water quality in dialysis unit.
- 7. Write down the Principles of hemodialysis?
- 8. What are the renal function tests?
- 9. Mention the Precautions during blood transfusion.
- 10. How to do dialyser reuse?
- 11. Write about Doffing and donning for COVID dialysis.
- 12. Explain CAPD patient care during dialysis.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021 DIPLOMA IN RESPIRATORY THERAPY TECHNICIAN COURSE PAPER II

Patient Contact Techniques & Anesthesiology

Exam date-15/12/2021

- 1. What are the different types of respiratory failure and write about management of type II Respiratory failure.
- 2. What is obstructive sleep apnea? Write about Polysomnography?
- 3. Explain about Ambu bag and Defibrillator?
- 4. Write short notes on A) Adrenaline B) Hydrocortisone C) Atropine D) Dopamine?
- 5. Duties of respiratory therapist in ICU?
- 6. Write about non invasive ventilation and different modes of NIV.
- 7. How do you manage hydropneumothorax and its complications?
- 8. Write briefly on breathing exercises useful for COPD patients and role of respiratory therapist in bronchoscopy.
- 9. Write briefly about ABG. What are the normal values and how do you interpret them?
- 10. What are the causes of sudden increase in peak airway pressures in a patient on ventilator? How do you manage?
- 11. Describe in detail various steps to be taken for cardio-pulmonary resuscitation.
- 12. Describe about A) oxygen Concentrator B) Pulse Oxymeter?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN MEDICAL STERILIZATION MANAGEMENT AND OPERATION THEATRE TECHNICIAN COURSE

PAPER II

Pharmacology, Respiration & Sources of Infections

Exam date-15/12/2021

- 1. What is Fumigation? What are all solutions used for Fumigation?
- 2. Write in detail about sources of infections and prevention of infection?
- 3. What is Sterilization? Describe about different Sterilization methods?
- 4. Write about Steam Sterilization? Mention about indicators used for Steam Sterilization?
- 5. Explain about agents used in Chemical disinfection?
- 6. Diagram of Tracheobronchial tree and labeling.
- 7. Equipments used during General Anaesthesia?
- 8. Equipments drugs used in ICU?
- 9. Explain about Emergency drugs used in Operation theatre.
- 10. Write about Basic Life Support?
- 11. Write various steps in cleaning unsterile items?
- 12. Write short notes on tetanus & gas gangrene?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN PERFUSION TECHNICIAN COURSE PAPER II

Patho Physiology, Pharmacology & Perfusion Techniques Exam date-15/12/2021

- 1. Write about priming fluids and selection criteria for different cases of open heart surgery ?
- 2. Define cardioplegia. Write about various types of cardioplegia solutions? Give the composition of Delnedo CP solution.
- 3. What is diuretic? What diuretics are used during CPB? Explain the mode of action.
- 4. Define hypothermia. What are the different forms of the hypothermia Discuss hypothermia used for complex infant and neonate surgeries?
- 5. Define Ph. What is alpha stat and Ph stat? Management of perfusion. Which is better accordingly to you? Justify.
- 6. What is Elongated One Piece (EOP) cannula? Explain when and where it is used. Give its advantages.
- 7. What is Extra Copporeal Membrane Oxygenation? Discuss its importance?
- 8. Write about various methods of myocardial protection?
- 9. How do you measure the adequacy of perfusion? Discuss.
- 10. What are plasma expanders? Mention its role during cardiopulmonary bypass.
- 11. What are common accidents occurring during CPB? Explain how massive air embolism is managed during CPB.
- 12.Explain how you will manage the CPB of a pregnant woman undergoing MVR?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021 DIPLOMA IN OPTOMETRY TECHNICIAN COURSE PAPER II

Mechanical, Geometrical, Physiological Optics

Exam date-15/12/2021

- 1. Describe about clinical refraction?
- 2. Write about Transposition with five examples.
- 3. Describe briefly about Hypermetropia and its management.
- 4. Write about the types of Contact lenses and their complications.
- 5. Define Astigmatism. Give science and symptom with treatment?
- 6. Explain briefly about A) Duochrome Test B) Jacksons cross Cyinder?
- 7. Write short notes on a) Low vision b) Eye Donation c) School Eye Screening d) Accommodation?
- 8. Define conjectiva and what are three most common types of conjunctives scribe briefly about a) pterygium b) acute baryocystitis and give its treatment.
- 9. Give ophthalmic Lens Materials with advantage and disadvantages.
- 10. What are the part of the spectacle frames with diagram?
- 11. What is Uni Occular movements and binocular movements and give types of Binocular?
- 12. What is a) Regular Astigatism b) Irregular Astigmatism C) Give classification of Astigmatism?

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

PAPER II

General Physics, Radiography Techniques & Medical Imaging

Exam date-15/12/2021

- 1. Write a note on area monitoring devices used in radiotherapy?
- 2. What is the characteristic curve of an x-ray film and explain the characteristics of an x-ray film?
- 3. What is the principle and scanning procedures of CT scan?
- 4. Explain in detail about mammography?
- 5. Describe in detail about simulation in radiotherapy?
- 6. Draw a neat and labeled diagram of Cobalt machine and explain in detail?
- 7. Explain in detail about intracavitary brachytherapy?
- 8. Write a short note on
 - (1) Photoelectric effect
 - (2) Compton effect?
- 9. Write a short note on
 - (1) image intensifier
 - (2) screen film and non screen film
- 10. Describe in detail about imaging in Nuclear medicine?
- 11. What is ionizing radiation? Write a note on alpha, beta and gamma Radiation?
- 12. Write a note on
 - (1) PDD
 - (2) Inverse Square Law

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN RADIOGRAPHIC ASSISTANT COURSE PAPER II

Radiographic Techniques

Exam date-15/12/2021

- 1. Mobile X-Ray unit and its uses?
- 2. a) Mastoid view b) PNS view.
- 3. a) Skyline view of patella b) Axial view of calcaneum.
- 4. Discuss the procedure for IVP.
- 5. Discuss about barium meal and what are the instructions to be given before barium meal.
- 6. Factors affecting image quality in radiograph?
- 7. a) RGU b) MCUG
- 8. Discuss about DR and its advantages?
- 9. Write about Orthopantomogram.
- 10. Discuss about Flouroscopy and its advantages.
- 11. Discuss about radiation hazards.
- 12. Discuss about X-Ray artefacts.

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

PAPER II

Hypothermia & Pharmacology

Exam date-15/12/2021

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

Total Marks: 80 Each Question carries 8 marks

Write a note on

- 1. Write a note on Patient preparation for Holter monitoring.
- 2. Write a note on Adenosine.
- 3. Write a note on Pulse wave doppler.
- 4. Write a note on Risks of TEE.
- 5. Write a note on Grading of Mitral regurgitation.
- 6. Write a note on Eustachian Valve.
- 7. Write a note on TAPSE.
- 8. Write a note on Body temperature.
- 9. Write a note on Echo Gel.
- 10. Write a note on ECG Electrodes.
- 11. Write a note on Pressure half time.
- 12. Write a note on Contraindications for TMT.

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

PAPER II

Devices used in Pacing Pace-maker and its types

Exam date-15/12/2021

- 1. Describe about temporary pacing. Settings used and complications?
- 2. Describe in detail about atrial septal defect device closure.
- **3.** Arterial blood gas monitoring.
- **4.** Describe in detail the pre-procedure preparation for PPI and post procedure care.
- 5. Describe in detail the radiation exposure in Cath lab and the prevention of radiation injury?
- 6. What is complete heart block? Describe the management of a case of complete heart block.
- **7.** Describe the cardiac cycle.
- **8.** Describe various types of pacemakers.
- **9.** Describe the duties and responsibilities of a Cath lab technician.
- **10.** Indications of use of temporary pacemaker in Cath lab.
- 11. Explain about the oximetry sampling.
- **12.** Explain about the catheters used in cardiac catheterization.

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

PAPER II

Cardio Vascular Pathology & Biochemistry of System

Exam date-15/12/2021

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

Total Marks: 80 Each Question carries 8 marks

- 1. Write a note on P Wave.
- 2. Write a note on Temporary pacing
- 3. Write a note on Aspirin.
- 4. Write a note on ST Elevation.
- 5. Write a note on SA Node.
- 6. Write a note on Pulse Oximetry.
- 7. Write a note on 6 minute walk test.
- 8. Write a note on Pacemaker ECG.
- 9. Write a note on Arm lead reversal.
- 10. Write a note on Ejection Fraction.
- 11. Write a note on Lead aVR.
- 12. Write a note on Complete heart Block.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN ANESTHESIA TECHNICIAN COURSE PAPER II

Pharmacology & Equipment Management

Exam date-15/12/2021

- 1. Write about various I V fluids & their uses.
- 2. Write about basic monitoring in Operation theatres.
- 3. Write about Mapleson classification of circuits. Explain about Bain's circuit?
- 4. Write about Oxygen cylinders?
- 5. Write about O T Fumigation?
- 6. Write about various induction agents?
- 7. Name some inhalation agents. Write in detail about Nitrous Oxide?
- 8. Write about Lignocaine, its uses & complications.
- 9. Write about Reversal agents & reversal criteria.
- 10. Write briefly about Premedication agents.
- 11. Write about various Blood groups & Blood transfusion.
- 12. Write briefly about Muscle relaxants.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN MPHA (MALE) COURSE PAPER II

Health Education

Exam date-15/12/2021

- 1. Write in detail about the objectives of NTCP?
- 2. What are the functions of a sub-centre?
- 3. Write a note on NRHM (National Rural Health Mission).
- 4. Explain the disease caused by smoking and Alcholism.
- 5. Write in detail about steps taken to control HIV?
- 6. Discuss about permanent and temporary contraception methods.
- 7. Explain the importance of physical exercise in daily life.
- 8. Role of MPHA in prevention of Filariasis.
- 9. What is exclusive breast feeding and how to create awareness regarding it?
- 10. What is the importance of census, registrations of births and deaths?
- 11. Write about preventive measures to control Diarrheal diseases.
- 12. Write a note on Roles and responsibilities of health workers.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN AUDIOMETRY TECHNICIAN COURSE PAPER II

Speech and Language Development

Exam date-15/12/2021

- 1. When to do OTO Acoustic emission test and which cases it is useful.
- 2. What are the Speech and Language assessment.
- 3. What are the Normal Speech and Language development in 12-16 months child.
- 4. What is mean by Speech Therapy?
- 5. How to follow techniques in speech therapy in case of 3 yrs child with Bilateral Profound hearing loss.
- 6. What is mean by amplification, how useful when a child with Bilateral Moderate hearing loss.
- 7. When a child comes with unable to hear and speak at the age of 2 years which is the best test to diagnose hearing loss.
- 8. Explain in detail about mixed hearing loss?
- 9. What is the Difference between Mixed and Sensori neural hearing loss.
- 10. Explain in detail about the Behavioral observation Audiometry
- 11. What is mean by Misarticulation and how it is diagnosed.
- 12. Explain in detail about Physiology of Hearing.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN DENTAL TECHNICIAN COURSE PAPER II

Dental Material & Basic Knowledge of Computer

Exam date-15/12/2021

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

- 1. Discuss in detail about different kinds of Restorative materials.
- 2. What are the requirements of a die? Describe materials used in preparation of dies.
- 3. Discuss in detail about the physical stages of polymerization.
- 4. Write in detail about dental waxes and mention one of them.
- 5. Discuss about the importance of Dental Technician.
- 6. Write in detail about abrasive and polishing agents used in dentistry.
- 7. Give a detailed description of CAD CAM in dentistry
- 8. Write in detail about Mercury Toxicity and method to avoid it?
- 9. Discuss the processing technique of heat cure denture base materials?
- 10. Write the composition of ceramics classifies ceramic materials and describe all ceramic materials?
- 11. Classify dental cements; Describe technique of mixing zinc phosphate cement?
- 12. Enumerate different forms of stainless steel and explain each of them in detail?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN EMERGENCY PARAMEDC COURSE PAPER II

Medical, Paediatric & Neonatal emergencies, Environmental Hazards, Toxicology & ICU Care

Exam date-15/12/2021

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

- 1. How do you assess patient bought in unconscious state aged about 50 years.
- 2. Describe the pre hospital treatment of seizures?
- 3. Describe the immediate of patient with Diabetes with unconsciousness.
- 4. Discuss the pre-hospital management of Acute GE with dehydration?
- 5. How will you assess chest pain in 50 years old male describe immediate management of the patients?
- 6. What are the components of LFT?
- 7. How do you manage a case of severe dehydration due to Acute Gastroenteritis? How much fluid to be transfuses?
- 8. A 2 year brought with continuous cry for one hour. How do you assess child status and initial management?
- 9. Describe the steps of recording the blood pressure.
- 10. A 50 year male known Epileptic brought to hospital he has not taken anti epileptic's tablets. How do you manage this case?
- 11. A Person suffers dog bite on right leg. How do you manage?
- 12. What are the drugs CRASH trolley?

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

DIPLOMA IN DARKROOM ASSISTANT COURSE PAPER II

Radiographic Techniques

Exam date-15/12/2021

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

- 1. Write about fluroscopy.
- 2. What is MRI? How is it superior of CT in imaging?
- 3. Briefly discuss about ultrasonography and various transducers used?
- 4. Write about mammography including technique and standard views?
- 5. Briefly discuss HSG.
- 6. What are the various contrast media used in radiology department?
- 7. Write short notes on a) Compton effect b) ALARA principle.
- 8. Briefly discuss about barium swallow.
- 9. Explain in detail about the emergency drugs that should be available in radiology department and first aid?
- 10. Write about sialography in detail.
- 11. Write about the factors affecting radiographic film quality.
- 12. Write about various views taken for shoulder joint.

COMBINED PARAMEDICAL (REGULAR) EXAMINATIONS, DECEMBER, 2021

Diploma in Medical Lab Technician Course (DMLT) PAPER II

Microbiology, Parasitology & Microbes

Exam date-15/12/2021

Time: 3hrs.

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Total Marks: 80

Answer any TEN (10) Questions only

Each Question carries 8 marks

- 1. Define sterilization & clarify different methods. Discuss in detail about Autoclave.
- 2. Write in detail about collection, transportation & processing of Urine sample for UTI.
- 3. Define & classify immunity. Write in detail about Bacterial Vaccines.
- 4. Classify culture media. Write about 1. Transport media 2. Selective media.
- 5. Write about collection, transportation & processing of Blood sample for Blood culture.
- 6. Describe the various routers of transmission of SARSCov-2 & Discuss the various laboratory tests to diagnose Covid-19 infection.
- 7. Classify fungi & Write in detail about candidiasis.
- 8. Draw a neat labeled diagram of compound microscope. Write about precautions to be taken while handling it.
- 9. Name two cestodes. Write in detail about Taenia solium.
- 10. Name 2 protozoa. Describe Life cycle of malarial parasites.
- 11. Classify culture media? Write short notes on selective media.
- 12. Define Antibody write about immuno globulin A.

4. How do you Process for Antibiotic Sensitivity testing in gram negative bacteria?