

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY (DMLT)

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 2101 SECTION -A, ANATOMY

(WRITE IN GREEN ANSWER BOOK)

NOTE: Answer the questions in order

LONG ESSAY- ANSWER ANY ONE

1x10=10

- 1 Name the parts of excretory system. Write briefly on urinary bladder
- 2 Mention the bones of lower limb. Write briefly on femur bone

SHORT ESSAY- ANSWER ANY FIVE

5x5 = 25

- 3 Brachial artery
- 4 Histology of spleen
- 5 Prostate gland
- 6 Pancreas
- 7 Trachea
- 8 Histology of kidney
- 9 Describe the Uterus

SHORT ANSWERS

5 x2=10

- 10 Name types of muscles
- 11 Median cubital vein
- 12 Types of salivary glands
- 13 Name any four endocrine glands
- 14 Name the parts of central nervous system

QP CODE: 2102 SECTION -B, PHYSIOLOGY

LONG ESSAY- ANSWER ANY ONE

1x10=10

- 15 With the help of a neat diagram, classify White blood cells and describe their functions
- 16 Name the hormones secreted from Anterior Pituitary gland and describe the actions of Growth hormone

SHORT ESSAY-ANSWER ANY FIVE

5x5 = 25

- 17 Composition and functions of Saliva
- 18 Functions of Large intestine
- 19 Regulation of spermatogenesis
- 20 Milk ejection reflex
- 21 Composition and functions of CSF
- 22 Contents and functions of middle ear
- 23 Conducting system of the heart

SHORT ANSWERS

5 x 2=10

- 24 Write two functions of Skin
- 25 Name any two Muscle proteins
- 26 Write the normal values of **A)** Tidal volume **B)** Vital capacity
- 27 Name any two abnormal constituents of urine
- 28 Write the normal values of **A)** Blood Pressure **B)** Pulse Rate

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY (DMLT)
(RS -2 SCHEME) MAX. MARKS: 100
QP CODE: 5101 SECTION -A, ANATOMY
(WRITE IN GREEN ANSWER BOOK)

NOTE: Answer the questions in order

SHORT ANSWERS- ANSWER ANY FOUR

4x5=20

- 1 Describe Hip joint
- 2 Describe cubital fossa
- 3 Describe anatomical planes
- 4 Describe the Uterus
- 5 Describe the sternocleidomastoid muscle

SHORT NOTES

10 x3 = 30

- 6 Name the bones of upper Limb
- 7 Name the muscles of thigh
- 8 Name the parts of Brain
- 9 Name the endocrine glands
- 10 Name the lobes of the Liver
- 11 Name the carpal bones
- 12 Classification of epithelium
- 13 Name the anatomical movements in the joint
- 14 Name the common veins used for intravenous injection
- 15 Name the branches of abdominal aorta

QP CODE: 5102 SECTION -B, PHYSIOLOGY

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 16 ABO blood grouping & Rh typing
- 17 Write Salivary glands secretion & its functions
- 18 Systemic & Pulmonary circulation
- 19 Menstrual cycle
- 20 Renal & non-renal functions of kidney

SHORT NOTES

10 x3 = 30

- 21 Hemoglobinuria
- 22 Modes of Transport of carbon dioxide in blood
- 23 List the pituitary gland hormones
- 24 Hypoxia
- 25 Functions of CSF
- 26 List different types of cell junctions
- 27 Draw a neat labelled diagram of cardiac muscle
- 28 Functions of cell membrane
- 29 Draw a neat labelled diagram of neuron
- 30 List the 3 functions of skin

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY (DMXT)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE: 2121

GENERAL PHYSICS

(WRITE IN BLUE ANSWER BOOK)

NOTE: Answer the questions in order

LONG ESSAY - ANSWER ANY ONE

1x10=10

- 1 Explain the construction and working of rotating anode X-ray tube
- 2 What is a transformer? Explain the types

SHORT NOTES - ANSWER ANY FIVE

5 x5 = 25

- 3 P-N Junction
- 4 Capacitors
- 5 Rectifiers
- 6 Anode Heel effect
- 7 Filters
- 8 Self-induction

SHORT ANSWERS

5 x 2 = 10

- 9 Units of radiation
- 10 Inverse square law
- 11 Electromagnetic relay
- 12 Structure of an atom
- 13 Semiconductors

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY (DMIT)
TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100
QP CODE- 5121, RADIATION PHYSICS
(WRITE IN GREEN ANSWER BOOK)

NOTE: Answer the questions in order

8 x 5 = 40

SHORT NOTE- ANSWER ANY EIGHT QUESTIONS

- 1 Photodisintegration
- 2 Effects of KVP and MAS on image quality
- 3 Rectifiers-Purpose and mechanism
- 4 Photoelectric effect
- 5 Automatic exposure control devices
- 6 Construction of stationery anode tube
- 7 Working principle, merits and demerits of image intensifier
- 8 Working principle of ionisation chamber
- 9 CT scan
- 10 Compton scattering

SHORT ANSWERS

20 x 3 = 60

- 11 Anode
- 12 Fluoroscopy
- 13 Automatic brightness control in fluoroscopy
- 14 Heel effect
- 15 Solid state detectors
- 16 Bremsstrahlung reaction
- 17 Step up transformer
- 18 Types of MRI machines
- 19 Ohm's law
- 20 Unsharpness
- 21 Define potential difference, current and resistance
- 22 Importance of earthing of electrical devices
- 23 Ionising radiations
- 24 Types of radioactive decay
- 25 Atom
- 26 Self rectification
- 27 Contrast media
- 28 Properties of electromagnetic radiation
- 29 Define hounsfield number. What are the HU values of air and water
- 30 What are non-ionising radiations? Give two examples

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2141, MEDICAL RECORD SCIENCE

(WRITE IN GREEN ANSWER BOOK)

NOTE: Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Discuss Medicolegal importance of Medicolegal case sheet
- 2 What are the Types of Numbering systems used in MRD & its merits demerits?
- 3 Define Types of Index cards, and its purposes

SHORT NOTES - ANSWER ANY TEN

10x5=50

- 4 Types of Registers maintained in MRD
- 5 How the Medical Records useful to Patient, Doctor, and Hospital?
- 6 Define Birth & Death registration & Correction rules
- 7 What is the meaning of Document production to the court?
- 8 What are the values of good Medical Records?
- 9 What is Qualitative & Quantitative analysis of Medical Records?
- 10 What do you know about Retention of Medical Records?
- 11 What are the important functions of MRD?
- 12 What are the Case Sheet Deficiency checklist contents?
- 13 Name the Office bearers of Medical Records Committee?
- 14 What is Compensation? How it relevant with a Case sheet?
- 15 What is IPC & its purpose of implementing?

SHORT ANSWERS

10x2=20

- 16 Summons
- 17 Arrest Warrant
- 18 Death Summary
- 19 Discharge against medical advice
- 20 Bed occupancy rate
- 21 Mortality rate
- 22 Diagnostic index card
- 23 Mention any one IPC Code & explain
- 24 Accident Register
- 25 Wound Certificate

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY(DMRT)
TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS:100
QP CODE: 5141, MEDICAL RECORD SCIENCE
(WRITE IN GREEN ANSWER BOOK)

NOTE: Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Functions of Medical record department
- 2 Rules and regulations of birth and death registration act
- 3 Quantitative and Qualitative analysis of medical records
- 4 Medical audit and its functions
- 5 Estoppel and promissory estoppels
- 6 Cognizable and non cognizable offence
- 7 Values of medical records to doctors, patient and hospital
- 8 Medical record committee and its function
- 9 Workman's compensation act
- 10 Flow of inpatient records

SHORT ANSWERS

20x3=60

- 11 Tracer card or locator card and its uses
- 12 Types of filing system and explain any one
- 13 Assembling and deficiency check list
- 14 Oral evidence and documentary evidence
- 15 Duties and responsibilities of Medical record technician
- 16 Summons and warrant
- 17 Types of court in India
- 18 Formula of Bed occupancy rate and Average outpatient per day
- 19 Accident registers and its contents
- 20 Admission register and its contents
- 21 Persons exempted from personal appearance in court
- 22 Mid night census and its uses
- 23 Bailable and non - bailable offences
- 24 Procedure for making corrections in death case sheets
- 25 Retention of medical records
- 26 Types of indexes
- 27 Death Summary
- 28 List the equipments required in MRD
- 29 Consent and its types
- 30 Basic Medical record forms

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY (DOTT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 2131

(WRITE IN GREEN ANSWER BOOK)

FUNDAMENTALS OF OT & BASIC CONCEPTS IN SURGERY

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2x10=20

- 1 Define sterilization. Explain methods of sterilization. Explain Central Sterile Supply Department
- 2 Explain about pre-operative care. How do you prepare patient for surgery?
- 3 Explain principles of sterile technique. How do you control contamination in O.T.?

SHORT NOTES - ANSWER ANY TEN

10x5=50

- 4 Health Care Team
- 5 Patient Monitoring
- 6 Ambulatory surgery
- 7 Draping
- 8 Urinary tract catheterization
- 9 Manifold room and scavenging gases
- 10 Division of duties
- 11 Team work in OT
- 12 Physical facilities at operation theatre
- 13 Care and handling of instruments in OT
- 14 Scrub nurse and circulating nurse
- 15 Harmonic scalpel

SHORT ANSWERS

10x 2=20

- 16 Surgical Scrubs
- 17 Disinfection
- 18 Post-operative evaluation
- 19 Absorbable suture material
- 20 Electrical Cautery
- 21 Ryles tube
- 22 Biomedical Waste
- 23 Autoclave
- 24 CPR
- 25 Gowning and gloving

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN OPERATION THEATRE &
ANESTHESIA TECHNOLOGY (DOT &AT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE- 5131

FUNDAMENTALS OF OT & BASIC CONCEPTS IN SURGERY
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES- ANSWER ANY EIGHT

8x5 =40

- 1 Ambulatory (day care) surgery
- 2 Pros and Cons of disposables
- 3 CPR
- 4 Preparation of operative site and draping
- 5 Method of haemostasis
- 6 Universal precautions in handling the instrument
- 7 Criteria for position
- 8 Surgical scrubs
- 9 Check list of patients before surgery
- 10 Radiation hazards and safe guards

SHORT ANSWERS

20x3=60

- 11 Scrub nurse
- 12 Iodine
- 13 Factors influencing wound healing
- 14 Ryles tube (Nasogastric tube) - Uses
- 15 Types of urinary catheter
- 16 Pre operative planning
- 17 Skin preparation
- 18 Check list
- 19 Carbon dioxide
- 20 Pulse oximeter
- 21 IVP (Intra Venous Pyelography)
- 22 Types of suture materials
- 23 Daily cleaning schedule
- 24 Vacuum suction
- 25 Electrical hazards and safe guards
- 26 Care and handling of instruments
- 27 Preservation of specimens to be sent for histopathology
- 28 Preparation of patients for surgery
- 29 Suture materials
- 30 Prevention of infection

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
OPHTHALMIC TECHNOLOGY (DOT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE- 2161, OPHTHALMOLOGY, PAPER-I

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2x10 = 20

- 1 Name the parts of the lens. Describe factors responsible for lens transparency and describe metabolism that occurs in the lens
- 2 Define myopia. Discuss the etiology, types, symptoms, signs and management of myopia
- 3 Describe layers of the cornea and factors responsible for the corneal transparency

SHORT NOTES - ANSWER ANY TEN

10 x 5=50

- 4 Astigmatism
- 5 Presbyopia
- 6 Describe the physiology of vision
- 7 Describe the types of lenses
- 8 Describe the axis and visual angles of the eye
- 9 What is accommodation?
- 10 What are the advantages and disadvantages of contact lenses?
- 11 Mechanism of aqueous humour production and drainage
- 12 Methods of colour vision testing
- 13 Define spherical mirror. Describe cardinal data of spherical mirror
- 14 Laws of refraction
- 15 Write a short note on Aqueous humor production

SHORT ANSWERS

10x2=20

- 16 Name parts of the conjunctiva
- 17 Name the functions of the eye lid
- 18 Structures seen in the angle of the eye
- 19 Name the extraocular muscles of the eye
- 20 Four components of visual perception
- 21 Types of visual acuity
- 22 Astigmatic fan
- 23 Convergence
- 24 Progressive lenses
- 25 Rhodopsin cycle

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN OPHTHALMIC TECHNOLOGY (DOT)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS:100

QP CODE: 5161, OPHTHALMOLOGY, PAPER-I

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Explain with diagram the production & drainage of Tears
- 2 Principles & use of Snellen's chart
- 3 Progressive Lenses
- 4 Low Visual aids & their uses
- 5 Draw a neat diagram of visual pathway
- 6 Define Aphakia, Describe Optics of Aphakic eye
- 7 Describe image formation by a Toric surface using Sturm's conoid
- 8 Describe Optics of mirror retinoscopy
- 9 Define Hypermetropia. Write etiological Classification of Hypermetropia
- 10 Types of Astigmatism

SHORT ANSWERS

20x3=60

- 11 Types of Perimetry
- 12 Pin Hole testing
- 13 Methods of checking colour blindness
- 14 Inter Pupillary Distance
- 15 Bifocal lens
- 16 Mention different Stereo acuity Test
- 17 Trial Set
- 18 Material used for spectacle Frame
- 19 Write simple transposition of the lens +2 D sphere -2 D cylinder at 110° axis
- 20 Phakic IOLs
- 21 Indication for contact lens
- 22 How to identify a Concave lens?
- 23 Focimeter
- 24 Describe uveal Tissue layer
- 25 Mention 3 uses of mirrors in Ophthalmology
- 26 Describe procedure of Keratometry
- 27 Astigmatic fan
- 28 Layers of Retina
- 29 Describe Fundus changes in Pathological myopia
- 30 Write 3 uses of Convex lens

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY (DDT)
(RS -1 SCHEME) MAX. MARKS: 90
QP CODE- 2151, SECTION-A, PHARMACOLOGY
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY ONE

1 x10 = 10

- 1 Name SIX penicillin group of drugs. Mention TWO uses, TWO adverse effects and TWO contra-indication of cephalosporins
- 2 Name SIX aminoglycoside antibiotics. Mention TWO uses, TWO adverse effects and TWO contra-indications of gentamicin

SHORT NOTES -ANSWER ANY FIVE

5 x5=25

- 3 Topical route of drug administration
- 4 Treatment of atropine poisoning
- 5 Ferrous sulphate
- 6 Albendazole
- 7 Metformin
- 8 Aspirin

SHORT ANSWERS

5x2=10

- 9 Mention TWO antiviral drugs
- 10 Mention TWO uses of antiandrogens
- 11 Mention TWO enzymes
- 12 Mention TWO chelating agents
- 13 Define: A) Maximum dose of drug B) Lethal dose of drug

QP CODE- 2152, SECTION-B, THEORY OF DIALYSIS

LONG ESSAY - ANSWER ANY ONE

1x10 = 10

- 14 Why do you need anticoagulation for hemodialysis? Discuss the common anticoagulation used and their protocols
- 15 How do you wash the accessories in Hemodialysis and describe the methods of Reuse of dialyzer and disinfection of dialyzer

SHORT NOTES -ANSWER ANY FIVE

5× 5 = 25

- 16 Hardness of water
- 17 Functions of Dialysis
- 18 Reverse osmosis
- 19 Monitoring of a patient before, during and after a hemodialysis session
- 20 Define intradialytic hypotension. How do you manage and prevent it?
- 21 Lab investigations done in a patient on haemodialysis

SHORT ANSWERS

5× 2 = 10

- 22 Normal blood levels of Albumin and Globulin
- 23 Causes of anemia in Chronic Renal Disease (CKD)
- 24 Parts of a dialysis filter
- 25 Two infections which spread in dialysis unit
- 26 Dry weight

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)
(RS -2 SCHEME) MAX. MARKS: 100
QP CODE- 5151, SECTION-A, APPLIED PHARMACOLOGY
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY FOUR

4 x 5 =20

- 1 MORPHINE- uses, adverse effects and contraindications
- 2 Define adverse drug reaction (ADR). Mention types of allergic reactions
- 3 Angiotensin converting enzyme inhibitors- uses and adverse effects
- 4 Bronchodilators
- 5 Biotransformation

SHORT ANSWERS

10 x 3=30

- 6 What is mannitol? Mention two uses
- 7 Name 3 sources of drugs; give one example for each
- 8 Mention 3 uses and 3 adverse effects of Insulin
- 9 Name 3 drugs used in Acute congestive (closed angle) Glaucoma
- 10 Name 3 Immunosuppressant's; mention three uses
- 11 Define the terms A) Pharmacodynamics B) Pharmacokinetics
C) Plasma half life
- 12 Mention 6 therapeutic uses of Glucocorticoids
- 13 Name THREE drugs used in dialysis
- 14 Name THREE 5-HT₃ antagonists
- 15 Name ONE use of A) Ferrous sulphate. B) Folic acid. C) Vitamin B12

QP CODE- 5152, SECTION-B, THEORY OF DIALYSIS

SHORT NOTES - ANSWER ANY FOUR

4 x 5=20

- 16 What are AAMI standards for water quality in HD?
- 17 Anatomy of Artificial kidneys (dialyzers) with diagram
- 18 Describe the methods of Reuse of dialyzer and disinfection of dialyzer
- 19 Describe the components of water treatment plant
- 20 Monitoring of patients in Hemodialysis

SHORT ANSWERS

10 x3=30

- 21 Name anticoagulants (IV and Oral)
- 22 Types of vascular access in HD
- 23 Interdialytic weight gain
- 24 Universal Precautions
- 25 Hardness of water
- 26 Monthly laboratory tests done in hemodialysis patients & their importance
- 27 Describe reverse osmosis
- 28 Washing accessories in Hemodialysis
- 29 Complications of Central Venous Catheter
- 30 Alarms and its importance

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE- 2171, DENTAL MATERIALS & METALLURGY
(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY ANSWER ANY ONE

1 x10=10

- 1 Define gypsum and write different types of gypsum products
- 2 Define an alloy. Mention alloys used in prosthodontics. Write in brief about base metal alloys

SHORT NOTES -ANSWER ANY FIVE

5x5=25

- 3 Steps in compression moulding technique
- 4 Classify waxes and write in detail about inlay wax
- 5 Glass ionomer cement
- 6 Fluxes and anti fluxes
- 7 Different types of corrosion
- 8 Materials used in maxillofacial prosthesis
- 9 Different casting technique

SHORT ANSWERS

5 x 2=10

- 10 Mention types of duplicating materials
- 11 Co-efficient of thermal expansion
- 12 Balanced stone
- 13 18x18 stain less steel
- 14 Alginate

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 50

QP CODE: 5171, DENTAL MATERIALS & METALLURGY

(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES -ANSWER ANY FOUR QUESTIONS

4X5=20

- 1 Classify dental waxes and discuss in detail inlay waxes
- 2 Base metal alloys
- 3 Tarnish and corrosion
- 4 Different manipulation techniques of acrylic resin
- 5 Manufacturing of gypsum products

SHORT ANSWERS

10 x3 =30

- 6 Wet strength
- 7 Recent advances in alginate
- 8 Die materials
- 9 Types of special trays
- 10 Tempering
- 11 Gypsum bonded investment material
- 12 Soldering and welding
- 13 Uses and types of separating media
- 14 Back pressure porosity
- 15 Failures of casting defects

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45
QP CODE- 2181, SECTION-A, GENERAL ANATOMY AND HISTOLOGY
(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY ANSWER ANY ONE 1 x9=9

- 1 Mention the names of the cranial nerves. Briefly write about any one of them
- 2 Briefly write about muscles of mastication

SHORT ESSAY -ANSWER ANY TWO 2 x 5 = 10

- 3 Mandible bone
- 4 Tongue
- 5 Salivary glands

WRITE SHORT ANSWERS 3 x 2 = 6

- 6 Mention the types of tissues of the body
- 7 Endocrine glands
- 8 Write neat labelled diagram of a tooth

QP CODE- 2182, SECTION-B, GENERAL PHYSIOLOGY

SHORT NOTES -ANSWER ANY FOUR 4x4=16

- 9 Taste pathway
- 10 Composition and functions of Gastric juice
- 11 Explain the active transport process
- 12 Deglutition
- 13 Functions of White blood cells
- 14 Actions of Growth hormone

SHORT ANSWERS 2x2=4

- 15 Name any two functions of saliva
- 16 Define Myopia. Name the lens of correction

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 50

QP CODE: 5181, SECTION-A, GENERAL ANATOMY, HISTOLOGY
(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES -ANSWER ANY TWO 2x5=10

- 1 Mention the endocrine organs and describe the pituitary in detail
- 2 Describe the facial nerve in detail
- 3 Classify connective tissue with examples

SHORT ANSWERS 5 x 3 = 15

- 4 List the 3 divisions of trigeminal nerve in face
- 5 Mention the different types of teeth
- 6 Mention the muscles of mastication
- 7 Nerve supply of tongue
- 8 Blood supply of the face

QP CODE: 5182, SECTION-B, GENERAL PHYSIOLOGY

SHORT NOTES -ANSWER ANY TWO 2 x 5=10

- 9 Renal and non -renal functions of kidneys
- 10 Cardiac output
- 11 Functions of pancreatic juice

SHORT ANSWERS 5 x 3 = 15

- 12 Name the hormones of Anterior pituitary
- 13 Functions and normal count of Platelets
- 14 Draw a neat labelled diagram of ECG
- 15 Micturition reflex
- 16 List 3 phases of menstrual cycle

SUPPLEMENTARY EXAMINATION, APRIL 2022

I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4191, ANATOMY

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES- ANSWER ANY EIGHT

8 x 5 = 40

- 1 Classify the connective tissue with examples
- 2 Classify bones with examples
- 3 Describe shoulder joint
- 4 Describe the popliteal fossa
- 5 Describe extraocular muscles
- 6 Classify connective tissue with examples
- 7 Classify bones with examples
- 8 Classify joints with examples
- 9 Describe femoral triangle
- 10 Describe deltoid muscle

SHORT ANSWERS

20 x 03 = 60

- 11 Name the bone cells
- 12 Name the parts of typical vertebra
- 13 Name the arches of foot
- 14 Gluteus maximus muscle
- 15 Name the arteries of lower limb
- 16 Name the contents of cubital fossa
- 17 Name the parts of mandible
- 18 Inguinal canal
- 19 Pectoralis major muscle
- 20 Name the intercostal muscles
- 21 Posterior triangle of neck
- 22 Name the muscles of tongue
- 23 Name the muscles of hand
- 24 Name the contents of axilla
- 25 Mention the contents of middle ear
- 26 Name the muscles of pelvic floor
- 27 Name the extraocular muscles
- 28 Name the paranasal air sinuses
- 29 Name the tarsal bones
- 30 Name the nerves of upper limb

SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)
(RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 6191- SECTION-A, P.T. IN MEDICAL CONDITIONS
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES -ANSWER ANY FOUR

4 x5=20

- 1 Discuss types and methods of breathing exercise
- 2 PT management of Myasthenia gravis
- 3 Discuss about cerebral palsy and its management
- 4 Explain muscular dystrophy, types and management
- 5 What are the differences between chronic bronchitis and emphysema? Broadly outline your treatment for the same

SHORT ANSWERS

10 x3=30

- 6 Erbs palsy
- 7 Poliomyelitis
- 8 Spirometry
- 9 CTEV
- 10 Difference between rigidity & spasticity
- 11 Scoliosis
- 12 Deep vein thrombosis
- 13 Gowers sign and management
- 14 Nerve conduction velocities
- 15 LMN lesion

QP CODE: 6192- SECTION-B, P.T. IN SURGICAL CONDITIONS

SHORT NOTES -ANSWER ANY FOUR

4 x5=20

- 16 ACL injury - etiology, clinical features, treatment and post-operative physiotherapy management
- 17 Types of Hernia and PT management of Herniotomy
- 18 Describe the post operative PT management of Pneumonectomy
- 19 PT management in Paediatric ICU
- 20 Explain about Hemipelvectomy and its PT management

SHORT ANSWERS

10 x3=30

- 21 Simmonds test
- 22 Stress incontinence
- 23 PT management of Prolapse Uterus
- 24 Dyskinesia
- 25 Reynaud disease
- 26 Prevention of Bed Sores
- 27 Lobectomy
- 28 Guyon's canal syndrome
- 29 Polio and its PT management
- 30 GB Syndrome

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA / III YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY (DMLT)
TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90
QP CODE: 3101, BIOCHEMISTRY
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Explain TCA cycle with energetic and its importance
- 2 Describe digestion and absorption of Lipids
- 3 Classify Renal function tests and add a note on clearance tests

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Cardiac Profile tests
- 5 Urea cycle
- 6 Glucose Tolerance Tests (GTT)
- 7 RIA - definition and applications with schematic diagram
- 8 Abnormal constituents of Urine
- 9 Ion Selective Electrode (ISE)
- 10 Creatinine synthesis
- 11 Digestion and absorption of carbohydrates
- 12 Cardiac profile tests
- 13 Chromatography - definition, principle and applications
- 14 External quality control
- 15 Random Access Analyzers

SHORT ANSWERS

10x2=20

- 16 Applications of Enzyme Linked Immunosorbent Assay (ELISA)
- 17 Reagent kits
- 18 Recording of patients data
- 19 Physical properties of normal urine
- 20 Name the ketone bodies
- 21 Normal range of Total, Direct and Indirect bilirubin
- 22 Micelles
- 23 Statistical significance in Biochemistry lab
- 24 Constituents of gastric juice
- 25 Jaffe's test

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN
MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 6101, BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 External quality control
- 2 Discuss the principle, instrumentation and applications of colorimeter
- 3 Discuss the principle and applications of blood gas analyzer
- 4 Biochemical changes in deferent types of jaundice
- 5 Explain the principle, advantages and disadvantages of any one method of cholesterol estimation
- 6 Explain the terms; accuracy, precision, specificity and sensitivity
- 7 Acid-base balance in human body
- 8 Principle and applications of RIA
- 9 Pattern of cardiac enzymes in heart diseases
- 10 Automation in clinical chemistry; principle and application

SHORT ANSWERS

20x3=60

- 11 Chloride shift
- 12 Reference values and interpretations
- 13 Barfoed's test
- 14 Principle and applications of electrophoresis
- 15 Lipid profile
- 16 Laws of photometry
- 17 Hyperkalemia
- 18 Principle and applications of flame photometer
- 19 Metabolic acidosis and metabolic alkalosis
- 20 Biuret test
- 21 Benedict's test
- 22 Pre analytical variation in clinical lab
- 23 Bilirubin formation
- 24 ELISA
- 25 Principles of quality assurance
- 26 Clearance test
- 27 Percentage error in laboratory
- 28 Specific gravity
- 29 Hypertension
- 30 Write the normal values of a)fasting glucose b)urea c)creatinine

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR CERTIFICATE COURSE/III YEAR DIPLOMA IN
HEALTH INSPECTOR (DHI)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 3111, COMMUNITY MEDICINE, PAPER-I
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2x 10 =20

- 1 How do you investigate an epidemic of gastroenteritis in a village? What measures will you take to control them?
- 2 Enumerate the risk factors for coronary heart disease. Explain briefly the prevention and control measures for it
- 3 Name the National health programmes of India. Discuss National Leprosy eradication program

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Uses of health related statistics
- 5 Audio visual aids
- 6 Anti retroviral treatment
- 7 DOTS treatment in tuberculosis
- 8 Prevention of hepatitis B
- 9 Scabies
- 10 Risk factors for Diabetes mellitus
- 11 Enumerate functions of primary health centre
- 12 Causes of blindness. Write briefly on vitamin A prophylaxis programme
- 13 What are the functions of integrated child development scheme (ICDS)
- 14 Subcentre
- 15 Road traffic accidents and its prevention

SHORT ANSWERS

10x2=20

- 16 Marriage counselling
- 17 Complications of Rubella
- 18 Functions of anganwadi worker
- 19 Herd immunity
- 20 Define incubation period
- 21 Name four zoonotic Diseases
- 22 Typhoid vaccine
- 23 Preventable blindness
- 24 Dai training programme
- 25 Spot map

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN HEALTH INSPECTOR(DHI)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 6111, COMMUNITY MEDICINE, PAPER-I

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Steps of investigation of epidemic
- 2 Treatment of Leprosy
- 3 Swach Bharath Mission
- 4 Enlist types of Accidents. Discuss Causes of Road traffic Accidents
- 5 Oral polio vaccine
- 6 Stop TB strategy
- 7 Risk factors of Hypertension
- 8 Life cycle of malarial parasite
- 9 Vision 2020 - The Right to Sight
- 10 Prevention of Diarrheal diseases

SHORT ANSWERS

20x3=60

- 11 Pentavalent vaccine
- 12 Mention any three domestic accidents
- 13 Body Mass Index(BMI)
- 14 Primordial prevention of Coronary Heart Diseases (CHDs)
- 15 Hospital Acquired infections
- 16 Tetanus Toxoid
- 17 Tribal Malaria
- 18 Periodic Deworming programme
- 19 Typhoid Mary
- 20 Signs of severe dehydration
- 21 BCG Vaccine
- 22 Congenital Rubella Syndrome
- 23 Name the diseases which can be transmitted through blood transfusion
- 24 Mission Indradhanush
- 25 JE Vaccination
- 26 Cancer Screening
- 27 Write the modes of transmission of Hepatitis B infection
- 28 Name any three diseases transmitted through unsafe water
- 29 Name any three Zoonotic Diseases
- 30 Urban Primary Health Center

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN X-RAY
TECHNOLOGY (DMXT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3121

RADIOGRAPHY INCLUDING RADIOLOGY PHYSICS

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Mention layers of X-ray film with neat labelled diagram. Mention different sizes of X-ray film used with one example for each
- 2 Define electromagnetic Radiation. Briefly explain about production of X-rays and its properties
- 3 Draw a neat labelled diagram of Fluoroscopy and briefly describe about Fluoroscopy and uses

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Three phase generators
- 5 Write briefly about collimation
- 6 Photo stimuable phospher
- 7 Write short note on photo-electric effect
- 8 Computed radiography and Digital radiography
- 9 TLD badge - in brief and its uses
- 10 Factors affecting X-ray film
- 11 Scattered radiation
- 12 Write about X-ray film developer solution
- 13 Write about general care of intensifying screens and cassettes
- 14 Define Grids and mention different types of grids with one example for each
- 15 Ultrasound

SHORT ANSWERS

10x2=20

- 16 Periodic table
- 17 Nuclear Fission. Give one example
- 18 Capacitor
- 19 Beta decay
- 20 Kv and Ma factors for Chest X-ray
- 21 Grid ratio
- 22 Write uses of cones
- 23 Mention methods of drying of films
- 24 Rotating anodes
- 25 Define Isotope and give one example

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY(DMIT)
TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS:100
QP CODE: 6121
RADIOGRAPHY POSITIONING & RADIOGRAPHIC PHOTOGRAPHY
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 ALARA concept
- 2 Radiation effects
- 3 Positioning aids
- 4 Skull views
- 5 Principles in protection
- 6 Hounsefield number
- 7 Linear attenuation coefficient
- 8 Collimator
- 9 Beam limiting devices
- 10 Grids

SHORT ANSWERS

20x3=60

- 11 Focal spot
- 12 Uses of cones
- 13 Genetic effects of radiation
- 14 Genetically significant dose
- 15 Claustrophobia
- 16 Skyline view of patella
- 17 Pixel and voxel
- 18 Non Stochastic effects of ionizing radiation
- 19 Stochastic effects of ionizing radiation
- 20 Sternum
- 21 Sources of radiation
- 22 Views for scaphoid
- 23 Orbital meatal line and its significance
- 24 Lead masks
- 25 Film fog
- 26 CT artifacts
- 27 Filters
- 28 Occupational safety and health administration
- 29 Source to image distance
- 30 Kvp

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN OPERATION
THEATRE TECHNOLOGY (DOTT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 3131, ANAESTHESIA & ALLIED TOPICS

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Classify intravenous induction agents. Describe in detail about Propofol
- 2 What is epidural anesthesia ? How is the procedure done? What are the complications
- 3 What is premedication ? Describe the drugs given as premedication. Write a brief note on Fentanyl

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Succinylcholine
- 5 Basic life Support
- 6 Lithotomy position
- 7 Pre anesthetic evaluation
- 8 ASA Grading
- 9 Mac. Intosh Laryngoscope
- 10 Pulseoximeter
- 11 Electrical Hazards in OT
- 12 Lignocaine
- 13 Bain's Circuit
- 14 Laryngeal Mask Airway
- 15 Spinal needles

SHORT ANSWERS

10x2=20

- 16 Neostigmine
- 17 Waste Management
- 18 Dexamethasone
- 19 Atropine
- 20 Draw a neat labelled diagram of Endotracheal tube
- 21 Name 2 blood products
- 22 Isoflurane
- 23 Normal saline
- 24 Oxygen cylinder
- 25 Midazolam

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY
(DOT &AT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 6131, ANAESTHESIA & ALLIED TOPICS

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Classify neuromuscular blocking agents. Write a brief note on Atracurium
- 2 ASA grading
- 3 Non invasive monitors
- 4 Indications of Spinal Anesthesia
- 5 What is Difficult airway algorithm?
- 6 Basic life support
- 7 Normal saline
- 8 Draw a neat labelled diagram of Endotracheal tube
- 9 Principles of Anesthesia Machine
- 10 What is premedication ? Name few premedication drugs

SHORT ANSWERS

20x3=60

- 11 Isoflurane
- 12 Waste management in OT
- 13 Glycopyrrolate
- 14 Lignocaine
- 15 Ondansetron
- 16 Dexamethasone
- 17 Oxygen cylinder
- 18 Sedation
- 19 Intravenous cannula
- 20 Laryngeal mask airway
- 21 Electrical hazards in OT
- 22 Bains circuit
- 23 Pre oxygenation
- 24 Atropine
- 25 Central venous pressure monitoring
- 26 Supine position
- 27 Thiopentone
- 28 Informed written consent
- 29 Defibrillator
- 30 Record keeping

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA /III CERTIFICATE COURSE IN MEDICAL RECORDS TECHNOLOGY
(DMRT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3141, MEDICAL TERMINOLOGY (WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

1. ANSWER THE FOLLOWING 3x 5 =15
 - a) Differentiate between Prefix, Suffix & Root with one example?
 - b) Name five Plains of the body?
 - c) Define Eponyms & Give three example?
2. GIVE THE MEANING FOR THE FOLLOWING PREFIX 5x1=5
 - a) Contra b) Dys c) Hyper d) Endo e) Trans
3. GIVE THE MEANING FOR THE FOLLOWING SUFFIXES 5x1=5
 - a) Mania b) Oma c) Pathy d) Scopy e) Plasty
4. GIVE THE MEANING FOR THE FOLLOWING ROOTS 5x1=5
 - a) Derm b) Cardi c) Enter d) Osteo e) Lip
5. GIVE THE MEANING FOR THE PHOBIAS 10x1=10
 - i) Acrophobia ii) Anemophobia iii) Chromatophobia iv) Febre Phobia
 - v) Dipsuphobia vi) Polyphobia vii) Pharacophobia viii) Photophobia
 - ix) Osmophobia x) Ochlophobia
6. DIFFERENTIATE THE FOLLOWING TERMS 5x2=10
 - i) Aural & Oral
 - ii) Cystostomy & Cystotomy
 - iii) Endemic & Epidemic
 - iv) Fascial & Facial
 - v) Larynx & Pharynx
7. WRITE THE TERMS FOR THE FOLLOWING NUMERALS 5x1=5
 - a) One b) Four c) Five d) Ten Lakhs e) Six
8. GIVE THE MEDICAL TERMS FOR THE FOLLOWING 10x1=10
 - a) Crushing of Stones in the bladder b) Suppurative inflammation of the uterus
 - c) Paralysis of one or more of nerves of the eye d) The term for Pain in the Joints
 - e) Deficiency of White blood cells f) Pus in the body cavity
 - g) Inflammation of the Vertebrae h) The term for removal of the tonsil
 - i) Formation of Blood Clot j) Suture of Torn Cervix Uteri
9. DEFINE THE FOLLOWING 10x1=10
 - a) Anemia b) Angiothrombosis c) Dysphagia d) Hemiplegia e) Hematoma
 - f) Myopathy g) Otodynia h) Dehydration i) Nephropexy j) Spondylitis
10. EXPAND THE FOLLOWING ABBREVIATIONS 10x1=10
 - a) I.V.H b) Hb c) F.T.P d) I.C.U e) D.O.B f) E.C.G g) A.C.V.D h) G.T.T
 - i) Ca j) F.B
11. GIVE THE MEANING FOR THE FOLLOWING COLOURS 5x1=5
 - a) Leucos b) Cirrhos c) Albus d) Erythros e) Melan

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY(DMRT)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS:100

QP CODE: 6141, MEDICAL TERMINOLOGY(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 What are the chief sources of Medical terminology? Give two example
- 2 Name the planes of the body
- 3 Define suffix and write any 3 suffixes with meanings
- 4 Define abortion and name the different types of abortion
- 5 Write the anatomical divisions of abdomen
- 6 What is the purpose of learning Medical terminology?
- 7 Name the bones of the lower limb
- 8 Define prefix and write 3 prefixes with meanings
- 9 Define Eponyms and write any three eponyms
- 10 Define phobia and write any 3 phobias with meanings

SHORT ANSWERS

20x3=60

- 11 Differentiate between Oral and Aural
- 12 Give the suffix for: a) Blood b) oma c) Inflammation
- 13 Give the roots for: a) stone b) White c) rectum
- 14 a) Downward displacement of the kidney is called.....
b) Hemorrhage in joints is called -----
c) Black stools of the new born is called -----
- 15 Differentiate between Mastitis and Mastoiditis
- 16 a) Pimples of cheek and nose is called-----
b) Decrease in white blood cells is called -----
c) Inflammation of heart and blood vessels is called-----
- 17 Define the terms a) Alopecia b) abasia c) Aerophagia
- 18 Define the terms a) Adenomalacia b) Angiodermatitis c) Craniclasia
- 19 Define the terms a) Gastralgia b) Haemolysis c) Glycopenia
- 20 Define the terms a) Tonsillectomy b) Gastrectomy c) Rhinoplasty
- 21 Define the terms a) Gastrocele b) Hyperglycemia c) Hepatomegaly
- 22 Define the terms a) Anaemia b) Adrenal c) Antipyretic
- 23 Give the meaning for a) Cerebro b) Dactyl c) Procto
- 24 Give the meaning for a) Algia b) Penia c) Spasm
- 25 Give the meaning for a) Centesis b) Pexy c) Tripsy
- 26 Give the meaning for a) Cele b) Malacia c) Pathy
- 27 Give the meaning for a) Ab b) Dys c) Dia
- 28 Give the meaning for a) Anaxophobia b) Cynophobia c) Bacteriophobia
- 29 Give the meaning for a) Monos b) Deca c) Mega
- 30 Give the meaning for a) Albus b) Erythros c) Polios

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN DIALYSIS TECHNOLOGY
(DDT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3151

FUNDAMENTALS OF HEMODIALYSIS & COMPONENTS
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Explain the anticoagulation techniques used in Hemodialysis
- 2 Write an essay on possible complications in a patient on dialysis
- 3 Name the types of dialysers. Describe 3 principles of hemodialysis. Define and classify flux and efficiency of dialysers

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Heparin free dialysis
- 5 Management of Anaemia
- 6 Proportioning of dialysate delivery
- 7 Universal precautions in dialysis unit
- 8 Deionization
- 9 Access recirculation
- 10 Dry weight
- 11 Dialysis disequilibrium syndrome
- 12 Alarms and monitors in dialysis machine
- 13 First use syndrome
- 14 Formaldehyde
- 15 Preparation of dialysate

SHORT ANSWERS

10x2=20

- 16 Saline rinse
- 17 Urea reduction ratio
- 18 Mention two antihypertensive drugs used in renal failure patients
- 19 Mention two important serum electrolytes
- 20 Medical problems associated with hemodialysis
- 21 Two Types of EPO
- 22 Dialyzable drugs
- 23 Vaccines used in renal failure patients
- 24 Non-medical members of dialysis team
- 25 Name two plasma proteins

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)
TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS:100
QP CODE: 6151, DIALYSIS, PAPER-I
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Indications and complications of plasmapheresis
- 2 Therapeutic Apheresis
- 3 Ultrafiltration
- 4 Composition of standard Hemodialysis solution
- 5 Techniques of AVF Cannulation
- 6 Heparin Free haemodialysis
- 7 Non-infectious complications with dialysis by catheter
- 8 Write a note on adequacy of haemodialysis
- 9 Peritoneal Equilibration Test (PET)
- 10 Dialyzer reuse

SHORT ANSWERS

20x3=60

- 11 Three pore model in peritoneal Dialysis
- 12 Drugs used in Heparin induced Thrombocytopenia
- 13 Four Oral antidiabetic drugs
- 14 Types of Dialysis closure
- 15 Saline Rinse
- 16 Four causes of chronic kidney disease
- 17 Cause of bleeding in Dialysis patients
- 18 Types of Erythropoietin
- 19 Temperature Sensors
- 20 Causes of Muscle cramps
- 21 Indications to start Dialysis
- 22 Monitoring of AV Fistula
- 23 Causes of death in hemodialysis patients
- 24 Pulse and Blood pressure - Importance
- 25 Blood tests in evaluation of anemia in dialysis patients
- 26 Name three diuretics
- 27 Name newer anticoagulants
- 28 Name four foods to be avoided by dialysis patients
- 29 Causes of fluid overload in PD Patients
- 30 Residual Renal function

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN OPHTHALMIC
TECHNOLOGY (DOT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 3161, OPHTHALMOLOGY, PAPER-I

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

1 Define retinoscopy. Mention its types and stages and briefly describe its procedure

2 Name uses and maintenance of surgical instruments for cataract surgery

3 Cutting Eyelashes before Cataract Surgery. How and Why?

SHORT NOTES -ANSWER ANY TEN

10x5=50

4 Indications and contraindications of contact lenses

5 Gonioscopy

6 Intra ocular lens power calculation

7 Discuss centering of the lens

8 Chalazion surgery

9 Cycloplegic refraction

10 OT fumigation

11 Optical aberrations

12 Define low vision and add a note on low vision aids

13 Color vision testing and its importance

14 Lacrimal Syringing

15 Name surgical Instruments used in Cataract Surgery

SHORT ANSWERS

10x2=20

16 Lantern test

17 Maddox rod test

18 Schiottz tonometer

19 Transposition of toric lenses

20 Trial set and its accessories

21 Pediatric spectacle prescription

22 Tests for binocular single vision

23 Toric lenses

24 Post mydriatic test

25 Describe simple transposition of lenses and its importance

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN OPHTHALMIC TECHNOLOGY (DOT)
TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS:100
QP CODE: 6161, OPHTHALMOLOGY, PAPER-I
(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Sterilization of ophthalmic instruments
- 2 How do you fumigate an Eye OT?
- 3 Maintenance of operating microscope
- 4 Technique of scrubbing, Gloving & Gowning
- 5 Calibration of Keratometer
- 6 Instruments used for DCR surgery
- 7 Nursing case in ophthalmology
- 8 How do you prepare a cataract patient for cataract surgery?
- 9 Purpose and benefits of aseptic technique in OT
- 10 Cleaning and dressing the Eye after ophthalmic surgery

SHORT ANSWERS

20x3=60

- 11 Trimming of Eye lashes
- 12 Connecting cardiac monitors
- 13 Uses of cryo machine
- 14 Pachymeter
- 15 Types of autoclaves
- 16 Types of retinoscopes
- 17 Instrument sterilization in minor OT
- 18 What are the records to be maintained in OT?
- 19 Drugs used in cataract surgery
- 20 Uses of diathermy
- 21 Instruments used in chalazion surgery
- 22 Drugs used in GA cases
- 23 Packing of sterilization bin
- 24 Drugs used for topical anaesthesia
- 25 Sterilization of phacotubings
- 26 Starting & care of IV Line
- 27 Maintenance of OT register
- 28 Lensometer
- 29 Bed making
- 30 Sutures used in cataract surgery

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS:45

QP CODE: 3171, COMPLETE DENTURES

(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY

1 x 10=10

- 1 Describe in detail about principles of teeth arrangement

SHORT NOTES

5x5=25

- 2 Mean value articulator
- 3 Finishing and polishing of denture
- 4 Principles of anterior teeth selection
- 5 Relining and rebasing
- 6 Curing cycle

SHORT ANSWERS

5 x 2=10

- 7 Curve of spee
- 8 Festooning
- 9 Splint
- 10 Beading and Boxing
- 11 Different types of casts

**KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
ANNUAL EXAMINATION, NOVEMBER 2021
III YEAR DIPLOMA IN DENTAL MECHANICS (DDM)
TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS:50
QP CODE: 6171, COMPLETE DENTURES
(WRITE IN BLUE ANSWER BOOK)**

NOTE Answer the questions in order

SHORT NOTES- ANSWER ANY FOUR

4 x 5=20

- 1 Posterior palatal seal area
- 2 Tissue conditioner
- 3 Advantages of immediate denture
- 4 Define balanced occlusion and factors affecting it
- 5 Classify articulators and write in detail about mean value articulator

SHORT ANSWERS

10 x 3=30

- 6 Boundaries of buccal shelf area
- 7 Posterior tooth form
- 8 Remounting of casts
- 9 Define relining and materials used
- 10 Cast preparation
- 11 Difference between natural artificial teeth
- 12 Waxing of trial denture
- 13 SPA factor
- 14 Finishing polishing of the denture
- 15 Beading and Boxing

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS:45

QP CODE: 3181, DENTAL HYGIENE & ORAL PROPHYLAXIS

(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY

1 x 10=10

- 1 Name mechanical plaque control methods. Write in detail about inter dental aids

SHORT NOTES

5x5=25

- 2 Write macroscopic features of gingival
3 Describe cemento-enamel junction (CEJ)
4 Mention functions of periodontal ligament
5 Define and Classify dental plaque
6 Periodontal probe

SHORT ANSWERS

5 x 2=10

- 7 Periodontal pocket
8 Disclosing agents
9 Gingival abscess
10 Explorers
11 Fluoride varnish

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN DENTAL HYGIENE (DDH)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 6181

ETIOLOGY & PATHOGENESIS OF PERIODONTAL DISEASES

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES- ANSWER ANY EIGHT

8 x 5=40

- 1 Macroscopic features of gingiva
- 2 Functions of saliva
- 3 Gingival recession
- 4 Chronic periodontitis
- 5 Stages of gingivitis
- 6 Principal fibres of periodontal ligament
- 7 Acute herpetic gingivostomatitis
- 8 Periodontal pocket
- 9 Theories of mineralization of calculus
- 10 Stages of dental plaque formation

SHORT ANSWERS

20 x 3=60

- 11 Attached gingiva
- 12 Gingival col
- 13 Classify dental plaque
- 14 Ankylosis of tooth
- 15 Color of gingiva
- 16 Osteoblasts
- 17 Dehiscence
- 18 Blood supply to gingival
- 19 Name acute gingival lesions
- 20 Cemento enamel junction (CEJ)
- 21 Basal bone
- 22 Classification of dental calculus
- 23 Classification of gingival recession
- 24 Name crystal of dental calculus
- 25 Treatment of ANUG
- 26 Non keratinized structures of gingiva
- 27 Name theories of calculus formation
- 28 Gingival sulcus
- 29 Alveolar bone proper
- 30 Periodontal abscess

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 5191, SECTION-A, PATHOLOGY

(WRITE IN GREEN ANSWER BOOK)

NOTE Answer the questions in order

SHORT NOTES - ANSWER ANY FOUR QUESTIONS

4 x 5=20

- 1 Discuss in detail the classification and laboratory diagnosis of Anaemia
- 2 Wound healing
- 3 Define Neoplasia. Discuss the difference between Benign and Malignant tumours
- 4 Pathogenesis and types of shock
- 5 Different types of Embolism with examples

SHORT ANSWERS

10 x 3=30

- 6 Necrosis
- 7 Hypertrophy
- 8 Peptic ulcer
- 9 Brain abscess
- 10 Arthritis
- 11 Atherosclerosis
- 12 Alcoholic liver diseases
- 13 Marasmus
- 14 CVC Lung
- 15 Laboratory diagnosis of Tuberculosis

QP CODE: 5192, SECTION - B, MICROBIOLOGY(RS -2 SCHEME)

SHORT NOTES - ANSWER ANY FOUR QUESTIONS

4 x5=20

- 16 Define and classify hypersensitivity. Add a note on class IV hypersensitivity
- 17 Lab diagnosis of Diphtheria
- 18 Zoonotic Infections
- 19 Active Immunity
- 20 Dry heat sterilization

SHORT ANSWERS

10 x 3=30

- 21 Name three bacteria causing diarrhoea
- 22 Name three endemic diseases
- 23 IgG antibody (Draw and label)
- 24 Name three bacteria causing Anaerobic Infections
- 25 List any three components of universal safety precautions
- 26 Draw a neat labelled diagram of Hepatitis B
- 27 Define significant bacteria
- 28 List polio vaccines
- 29 Name three disease caused by staphylococcus aureus
- 30 Name three Motile bacteria

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
FIRST YEAR ALL CERTIFICATE COURSES

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS:45

QP CODE: 1101, PHYSICS

(WRITE IN BLUE ANSWER BOOK)

NOTE Answer the questions in order

LONG ESSAY- ANSWER ANY ONE

1 x 10=10

1 Explain work, power and energy with units

2 Define radioactivity. Explain emission of α , β and γ rays with sketch

SHORT NOTES- ANSWER ANY FIVE

5x5=25

3 Refraction of light with sketch

4 State Ohm's law and its expression

5 Coulomb's law

6 Perfect gas and equation

7 Surface tension and effects

8 Newton's law of gravitation

9 Capacitor with sketch and uses

SHORT ANSWERS

5 x 2=10

10 Speed and its unit

11 Units of temperature

12 Resistance and its unit

13 Scalars and vectors

14 Dispersion

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022

FIRST YEAR ALL DIPLOMA COURSES

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 4101, PHYSICS (WRITE IN GREEN ANSWER BOOK)

SHORT NOTES- ANSWER ANY EIGHT

8 x 5=40

- 1 Explain total internal reflection
- 2 What is thermometer? Explain the types
- 3 What is SI system of measurement? List the basic units used
- 4 What is P-N junction? Explain forward bias
- 5 **Match the Following**

i) Velocity	a) Steady flow of liquid
ii) Pressure	b) Temperature remains constant
iii) Stress	c) Force/area
iv) Streamline motion	d) deforming force
v) Isothermal process	e) ms^{-1}

- 6 Define sound. How does sound propagate?
- 7 Derive an expression for capacitors in series
- 8 Write a note on ultrasonography
- 9 Define work. What is its SI unit?
- 10 **Multiple Choice questions**
 - a) Distance between two consecutive crests and troughs is
 - i) Amplitude ii) Wavelength iii) Wave motion iv) Frequency
 - b) Atomic number is number of
 - i) Protons ii) Neutrons iii) Electrons iv) Molecules
 - c) The device which converts light energy into electrical energy is called
 - i) Transistors ii) Photoelectric cell iii) Diode iv) Thermistor
 - d) A substance which does not allow current to pass through it is.....
 - i) Conductor ii) Semiconductor iii) Insulator iv) Resistor
 - e) S.I Unit of frequency is.....
 - i) Metre ii) Hertz iii) Watt iv) Second

SHORT ANSWERS

20 x 3=60

- 11 Define centripetal and centrifugal force
- 12 Define a) Mass number b) Atomic number
- 13 Write a note on radioactive safety measures
- 14 Define i) Electric intensity ii) Electric field iii) Electric potential
- 15 Define osmosis and diffusion
- 16 What is principle of Colorimeter?
- 17 Define medical gas and mention the uses
- 18 What is a lens? Explain the types
- 19 What is resistance? mention its unit
- 20 **Fill in the blanks**
 - a. is a diagnostic medical procedure in which sound waves are used.
 - b. The degree of hotness and coldness is called
 - c. Real image is always
- 21 Write a note on Laser
- 22 Microscope and uses
- 23 State Pascal's law and give one example
- 24 What is doping? Name two doping agents
- 25 What is optical fibre? Write two applications
- 26 Give three reasons for using mercury in thermometer
- 27 Define a) Conductors b) Insulators with examples
- 28 What is power? Explain with unit
- 29 Write the properties of sound
- 30 **Answer in one word/sentence**
 - i) Which is the mode of heat transfer in liquids?
 - ii) Name the lens which converges the beam of light after refraction.
 - iii) What is isotope?

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
(DMLT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5103 BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Classify Lipids. Add a note on properties of lipids and lipoproteins
- 2 Classification of Enzymes with their examples
- 3 Name fat soluble vitamins. Mention the functions and deficiency diseases of Vitamin A
- 4 Preparation of normal solution, molar solution and percent solution
- 5 Colorimeter-diagram, parts & uses
- 6 List the commonly used indicators and their pH range. Suitable pH indicators used in different acid-base titrations
- 7 Reference forms. Maintenance of registers, log books and quality control records
- 8 Classification of acids and bases. Difference between base and alkali
- 9 Safety measures in Laboratory, maintenance of Lab data
- 10 Maintenance of Glass wares

SHORT ANSWERS

20 x3=60

- 11 Preparation of buffers solution using pH meter
- 12 Methods of measuring liquids, weighing solids
- 13 Reflex condenser uses and maintenance
- 14 Deep freezer maintenance and uses
- 15 Different types of Funnels and their uses
- 16 Types of Cuvettes and significance in Colorimeter
- 17 Write briefly on Anticoagulants
- 18 Saturation and super saturation solutions
- 19 Name three polysaccharides and functions of each
- 20 Essential amino acid with examples
- 21 Reference values
- 22 Difference between Nucleoside and Nucleotide
- 23 Normal constituents of urine
- 24 What are Isoenzymes?
- 25 Name three macro-elements
- 26 Plasma proteins
- 27 Maintenance of Laboratory statistics
- 28 Preparation of 0.1 N NaCl
- 29 Uses of Incubators
- 30 Different types of cleaning solutions

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY(DMLT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 2103 BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Explain with neat diagram atomic structure. Explain atomic weight, atomic number and molecular weight with examples
- 2 Define enzymes. Write in detail the factors affecting enzyme activity
- 3 Define carbohydrates. Classify them with suitable examples and add a note on functions of carbohydrates.

SHORT NOTES ANSWER ANY TEN

10x5=50

- 4 Operation and management and application of blood gas analyser
- 5 Types of salts with examples
- 6 Preparation of normal, molar and percent solution
- 7 Types of buffers with examples
- 8 Diagnostic importance of enzymes
- 9 Indicators - definition, uses and types
- 10 Hot air oven and incubator
- 11 Precautions and hazards in laboratory
- 12 Operation and management of spectrophotometer
- 13 Semi automated analyzer
- 14 Biochemical functions and deficiency manifestations of calcium.
- 15 Aromatic and aliphatic compounds with examples

SHORT ANSWERS

10x2=20

- 16 Different types of cuvettes
- 17 Name essential fatty acids
- 18 Uses of Indicators
- 19 Water bath
- 20 Analytical balance
- 21 Functions of proteins
- 22 Name two fat soluble vitamins
- 23 Name two ketone bodies
- 24 Rancidity
- 25 Two advantages of Dry chemistry analyzers

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022

I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR (DHI)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2111, COMMUNITY MEDICINE, PAPER-I

LONG ESSAY- ANSWER ANY TWO 2x10=20

- 1 Describe natural history of a disease; how do you apply different levels of prevention with reference to natural history of a disease - explain with suitable examples
- 2 Explain structure of heart with a neat diagram. Add a note on its functions
- 3 Enumerate different types Family. Discuss the advantages & disadvantages of Nuclear Family & Joint Family?

SHORT NOTES ANSWER ANYTEN 10x5=50

- 4 Iceberg Phenomenon of disease
- 5 Break point chlorination
- 6 Acculturation
- 7 Functions of digestive system
- 8 Medico social worker
- 9 Influence of cultural factors on the health of mother and child
- 10 Name the sense organs and their functions
- 11 Personal Hygiene
- 12 Socioeconomic Status
- 13 Doctor patient relationship
- 14 Thyroid gland
- 15 Effects of smoking on Health

SHORT ANSWERS 10x2=20

- 16 Pandemic
- 17 Social Pathology
- 18 Intelligence Quotient
- 19 Hidden Hunger
- 20 Enumerate the blood groups
- 21 Enumerate the stages of deglutition
- 22 RBC (Red Blood Cells)
- 23 World Health Day 2021
- 24 Primordial prevention
- 25 Name three social problems

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN HEALTH INSPECTOR (DHI)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 5111, COMMUNITY MEDICINE, PAPER-I

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Explain Epidemiological triad in detail with an example
- 2 Functions of Blood
- 3 Explain the Special Sense Organs
- 4 Briefly explain Dimensions of Health
- 5 Discuss the Social Problems in a Community
- 6 Difference between Rural and Urban Societies
- 7 Modes of Interventions under Primary Prevention – with an example each
- 8 Multifactorial causation of Disease
- 9 What is Joint Family? Discuss with regards to its Merits & Demerits
- 10 Personal Hygiene

SHORT ANSWERS

20 x3=60

- 11 Iceberg phenomenon.
- 12 Write functions of saliva
- 13 Write the names of any three endocrine glands
- 14 Functions of the Kidneys
- 15 Name any three dimensions of health
- 16 Crude death rate
- 17 Surveillance
- 18 Name three types of learning
- 19 Socialization
- 20 Problem families
- 21 Name three social security measures given to civil servants
- 22 Write three health consequences of alcohol abuse
- 23 Define culture and give two examples of cultural practice in our country
- 24 Write three functions of hospital
- 25 Enumerate factors determining Standard of Living
- 26 Acculturation
- 27 Define Anthropology
- 28 Write three functions of white blood cells
- 29 Write the name of plasma proteins
- 30 Positive Health

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY (DMXT)**

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE: 2122 ANATOMY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY- ANSWER ANY TWO

2x10=20

- 1 Name the parts of female reproductive system. Write briefly about uterus
- 2 Name the parts of gastrointestinal system. Write briefly about liver
- 3 Name the bones of lower limb. Write briefly about Hip joint

SHORT NOTES- ANSWER ANY THREE

3x5=15

- 4 Give examples for synovial joints
- 5 Small intestine
- 6 Right lung
- 7 Testis

SHORT ANSWERS

5 x2=10

- 8 Paranasal air sinuses
- 9 Name the muscle of abdomen
- 10 Histology of lymph node
- 11 Name types of cartilage
- 12 Name the anatomical planes

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY

(DMIT)

TIME: 1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 50

QP CODE: 5123 ANATOMY

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 1 Write briefly about heart
- 2 Types of joints with examples
- 3 Liver
- 4 Hip bone
- 5 Mammary gland

SHORT ANSWERS

10x3=30

- 6 Knee joint
- 7 Classify bones
- 8 Para nasal air sinuses
- 9 Diaphragm
- 10 Skull bone
- 11 Salivary glands
- 12 Carpal bones
- 13 Examples of synovial joints
- 14 Movements occurring at joints
- 15 Vertebral column

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY (DOTT)**

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 2132, SECTION-A, BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE **1x10=10**

- 1 What is the normal Blood glucose level? Explain the factors regulating blood glucose level. Add a note on Benedict's test
- 2 Explain tests for detection of sugar, urea, creatinine & proteins in blood

SHORT NOTES -ANSWER ANY TWO **2x5=10**

- 3 Describe urea cycle
- 4 Explain the renal regulation of blood pH
- 5 Write a note on the digestion and absorption of Carbohydrates

SHORT ANSWERS **5x2=10**

- 6 Benzidine test
- 7 Functions of albumin
- 8 Normal values of Urea and creatinine
- 9 Physical characteristics of urine
- 10 What are acids, bases and salts?

SECTION-B, PHARMACOLOGY (RS -1 SCHEME)

LONG ESSAY-ANSWER ANY ONE **1x10=10**

- 11 Mention the various routes of drug administration with examples. Write the advantages and disadvantages of Oral route of drug administration
- 12 Mention the Inhalational and Intravenous General Anaesthetics. Describe the actions and uses of Thiopentone sodium

SHORT NOTES -ANSWER ANY TWO **2x5=10**

- 13 First line drugs used in Tuberculosis
- 14 Morphine
- 15 Spinal Anaesthesia

SHORT ANSWERS **5x2=10**

- 16 Anaphylaxis
- 17 Name FOUR Benzodiazepines.
- 18 Mention TWO uses and TWO adverse effects of Sulfonamides
- 19 Mention FOUR drugs used in the treatment of Malaria
- 20 Mention TWO disinfectants used in the sterilization of OT

SECTION-C, MICROBIOLOGY (RS 1 SCHEME)

LONG ESSAY-ANSWER ANY ONE **1x10=10**

- 21 Define and classify sterilization, add a note on autoclave
- 22 Describe morphology, pathogenesis, and lab diagnosis of mycobacterium tuberculosis

SHORT NOTES -ANSWER ANY TWO **2x5=10**

- 23 Prophylaxis of hepatitis
- 24 Active immunity
- 25 Gaseous method of sterilization

SHORT ANSWERS **5x2=10**

- 26 Name two bacterial vaccines
- 27 Name two DNA viruses
- 28 Name two opportunistic fungi
- 29 Name any four normal flora of body
- 30 Different forms of bacteria

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN OPERATION THEATRE & ANAESTHESIA
TECHNOLOGY (DOT &AT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5133, SECTION-A, BIOCHEMISTRY
(WRITE IN GREEN ANSWER BOOK)

SHORT ESSAY - ANSWER ANY FIVE

5x5=25

- 1 Write the sources, daily requirements and functions of calcium
- 2 Define lipids. Classify lipids with examples
- 3 DNA structure and function
- 4 Write a note on ionisation of water
- 5 Renal function tests
- 6 Acid base balance and its disorders

SHORT ANSWERS

5x3=15

- 7 Essential fatty acids
- 8 Polysaccharides and its bio-medical importance
- 9 Vitamin A and its functions
- 10 Normal constituents of urine
- 11 Define acid, base and salt

SECTION-B, APPLIED PHARMACOLOGY (RS -2 SCHEME)

SHORT ESSAY - ANSWER ANY THREE

3x5=15

- 12 Name FOUR commonly used NSAIDs. Write the uses and adverse effects of NSAIDs
- 13 Uses and adverse effects of Corticosteroids
- 14 Name FOUR Local Anaesthetics. Explain the techniques of local anaesthesia
- 15 Inhalational route of administration of drugs

SHORT ANSWERS

5x3=15

- 16 Write three differences between crystalloids and colloids
- 17 Mention three groups of drugs used in Pre-anaesthetic medication
- 18 Write SIX uses of Sedative hypnotics
- 19 Name THREE emergency drugs used in OT and write one use for each
- 20 Mention three advantages and three disadvantages of Intravenous route of drug administration

SECTION-C, MICROBIOLOGY (RS2 SCHEME)

SHORT ESSAY - ANSWER ANY THREE

3x5=15

- 21 Louis Pasteur
- 22 Active immunity
- 23 Laboratory diagnosis of HIV
- 24 Biomedical waste disposal

SHORT NOTES

5x3=15

- 25 Name gaseous disinfectants
- 26 Prophylaxis for tetanus
- 27 Alcohol ,mode of action and uses
- 28 Types of hospital acquired infections
- 29 Candida albicans

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA /II YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 2142, SECTION-A, ANATOMY (WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE **1x10=10**

1 Name the parts of excretory system. Write briefly about kidney

2 Name the parts of respiratory system. Write briefly on trachea

SHORT NOTES -ANSWER ANY TWO **2x5=10**

3 Uterus

4 Stomach

5 Mention four muscles of abdomen and four muscles of thorax

SHORT ANSWERS **5x2=10**

6 Small intestine

7 Types of synovial joints

8 Name carpal bones

9 Parts of brain

10 Name the types of muscle tissue

SECTION-B, PHYSIOLOGY (RS -1 SCHEME)

SHORT NOTES-ANSWER ANY FOUR **4x5=20**

11 Composition and functions of blood

12 Name hormones of anterior pituitary, explain growth hormone

13 Transport of oxygen

14 Define artificial respiration. List two indications for it

15 Conducting system of heart

SHORT ANSWERS **5x2=10**

16 Name clotting factors

17 Define GFR and give its normal value

18 Define stroke volume

19 Function of saliva

20 Functions of ovary

SECTION-C, PATHOLOGY & MICROBIOLOGY

LONG ESSAY-ANSWER ANY ONE **1x10=10**

21 Mention different types of microscopes. Describe briefly about different investigations in microbiology

22 What are the various investigations done in Pathology

SHORT NOTES -ANSWER ANY TWO **2x5=10**

23 Write difference between gram positive and gram negative bacteria

24 Write a note on maintenance of medical records in pathology

25 Tuberculosis

SHORT ANSWERS **5x2=10**

26 Name 2 chemical tests for urine analysis

27 Define hypertrophy and hyperplasia

28 Name TWO fungal diseases

29 Name four culture media

30 Name TWO intestinal parasites

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE:5143, SECTION-A, ANATOMY
(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY TWO 2x5=10

- 1 Write types of synovial joints with examples
- 2 Liver
- 3 Testis

SHORT ANSWERS 10x3=30

- 4 Write three arteries of upper limb
- 5 Major salivary glands
- 6 Coverings of heart
- 7 Popliteal fossa
- 8 Larynx
- 9 Name the anatomical planes
- 10 Name any three muscles of upper limb
- 11 Name the lymphoid organs
- 12 Oesophagus
- 13 Aorta

SECTION-B, PHYSIOLOGY (RS 2 SCHEME)

SHORT NOTES - ANSWER ANY THREE 3x5=15

- 14 Describe hypoxia. Classify hypoxias
- 15 Neuro muscular junction
- 16 Composition and function of pancreatic juice
- 17 Renal function tests

SHORT ANSWERS 5x3=15

- 18 Contraceptive methods in males
- 19 Refractive errors
- 20 Functions of progesterone
- 21 Functions of WBC
- 22 Conductive system of heart

SECTION-C, PATHOLOGY & MICROBIOLOGY (RS 2 SCHEME)

SHORT NOTES- ANSWER ANY THREE 3x5=15

- 23 Define inflammation. Add a note on types with examples
- 24 Rheumatic Heart Disease and laboratory diagnosis
- 25 Etiology and types of carcinoma stomach
- 26 Tuberculosis of lung including primary complex

SHORT ANSWERS 5x3=15

- 27 Osteomyelitis
- 28 Hydronephrosis
- 29 Gall stones
- 30 Thyrotoxicosis
- 31 Name 3 parasitic infestation

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY (DDT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90
QP CODE: 2153, SECTION-A, BIOCHEMISTRY
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE 1x10=10

- 1 Explain creatinine synthesis. Add a note on creatinine clearance
- 2 Write in detail about Renal function tests

SHORT ESSAY- ANSWER ANY FIVE 5x5=25

- 3 Disorders of acid base balance
- 4 Inorganic constituents of normal urine
- 5 Maintenance of normal blood glucose level
- 6 Absorption of Carbohydrates
- 7 Factors & maintaining pH of blood
- 8 Blood glucose regulation

SHORT ANSWERS 5 x2=10

- 9 Benzidine test
- 10 Normal serum electrolyte level
- 11 Test for proteins in the urine
- 12 Benedict's test
- 13 Rothera's test

SECTION-B, MICROBIOLOGY

LONG ESSAY- ANSWER ANY ONE 1x10=10

- 14 Define sterilization, how is operation theater sterilization performed what are the necessary steps to be followed
- 15 Explain dialysis, what are the various types of dialysis, briefly differentiate hemodialysis and peritoneal dialysis

SHORT ESSAY- ANSWER ANY FIVE 5x5=25

- 16 Robert Koch
- 17 Endotracheal tube
- 18 Bacterial cell wall
- 19 Diagnosis of diptheria
- 20 Nosocomial infections
- 21 Robert Koch

SHORT ANSWERS 5 x2=10

- 22 Candidiasis
- 23 Universal precautions
- 24 Toxoids
- 25 DPT vaccine
- 26 Gram negative bacteria

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5153, SECTION-A, BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 1 Plasma proteins classification and their reference values
- 2 Discuss the concept of acid-base reaction
- 3 Write briefly on Liver function tests
- 4 Write in detail about different types of RO water
- 5 What are Isoenzymes? Give examples and clinical importance

SHORT ANSWERS

10x3=30

- 6 Universal Indicators
- 7 Deionised water
- 8 Deficiencies of Vitamin A
- 9 Name the types of RNAs. Mention their functions
- 10 Different methods of cholesterol estimation
- 11 Lipid profile
- 12 Normal serum calcium level? Write two functions of calcium
- 13 Lipoproteins
- 14 Water crystallization
- 15 Acid-base disorders

SECTION-B, MICROBIOLOGY (RS-2 SCHEME)

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 16 Pathogenicity of clostridium tetani
- 17 Moist heat sterilization
- 18 Morphology of bacteria
- 19 Operation theatre sterilization
- 20 Delayed hypersensitivity

SHORT ANSWERS

10x3=30

- 21 Pasteurization
- 22 Active immunity
- 23 Atopy
- 24 Joseph Lister
- 25 Line infections
- 26 Prophylaxis
- 27 Hepatitis infection
- 28 Classification of streptococci
- 29 Toxins
- 30 Live and killed vaccines

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN OPHTHALMIC
TECHNOLOGY (DOT)**

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2162, OPHTHALMOLOGY, PAPER-II

LONG ESSAY-AANSWER ANY TWO 2x10=20

- 1 Define Corneal ulcers. Types of Cornea ulcers. Write clinical features and treatment of corneal ulcers
- 2 What are the causes of Cataract. Workup of cataract patient before cataract surgery
- 3 Define Amblyopia. Types of Amblyopia. Write a note on Patching therapy

SHORT NOTES ANSWER ANYTEN 10x5=50

- 4 Define and classify Glaucoma
- 5 Define Tonometry. Explain Schiottz Tonometry
- 6 What are Cycloplegics? Name Cycloplegics and write their advantages and disadvantages
- 7 DCR. Method and advantages
- 8 Drugs used in Glaucoma
- 9 Local Anaesthetic drugs used in ophthalmology
- 10 Clinical features and treatment of Keratoconus
- 11 Blepharitis
- 12 Classification of Hypertension Retinopathy
- 13 Causes of Red eye
- 14 Schimers test
- 15 Causes of non-improvement of visual acuity

SHORT ANSWERS 10x2=20

- 16 Name two antiviral drugs used in eye
- 17 Name two antifungal drugs used in eye
- 18 Types of Cataract surgeries
- 19 Two types of LIG
- 20 Treatment of vitamin A Prophylaxis
- 21 Two Contraindications for Atropine use
- 22 Two signs in Glaucoma
- 23 Two anti-inflammatory drugs uses in ophthalmology
- 24 Two causes of Headache in ophthalmology
- 25 Two causes of watering of eye

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN OPHTHALMIC TECHNOLOGY (DOT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5163, OPHTHALMOLOGY, PAPER-II

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Define cataract .what are the causes for cataract?
- 2 Define squint. What are the types of squint?
- 3 Name 5 ocular emergencies and how do you refer them to a tertiary eye care centre
- 4 What is dacrocystitis ?how do you treat chronic dacrocystitis?
- 5 What is acute glaucoma? How will you treat it?
- 6 First aid management of chemical injuries
- 7 What is biometry? Mention the components of biometry and its use
- 8 Write a note on lacrimal syringing and its interpretation
- 9 Ophthalmia Neonatorum
- 10 What is amblyopia? Mention about its treatment?

SHORT ANSWERS

20 x3=60

- 11 Chalazion
- 12 Classification of Diabetic Retinopathy
- 13 Causes for Orbital cellulitis
- 14 Describe method to apply Eye shield
- 15 Three causes for sudden loss of vision
- 16 Types of allergic conjunctivities
- 17 Postoperative care after cataract surgery
- 18 Prophylaxis of vitamin A
- 19 Name any 3 tonometers
- 20 Three causes for preventive blindness
- 21 Three complications of cataract surgery
- 22 How do you check for visual fields
- 23 Cover test and its uses
- 24 Types of glaucoma
- 25 Name any 3 lid infections
- 26 Name 3 diagnostics in glaucoma
- 27 Three complications of hypermature cataract
- 28 Stages of binocular single vision
- 29 Name 3 ocular surgeries you know
- 30 Types of corneal ulcers

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA /II YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE: 2172, APPLIED ORAL ANATOMY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE

1x10=10

1 Write briefly the anatomy of the mandibular permanent 1st molar tooth with diagram

2 Temporomandibular joint (TMJ)

SHORT ESSAY- ANSWER ANY FIVE

5x5=25

3 Muscles of facial expression

4 Soft palate

5 Tooth carving

6 Overjet and overbite

7 Post palatal seal area

8 Significance of incisive papilla

9 Mandibular canine

SHORT ANSWERS

5 x2=10

10 Dentolabial sulcus

11 Cusp of cerebellum

12 Centre relation

13 Buccinator muscle

14 Rugae

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 50

QP CODE: 5172, APPLIED ORAL ANATOMY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY- ANSWER ANY FOUR

4x5=20

- 1 Write briefly about the anatomy of the permanent mandibular 1st molar tooth
- 2 Muscles of mastication
- 3 Teeth system
- 4 Mandibular nerve
- 5 Temporomandibular joint (TMJ)

SHORT ANSWERS

10 x3=30

- 6 Muscles of tongue
- 7 Facial artery
- 8 Branches of facial nerve
- 9 Human dentition
- 10 Labial frenulum
- 11 Compensatory curve
- 12 Overjet and overbite
- 13 Enamel
- 14 Occlusion
- 15 Parotid duct

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA /II YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

**QP CODE: 2183, SECTION-A, GENERAL PATHOLOGY &
MICROBIOLOGY**

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE

1x9=9

- 1 Mention types of wound healing. Factors affecting wound healing
- 2 Describe briefly etiopathogenesis of dental caries

SHORT ESSAY- ANSWER ANY FOUR

4x5=20

- 3 Vitamin D deficiency
- 4 Dental attrition
- 5 Malignant tumour
- 6 Anatomy of normal tooth
- 7 Acute inflammation
- 8 Leukoplakia

SHORT ANSWERS

3 x2=6

- 9 Signs of inflammation
- 10 Name 3 systemic diseases with oral manifestations
- 11 Name 3 dental anomalies

SECTION-B, PHARMACOLOGY (RS-1 SCHEME)

SHORT ANSWERS

5 x2=10

- 12 Write 2 sources of Vitamin A
- 13 Name 2 uses of Paracetamol
- 14 Name 2 uses of Metronidazole
- 15 Name 2 disinfectants used in OT
- 16 Name 2 Oral anticoagulants

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 50

QP CODE: 5183, SECTION-A, GENERAL PATHOLOGY &

MICROBIOLOGY

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 1 Write a note on oral manifestations of systemic diseases
- 2 Importance of maintenance of medical records in laboratory
- 3 Investigations done in microbiology
- 4 What is a consent form?
- 5 What is the role of laboratory in diagnosis of infectious diseases?

SHORT ANSWERS

5 x3=15

- 6 Name any 3 bacteria
- 7 Name any 3 parasites
- 8 Name any 3 investigations in microbiology
- 9 Infectious diseases
- 10 Name any three viruses

SECTION-B, APPLIED PHARMACOLOGY (RS 2 SCHEME)

SHORT NOTES-ANSWER ANY ONE

1 x5=5

- 11 Name four penicillin s, write two uses and two adverse effects of amoxicillin
- 12 Name five NSAID'S, mention three uses and three adverse effects of aspirin

SHORT ANSWERS

5 x2=10

- 13 Define antiseptic, give two examples
- 14 Write briefly on lignocaine
- 15 Mention four parental route of drug administration
- 16 Name two uses and two adverse effects of metronidazole
- 17 Name four glucocorticoids

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4193, SECTION-A, PHYSIOLOGY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 1 Describe the effects of hyper secretion of growth hormone
- 2 Describe hypoxia. Classify hypoxia
- 3 Olfactory pathway
- 4 Neuromuscular junction
- 5 Transport of oxygen in blood

SHORT ANSWERS

10x3=30

- 6 Functions of progesterone
- 7 Structure of cell membrane
- 8 Functions of ADH
- 9 Structure of neuron
- 10 Define Cardiac output and give its normal value
- 11 Enumerate types of muscles
- 12 Functions of saliva
- 13 Surfactant
- 14 Pregnancy tests
- 15 Muscle proteins and their functions

SECTION-B, BIOCHEMISTRY

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 16 Define carbohydrates. Classify carbohydrates with examples
- 17 Explain the Liver function tests
- 18 Write the sources dietary requirement and functions of Vitamin A
- 19 Explain the structure and function of a cell
- 20 Explain the clinical significance of enzymes with examples

SHORT ANSWERS

10x3=30

- 21 Essential Amino acids
- 22 Phospholipids and its importance
- 23 Calcium and its functions
- 24 Balanced diet
- 25 Detoxification reactions
- 26 Creatinine Clearance tests
- 27 Isoenzymes
- 28 Importance of Hormones on metabolism
- 29 Denaturation of protein
- 30 Poly unsaturated fatty acids (PUFAs)

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6193, P.T. IN TRAUMATOLOGY & ORTHOPAEDICS

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY EIGHT

8x5=40

- 1 Write about indications of Total Hip Replacement and its PT management
- 2 What are the types of Spinal deformities? Write about PT management of any one deformity
- 3 Write about assessment and PT management of Lateral epicondylitis
- 4 Define Torticollis and write about PT management of Torticollis
- 5 Write about Spinal canal stenosis and its PT Management
- 6 PT management of Shoulder instability
- 7 Define Spondylosis and write about PT management of Cervical Spondylosis
- 8 Write about different types of external fixators
- 9 What are the stages of Polio myelitis?
- 10 What are the deformities seen in Rheumatoid Arthritis? write about PT management of hand deformities

SHORT ANSWERS

20x3=60

- 11 Types of soft tissue injuries
- 12 Benefits of Closed kinematic chain exercises
- 13 PT management of Osteo arthritis of Knee
- 14 Causes of Thoracic out let syndrome and its PT management
- 15 Complications of Fractures of Upper limb bones and its PT management
- 16 PT management of Radial nerve injury due fracture of Shaft of humerus
- 17 PT management of Lateral ligament sprain of ankle
- 18 PT management of Phantom limb pain
- 19 Plantar fasciitis causes and PT management
- 20 Define Congenital TalipesEquino Varus and mention its surgical management
- 21 PT assessment of T.B. spine
- 22 Exercise plan for Ankylosis Spondylitis
- 23 Causes of Limb length discrepancy and methods of its assessment
- 24 Patellectomy and its PT management
- 25 Define Carpal tunnel syndrome and mention the causes
- 26 PT management of trigger finger
- 27 PT assessment of Piriformis syndrome
- 28 Define Osteomalacia and Osteopenia
- 29 PT management of septic arthritis of hip
- 30 Define subluxation with an example

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3102, PATHOLOGY
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Name different types of Haematoxylin. Write briefly about preparation of any one of them. Discuss the steps in H & E staining
- 2 Quality control in blood bank
- 3 Discuss about normal coagulation cascade. Write the normal ranges for PT & APTT. List the causes for increased PT& APTT

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Cross matching
- 5 Sputum examination
- 6 Osmotic fragility test
- 7 Mounting of museum specimen
- 8 Anticoagulants
- 9 Microwave processing
- 10 PAS staining
- 11 Semen analysis
- 12 Staining of bone marrow smears
- 13 Biomedical waste management
- 14 Errors in section cutting & methods to correct them
- 15 Cryoprecipitate

SHORT ANSWERS

10x2=20

- 16 Frozen section cutting
- 17 Embedding
- 18 Blood grouping
- 19 Name the stains used in cytology
- 20 Name six transfusion reactions
- 21 Coomb's test
- 22 Collection of cerebrospinal fluid (CSF)
- 23 Demonstration of Barr bodies
- 24 Sickling test
- 25 Name three clearing agents used in histopathology

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6103 PATHOLOGY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Osmotic fragility test
- 2 Biomedical hospital waste management
- 3 Transfusion reactions
- 4 H and E staining procedure
- 5 Preparation of bone marrow smear for examination and staining of bone marrow slides
- 6 Cross matching
- 7 APTT
- 8 Frozen section
- 9 Histokinette
- 10 Mounting of museum specimen

SHORT ANSWERS

20 x3=60

- 11 Errors in section cutting
- 12 PAS staining
- 13 Fresh frozen plasma
- 14 Reverse blood grouping
- 15 Normal PT range and causes of increased PT
- 16 Fetal hemoglobin
- 17 Coomb's test
- 18 Name three clearing agents
- 19 Types of hematoxylin
- 20 Bleeding time
- 21 Normal differential count
- 22 Screening test for donor
- 23 Rh typing
- 24 Embedding
- 25 Disposal of expired blood
- 26 PERLS stain
- 27 Sites of bone marrow aspiration
- 28 Microwave tissue processing
- 29 AFB staining
- 30 Laboratory Information System (LIS)

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN HEALTH INSPECTOR (DHI)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3112, COMMUNITY MEDICINE, PAPER-II
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Describe the causes of maternal mortality in India. Add a note on its prevention and control
- 2 Define Family planning. Classify contraceptive methods. Add a note on Terminal methods of contraception
- 3 Discuss the common Health problems of the Elderly. Add a note on Social Security

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Role of Health Inspectors in MCH programme
- 5 Objectives of antenatal care
- 6 Principles of Health Education
- 7 Barriers in Communication
- 8 Complications of Postnatal Care
- 9 Employees State Insurance Act
- 10 Problems of a preschool child
- 11 Barrier methods of Contraception
- 12 Enumerate social problems. Write in detail about Alcoholism
- 13 School health programme
- 14 Indian Red Cross Society
- 15 Explain disaster cycle in details with the help of flowchart

SHORT ANSWERS

10x2=20

- 16 Expand AYUSH
- 17 Baby friendly hospitals initiatives
- 18 Kangaroo Mother Care
- 19 Two way communication
- 20 Target Couple
- 21 Uses of Demography- Any Two
- 22 Five cleans of intranatal care
- 23 Weaning
- 24 Child Labour
- 25 Census

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN HEALTH INSPECTOR (DHI)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 6113, COMMUNITY MEDICINE, PAPER-II

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Define Antenatal care. Write the Objectives of Antenatal care
- 2 Define Family planning. Classify contraceptive methods
- 3 Define health education. Mention the principles of health education
- 4 Demography Cycle
- 5 Barriers of Communication
- 6 First Aid
- 7 Health problems in adolescents
- 8 Complications of post natal period
- 9 Baby friendly hospitals initiatives
- 10 Janani Suraksha Yojana

SHORT ANSWERS

20 x3=60

- 11 World Health day Theme 2021
- 12 Safe period (rhythm method)
- 13 Juvenile delinquency
- 14 MTP Act
- 15 Oral Contraceptive Pills
- 16 Panel Discussion
- 17 Types of Communication
- 18 Approaches to health education
- 19 Exclusive Breast Feeding
- 20 Child abuse and its prevention
- 21 Write drugs commonly used by health inspector
- 22 ASHA
- 23 Expand JSSK, IMNCI and CNAA
- 24 Age specific fertility rate
- 25 Infant Mortality Rate
- 26 Nutritional Rehabilitation centre
- 27 Demographic Gap
- 28 ESI Act
- 29 Anganwadi
- 30 PC and PNDT Act

**KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN MEDICAL X-RAY TECHNOLOGY (DMXT)**

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3122, RADIOGRAPHY INCLUDING MEDICAL RECORDS

(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Define good medical record and write about arrangements of medical records in hospital management. Add a note on MLC medical form
- 2 Write about intravenous pyelography (IVP) -preparation, procedure
- 3 Mention the parts of MRI machine with labelled diagram. Mention any five sequences

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Briefly write about Mobile radiography
- 5 Write about contrast reaction and first aid in radiology department
- 6 Sinogram
- 7 Barium swallow- patient preparation and procedure
- 8 Write about chest x-ray positioning. Any five
- 9 Write about C-arm
- 10 Loopogram
- 11 Write short note on Picture archiving, computerising and storing (PACS)
- 12 Short note on Ionic and non ionic contrast agent
- 13 Preparation of patient and procedure - HSG
- 14 Write about Bucky and its uses
- 15 Write about voltage of x ray machine and its effect on x ray imaging

SHORT ANSWERS

10x2=20

- 16 Write centring for chest x ray(AP) and L.S. spine (AP)
- 17 Uses of binders in imaging
- 18 Milliampere (mA)
- 19 General x-ray film storage
- 20 Stock maintenance
- 21 Immobilisation
- 22 Two uses of collimation
- 23 X ray film numbering
- 24 Name two radiotherapy equipments
- 25 Write full form of DSA and MRI

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY (DMIT)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 6123, SPECIAL PROCEDURES, RADIOGRAPHIC

PHOTOGRAPHY AND MEDICAL RECORDS

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT 8x5=40

- 1 Small bowel enema – technique and procedure
- 2 Post operative T tube cholangiography- radiographic position and procedure
- 3 Patient preparation, positioning and procedure of barium meal follow through
- 4 Micturating cystourethrography (MCU)
- 5 Arteriography- Technique and its uses
- 6 HSG- hysterosalpingogram – instruction given to patient, preparation and procedure
- 7 Short note on role of MRI in central nervous system investigation and mention two indications
- 8 Mobile radiography
- 9 Foreign body localisation
- 10 Short note on contrast media, types and sides effects

SHORT ANSWERS 20 x3=60

- 11 Write three differences of single plane and biplanar imaging
- 12 First aid in contrast reactions
- 13 Bronchography – definition and procedure
- 14 Short note on Fistulogram
- 15 Name three instruments used in arteriography
- 16 Percutaneous nephrostomy
- 17 Three uses of ultrasound scan in urinary tract system
- 18 Short note on mammography
- 19 Hypotonic duodenography – technique
- 20 Forensic radiography
- 21 Define radio isotope and mention two uses in radiology
- 22 Lymphangiography
- 23 Myelography- technique
- 24 Arthrography –technique
- 25 Uses of barium studies
- 26 Write three indications for IVU(intravenous urography)
- 27 Types of contrast media
- 28 Write uses of digital subtraction angiography
- 29 Sialography
- 30 Peripheral venography of lower limb

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN OPERATION THEATRE TECHNOLOGY (DOTT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3132, OPERATIVE PROCEDURE
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Laparoscopic surgery, mention the advantages and name five surgeries done by laparoscopic methods
- 2 Special features of orthopaedic surgery
- 3 Define shock. Types of shock and explain in detail about hypo-volemic shock

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Diabetic foot care
- 5 Plaster of Paris(POP) slat and its application
- 6 Bronchoscopy
- 7 TURP
- 8 Robotic surgery
- 9 Retractors
- 10 Burns
- 11 Renal stones
- 12 Sebaceous cyst
- 13 What is transplantation? Describe the types of transplantation
- 14 Hydrocele
- 15 Buerger's disease (TAO)

SHORT ANSWERS

10x2=20

- 16 Fissure in ano
- 17 Universal precautions on surgery
- 18 Indirect laryngoscopy
- 19 Bowel preparation
- 20 Debridement
- 21 Traction for fracture
- 22 Appendectomy
- 23 Suction drain
- 24 Sitz bath
- 25 Abdominal drain

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN OPERATION THEATRE & ANAESTHESIA
TECHNOLOGY (DOT &AT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6133, OPERATIVE PROCEDURES

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Heller's Cardiomyotomy
- 2 Fracture femur
- 3 Cataract surgery
- 4 Procedure of Fibroadenoma
- 5 Fundoplication
- 6 Colostomy
- 7 Preparation of patient for emergency caesarean section
- 8 Repair of tendons and ligaments
- 9 Treatment for liver abscess
- 10 Thyroidectomy

SHORT ANSWERS

20 x3=60

- 11 MTP
- 12 Lymph node Biopsy
- 13 Fissures
- 14 Incision and drainage
- 15 Episiotomy
- 16 Tonsillectomy
- 17 Suction drain
- 18 Foreign body nose
- 19 Oro Pharyngeal airway
- 20 Endoscopy
- 21 Concepts of laparoscopic surgery
- 22 Indications for splenectomy
- 23 Aspiration
- 24 Indication for above knee amputation
- 25 Burst abdomen
- 26 Care of Colostomy
- 27 Cast application
- 28 Nasal operative procedures
- 29 Urinary Catheterisation
- 30 Pilonidal sinus

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3142, HOSPITAL ADMINISTRATION
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Define hospital. Write in detail the role and functions of hospitals in health care
- 2 Define Controlling. Write in detail the control techniques in management
- 3 Define evaluation. Write in detail about the analysis of hospital organization

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Team work
- 5 Mudaliar committee
- 6 Health Insurance
- 7 Role of hospital in primary health care
- 8 Nosocomial infection
- 9 PERT
- 10 History of hospitals in India
- 11 Ambulance services
- 12 Hospital environment
- 13 Two bin system
- 14 Medical audit
- 15 Functions of house keeping

SHORT ANSWERS

10x2=20

- 16 Injection room
- 17 Actuating
- 18 Purchase committee
- 19 Co-ordination
- 20 Infection control committee
- 21 Diet counseling
- 22 Two bin system
- 23 Functions of ambulance services
- 24 Paramedical worker
- 25 Waiting area in Out-patient department

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE
COURSE IN DIALYSIS TECHNOLOGY (DDT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

**QP CODE: 3152, RENAL REPLACEMENT THERAPY OTHER
THAN HAEMODIALYSIS & PATIENT TEACHING**
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Peritoneal dialysis
- 2 Renal replacement therapy
- 3 Renal failure

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Poisoning and dialysis
- 5 Indications for dialysis
- 6 AV fistula
- 7 Monitoring of dialysis in ICU
- 8 Dialysis Team
- 9 Plasmapheresis
- 10 Complications of Dialysis
- 11 CAPD
- 12 Anticoagulation
- 13 Immunization for HD patients
- 14 Concentration gradient
- 15 Anti hypertensives

SHORT ANSWERS

10x2=20

- 16 Anatomy of Kidney
- 17 Renal function test
- 18 Erythropoietin
- 19 Iron therapy
- 20 HIV and renal replacement therapy
- 21 Psychological problems with HD
- 22 Renal transplant
- 23 Dialysis in acutely ill patients
- 24 Anatomy of peritoneum
- 25 Artificial kidney

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6153, DIALYSIS PAPER-II

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Peritoneal dialysis
- 2 Plasmapheresis
- 3 Standard dialysate composition
- 4 Hemo diafiltration
- 5 Dram water treatment part and label parts
- 6 Brief about central venous catheterization
- 7 Anti Hypertensive
- 8 Vaccination in dialysis patient
- 9 Arterio venous fistula
- 10 Psychosocial problems in chronic hemodialysis patient

SHORT ANSWERS

20 x3=60

- 11 Name 3 poisoning can be treated with dialysis
- 12 Types of CRRT
- 13 Three indications for HD catheter remover
- 14 Priming of HD Machine
- 15 Diuretics
- 16 Dialyser reuse
- 17 CAPD peritonitis
- 18 Three Examples of biocompatible dialyser
- 19 Pre dialysis patient assessment
- 20 CAPD
- 21 Indications for CRRT
- 22 SLED
- 23 Anticoagulation
- 24 Inotropes
- 25 PD fluid composition
- 26 Difference between acute PD and CAPD
- 27 Assessment of adequacy in CAPD
- 28 Peritonitis
- 29 Responsibilities of dialysis team
- 30 Dialysis in ICU

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN OPHTHALMIC TECHNOLOGY (DOT)

TIME: 3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3162, OPHTHALMOLOGY, PAPER-II
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Mention in detail the OPD & IPD record keeping?
- 2 Write in detail about National programme for control of blindness
- 3 Describe School Screening in detail

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Minor surgical records maintenance
- 5 Transportation of donor eyes
- 6 Vitamin A deficiency
- 7 Alphabetical Index
- 8 Vocational training of blind
- 9 Use of cycloplegics for refraction in children
- 10 Preparation of eyepads
- 11 What are the camp activities done in your hospital
- 12 ICD 10
- 13 How do you prevent common eye disease?
- 14 Differences between spherical and cylindrical lens
- 15 How is an optometrist useful in the field of ophthalmology

SHORT ANSWERS

10x2=20

- 16 Two charts for NEAR vision testing
- 17 Two preservation media for eyeball preservation
- 18 Brief on consent format
- 19 Two uses of prisms in ophthalmology
- 20 Mention 2 minor surgical procedures
- 21 Need and methods of eye health education
- 22 Types of bifocal lenses
- 23 Disease index
- 24 Pinhole testing
- 25 Numerical index

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN OPHTHALMIC TECHNOLOGY (DOT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6163, OPHTHALMOLOGY, PAPER-II

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 What are methods to identify shallow anterior chamber?
- 2 What are consent forms? Describe the contents of consent forms ?
- 3 What is Rehabilitation of blind? Mention the types of rehabilitation
- 4 What if the importance of fundus evaluation in patients?
- 5 Describe the role of eye camps in rural population?
- 6 How is lacrimal syringing done? What is its importance?
- 7 Write a note on biometry for IOL calculation?
- 8 Role of protective eye gear at workplace
- 9 What is school eye screening ? Importance of the same ?
- 10 Importance of medico-legal record maintenance

SHORT ANSWERS

20 3=60

- 11 Three side effects of indiscriminate use of steroids
- 12 Three methods who want to employ to motivate general public for eye donation
- 13 Name 3 causes for redevye
- 14 Name 3 causes for painful eye conditions
- 15 Importance of fundus examination at every visit of a patient
- 16 Emergency resuscitation
- 17 Write a note on storage of donor corneas
- 18 Three methods of drug administration in ophthalmology
- 19 Three causes of loss of window reflex
- 20 What is dacrocystitis ? Name 2 surgeries for chronic dacrocystitis
- 21 How do you record distant vision?
- 22 Three causes for no visual improvement in a pinhole
- 23 What is keratometer? Mention 2 types of keratometer
- 24 Mention 3 types of anaesthesia used in ophthalmology
- 25 Define blindness? Mention types of blindness?
- 26 Expand NPCB. write 2 goals of NPCB
- 27 Mention 3 myths around eye donation
- 28 How to treat anisometropia in school children?
- 29 Name 3 groups of anti glaucoma drugs with examples
- 30 Name 3 steroids used in ophthalmology

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45
QP CODE: 3172, PARTIAL DENTURES, ORTHODONTIA,
MAXIOFACIAL PROSTHESIS (WRITE IN GREEN ANSWER BOOK)

LONG ESSAY 1x10=10

- 1 Mention the components of Removable partial denture and discuss various types of Direct Retainers

SHORT NOTES 5 x5=25

- 2 Pindex system
- 3 Draw neat labelled diagram of Dental surveyor
- 4 Materials used in maxillofacial prosthesis
- 5 Mandibular Major Connectors
- 6 Adam's clasp

SHORT ANSWERS 5 x2=10

- 7 Kennedy's Class I
- 8 Arbitrary block out
- 9 Stippling
- 10 Casting Machines
- 11 Sand blasting

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN DENTAL MECHANICS (DDM)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 50

**QP CODE: 6172, PARTIAL DENTURES, ORTHODONTIA, MAXIOFACIAL
PROSTHESIS (WRITE IN GREEN ANSWER BOOK)**

SHORT NOTES-ANSWER ANY FOUR 4 x5=20

- 1 Die systems used in FPD
- 2 Applegate's rules for Kennedy's classification
- 3 Mandibular Major connectors
- 4 Parts of FPD with diagrams
- 5 Parts of Surveyor with diagram

SHORT ANSWERS 10 x3=30

- 6 Occlusal rest
- 7 Color coding in RPD design
- 8 Divestments
- 9 Hawley's appliance
- 10 Embrasure clasp
- 11 Palatal Strap
- 12 Refractory cast
- 13 Materials used in Maxillofacial prosthesis
- 14 Adam's clasp
- 15 Kennedy's classification

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE
IN DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45
QP CODE: 3182, DENTAL HEALTH EDUCATION, SOCIAL &
PUBLIC HEALTH & PREVENTIVE DENTISTRY
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY 1x10=10

1 Describe various tooth brushing techniques

SHORT NOTES

5 x5=25

2 Child care counselling

3 Community water fluoridation

4 School health education

5 Habits and their effects on dental structure

6 Oral health in handicapped

SHORT ANSWERS

5 x2=10

7 Chlorhexidine mouth wash

8 Oral irrigation devices

9 Prevention of periodontal diseases

10 Audio visual aids

11 Dental camps

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN DENTAL HYGIENE (DDH)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

**QP CODE: 6183, DIAGNOSIS & TREATMENT OF PERIODONTAL
DISEASE**

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT 8x5=40

- 1 Define dental hygiene .Write rules and regulations of dental hygiene
- 2 Dental management of haemophilia patients
- 3 Care of patients with disabilities
- 4 Case history recording
- 5 Indications and contraindications of use of ultrasonic scaler
- 6 Thumb sucking habit
- 7 Trauma from occlusion.
- 8 Sutures and periodontal dressing
- 9 Write various methods of tooth brushing
- 10 Bruxism

SHORT ANSWERS 20 x3=60

- 11 Management of patients with Diabetes mellitus
- 12 Instrument maintenance
- 13 Shock
- 14 Management of hypertensive patients
- 15 Management of oral and maxillofacial surgery patients
- 16 Diagnosis
- 17 Interdental aids
- 18 Dentifrices
- 19 Oral irrigation devices
- 20 Tongue thrusting habit
- 21 Syncope
- 22 Powered tooth brushes
- 23 Oral Hygiene index Simplified
- 24 Chlorexidine gluconate mouth rinse
- 25 Plaque control around dental implant
- 26 Management of Medically compromised patients
- 27 Management of Pediatric patient
- 28 Objectives of dental hygiene
- 29 Prognosis
- 30 Basic sharpening principles

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN PHYSIOTHERAPY (DTP)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5193, THERAPEUTIC EXERCISE

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Discuss the various physiological changes that occurs during aerobic exercise
- 2 What are the indications and principles for resistance exercises?
- 3 Merits and demerits of suspension therapy
- 4 Classification and uses of active exercises
- 5 Write a note on Jacobson's relaxation technique
- 6 Describe PNF
- 7 Physiology of balance and components of balance
- 8 Principles and techniques of free exercise
- 9 Write a note on Mulligan technique of joint mobilization
- 10 Functional re-education

SHORT ANSWERS

20 x3=60

- 11 Name therapeutic effects of exercises in water
- 12 Name the uses of crutch and canes
- 13 What is vertical suspension?
- 14 Define posture and its types
- 15 Circuit training
- 16 Indications of resisted exercises
- 17 Frenkel's exercises
- 18 Tests for incoordination
- 19 Tests for sensation
- 20 Define work, endurance and power
- 21 Petrissage massage
- 22 Advantages and disadvantages of group exercise
- 23 Advantages of endurance exercises
- 24 Types of muscle contraction with example
- 25 VO2 Max
- 26 Components of balance
- 27 Principles of strengthening exercises
- 28 BRIME
- 29 Define open chain and closed chain exercises
- 30 Define tightness and contracture

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
FIRST YEAR ALL CERTIFICATE COURSES

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE: 1102, CHEMISTRY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE

1x10=10

- 1 Explain the preparation, properties and uses of Nitric acid
- 2 Explain the preparation, properties and uses of Ethyl alcohol

SHORT NOTES-ANSWER ANY FIVE

5 x5=25

- 3 Atomic mass and molecular mass
- 4 Preparation of hydrogen peroxide
- 5 Differences between colloids and crystalloids
- 6 Properties of Alpha, Beta and Gamma rays
- 7 Classification of carbohydrates. Give an example for each
- 8 Differences between DNA and RNA
- 9 Mention the names with structure of any five amino acids

SHORT ANSWERS

5 x2=10

- 10 Define A) Acid b) Base
- 11 Uses of chlorine
- 12 Types of RNA
- 13 Structure of Maltose
- 14 Isotopes

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
 PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
FIRST YEAR ALL DIPLOMA COURSES,

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4103, CHEMISTRY (WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Explain the preparation of nitric acid by Ostwald's process and mention two uses
- 2 Explain the manufacture of phenol from coal tar
- 3 Explain a) Tyndall effect b) Brownian movement
- 4 Define half-life period. Mention the properties of α particles
- 5 Define matter. Mention the states and physical properties of matter

6 **Match the following**

i) Carbohydrate	a) Zymase
ii) Enzyme	b) DNA
iii) Amino acid	c) CO^{60}
iv) Nucleic acid	d) Glucose
v) Isotope	e) Glycine

- 7 Write the structure of a) Glycine b) Alanine c) Serine d) Aspartic acid e) Tyrosine
- 8 Define enzyme. Give the classification of enzymes with one example for each class
- 9 Define pollution. Mention the causes of water pollution

10 **Choose the correct answers**

- a) The major storage form of carbohydrates in animals
 - 1) Cellulose 2) Chitin 3) Glycogen 4) Starch
- b) General formula of alkene is
 - 1) C_nH_{2n+2} 2) C_nH_{2n} 3) C_nH_{2n-2} 4) C_nH_n
- c) Haemoglobin is the coordination compound of..... metal
 - 1) Fe 2) Co 3) Mg 4) Na
- d) Sodium Carbonate is also known as
 - 1) Washing Soda 2) Baking soda 3) slaked lime 4) Caustic soda
- e) Protein present in Hair is
 - 1) Keratin 2) Myosine 3) Insulin 4) Albumin

SHORT ANSWERS

20 x3=60

- 11 Define a) Acid b) Base c) Salt with one example for each
- 12 What is aquaregia? Mention its uses
- 13 Mention three applications of colloids
- 14 Plaster of Paris
- 15 Define buffer solution. Mention different types of buffer solution
- 16 Mention the application of coordination compound
- 17 Milk Sugar
- 18 Mention the atomic weight of elements a) Carbon b) Nitrogen c) Sodium
- 19 Define Normality, Molarity, Molality
- 20 **Fill in the Blanks**
 - a) H_2O_2 is the chemical formula of.....
 - b) $Ca(OH)_2$ is the chemical formula of.....
 - c) SI unit of length is
- 21 Uses of Acetone
- 22 Write a note on global warming
- 23 Define indicator. Mention types of indicator. Give examples
- 24 Mention one application each of a) Cobalt 60 b) Iodine 131 c) Phosphorous 32 isotopes
- 25 Define saturated and unsaturated hydrocarbons. Give one example for each
- 26 Calculate the molecular weight of a) H_2O b) $C_6H_{12}O_6$ c) CO_2
- 27 Define a) Alkanes b) Alkenes. Give one example for each
- 28 Uses of chloroform
- 29 Define an atom. Name the sub atomic particles of an atom
- 30 Give an example for a) acidic amino acid b) basic amino acid c) neutral amino acid

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN MEDICAL
LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2104, PATHOLOGY (WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO 2x10=20

- 1 Describe the methods of urine collection. Add a note on physical examination of urine
- 2 Classify the fixatives used in histopathology. Briefly describe the advantages and disadvantages of Formalin
- 3 Define anticoagulants. Name the anticoagulants used in laboratory with emphasis on vacutainer colour code

SHORT NOTES ANSWER ANY TEN 10x5=50

- 4 Reticulocyte count
- 5 Erythrocyte sedimentation rate (ESR)
- 6 Stains used in cytology
- 7 Quality control in hematology
- 8 Peripheral smear staining
- 9 Embedding
- 10 Mention the errors while section cutting and their correction
- 11 Differential leucocyte count
- 12 Red Blood indices
- 13 Decalcification
- 14 Methods of haemoglobin estimation
- 15 Staining of peripheral smear

SHORT ANSWERS 10x2=20

- 16 Name 4 casts in urine
- 17 Name 4 causes of leukocytosis
- 18 Name and draw 2 poikilocytes
- 19 Normal AEC and two causes of increased AEC
- 20 Name two fixatives used in cytology
- 21 Name two preservatives used for urine
- 22 Name two clearing agents used in histopathology
- 23 Name two disadvantages of Sahli's hemoglobin estimation
- 24 Packed cell volume (PCV)
- 25 Principle of Romanowsky stain

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
(DMLT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5105, PATHOLOGY (WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Physical examination of urine
- 2 Preparation and staining of peripheral blood smear
- 3 Absolute eosinophil count procedure and importance
- 4 Anticoagulants
- 5 Packed cell volume
- 6 Collection of CSF
- 7 Microscopy of semen analysis
- 8 Pap staining procedure
- 9 Fixatives used in histopathology
- 10 Endpoint methods of decalcification

SHORT ANSWERS

20 x3=60

- 11 Barr bodies
- 12 Types of hematoxylin
- 13 Stains used in cytology
- 14 Synovial fluid analysis
- 15 Microscopy of normal sputum
- 16 Disadvantages of Formalin
- 17 Preservation of semen
- 18 Name three decalcifying agents
- 19 Master register in histopathology
- 20 Fixation of cytology smears
- 21 Preservation of urine
- 22 Name the diluting fluid for RBC count with composition
- 23 Name the Romanowsky stain
- 24 Disadvantages of Sahli's method of hemoglobin estimation
- 25 Red cell indices with normal range
- 26 Ideal peripheral smear
- 27 Wintrobe tube 28 blood grouping system
- 28 Blood grouping system
- 29 Colour code for blood sample vacutainers
- 30 Microscopy of ova cyst in stool examination

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR (DHI)

TIME: 3 Hrs (RS -1 SCHEME) **MAX. MARKS: 90**
CODE: 2112, COMMUNITY MEDICINE, PAPER-II
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-AANSWER ANY TWO **2x10=20**

- 1 Describe the effect , monitoring and prevention of Air Pollution
- 2 Describe causes and prevention of malnutrition
- 3 Explain sampling of water from various sources for Physical, Chemical and bacteriological examination. Add a note on Drinking Water Quality Standards

SHORT NOTES ANSWER ANY TEN **10x5=50**

- 4 Diseases transmitted and control measures of Aedes mosquito
- 5 Fluorosis and its prevention
- 6 Composting
- 7 Low birth Weight Babies
- 8 Balanced Diet
- 9 Iodine deficiency diseases
- 10 Sanitary advice to maintain a slaughter house
- 11 FSSAI: Food safety standards act of India
- 12 Life cycle of a Mosquito
- 13 Education of Food Handler
- 14 Explain Sanitation Barrier with diagram
- 15 Draw a Food Guide Pyramid

SHORT ANSWERS **10x2=20**

- 16 Zoonosis
- 17 Effects of Noise Pollution
- 18 Recommended Daily Allowance for a sedentary male
- 19 Water related disease
- 20 Draw different stages of VVM on Vaccine vials and at what stage to discard the vaccine
- 21 Diet Survey
- 22 Human habits and Hook worm disease
- 23 Abate
- 24 Water seal latrines
- 25 Household purification of water

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA COURSE IN HEALTH INSPECTOR (DHI)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5113, COMMUNITY MEDICINE, PAPER-II

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Large scale purification of water
- 2 Colour coded bins for hospital waste management
- 3 Health inspectors : roles and responsibilities
- 4 Sewage treatment plants
- 5 Causes and prevention of Air Pollution
- 6 Housing Standards
- 7 How to differentiate the eggs, larva, pupa and adult of Anopheles, Aedes and Culex Mosquitoes?
- 8 Chlorination
- 9 Integrated vector control
- 10 Bacteriological indicators of health

SHORT ANSWERS

20 x3=60

- 11 Zoonotic diseases
- 12 Rain water harvesting
- 13 Heat stress prevention
- 14 Malaria diagnosis
- 15 Rodent control measures
- 16 List any three instruments used in meteorology department
- 17 Water related diseases
- 18 Stool examination
- 19 Abate
- 20 Deworming
- 21 Safe and wholesome water
- 22 Disease transmitted by Itch mite and how to Control Itch mite
- 23 Acid rain
- 24 List 6 Air Pollutants
- 25 Overcrowding assessment criteria
- 26 Sewage farming
- 27 Human Habits in Ascariasis
- 28 Uses and contents of Horrock's apparatus
- 29 Sanitation barrier
- 30 Composting

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN MEDICAL
X-RAY TECHNOLOGY (DMXT)

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE: 2123, PHYSIOLOGY (WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE

1x10=10

1 Enumerate the Anterior Pituitary hormones. Describe the functions of growth hormone

2 Describe Erythropoiesis and its regulation. Add a note on anaemia

SHORT NOTES -ANSWER ANY FIVE

5x5=25

3 Lung volumes and capacities

4 Conducting system of the heart

5 Regulation of body temperature on exposure to heat

6 Intra uterine contraceptive device (IUCD)

7 Describe the composition of gastric juice

8 Functions of large intestine

9 Define Hypoxia and classify hypoxia

SHORT ANSWERS

5x2=10

10 Write any two functions of skin

11 Write the normal value of a) WBC count b) Platelet count

12 Name any two anticoagulants

13 Name any two primary taste sensations

14 Name any two contractile proteins of muscle

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY
(DMIT)

TIME: 1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 50

QP CODE: 5124, PHYSIOLOGY (WRITE IN BLUE ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR

4x5=20

- 1 Conducting system of heart
- 2 Describe the composition of blood
- 3 Describe the active transport mechanism across the cell membrane
- 4 Functions of thyroxine
- 5 Classify white blood cells with the help of a neat diagram

SHORT ANSWERS

10x3=30

- 6 Name any three hormones of adrenal gland
- 7 Functions of skin
- 8 Describe the functions of middle ear
- 9 Draw a neat labelled diagram of reflex arc
- 10 Name any three contraceptive methods in males
- 11 Pulmonary Surfactant
- 12 Composition of cerebrospinal fluid (CSF)
- 13 Define GFR and give its normal value
- 14 Name the refractive errors of eye
- 15 Composition of gastric juice

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA/II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY (DOTT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2135, SECTION-A, ANATOMY

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE GREEN BOOKLET)

NOTE: ANSWER THE QUESTIONS IN ORDER

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Name the parts of excretory system of the body. Write briefly about Kidney
- 2 Name the parts of Respiratory system. Write briefly about right lung

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 3 Uterus
- 4 Parts and coverings of the brain
- 5 Pancreas
- 6 Write briefly about bones of upper limb
- 7 Endocrine glands
- 8 Synovial joints
- 9 Parts of uterine tube

SHORT ANSWERS 5x2=10

- 10 Name the veins of upper limb
- 11 Name the muscles of lower limb
- 12 Name the tarsal bones
- 13 Name the coverings of the heart
- 14 Parts of small intestine

SECTION-B, PHYSIOLOGY (RS 1 SCHEME)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 15 Explain the composition and functions of blood
- 16 Name the hormones of thyroid gland and describe the actions of thyroid hormone

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 17 Composition and functions of gastric juice
- 18 Explain the functions of kidney
- 19 Explain the structure of a neuron, with a neat diagram
- 20 Draw a labelled diagram of Neuromuscular junction (NMJ)
- 21 Artificial respiration
- 22 Taste pathway
- 23 Explain the conducting system of heart

SHORT ANSWERS 5x2=10

- 24 Define blood pressure and write its normal value
- 25 Name any two Refractive errors of eye
- 26 Name any two types of muscle
- 27 Name any two hormones secreted from Pancreas
- 28 Write the normal values of 1) Vital capacity 2) Tidal volume

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN OPERATION THEATRE & ANAESTHESIA
TECHNOLOGY (DOT&AT)

TIME: 3 Hrs (RS -2 SCHEME) **MAX. MARKS: 100**

QP CODE: 5136, SECTION-A, ANATOMY

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE GREEN BOOKLET)

NOTE: ANSWER THE QUESTIONS IN ORDER

SHORT NOTES -ANSWER ANY FOUR **4x5=20**

- 1 Uterus
- 2 Hip joint
- 3 Pancreas
- 4 Nerves of brachial plexus
- 5 Veins of upper limb

SHORT ANSWERS **10x3=30**

- 6 Humerus bone
- 7 Arteries of lower limb
- 8 Mandible bone
- 9 Movements across joints
- 10 Testis
- 11 Small intestine
- 12 Coverings of the heart
- 13 Coverings of the brain
- 14 Lymph nodes
- 15 Cubital fossa

SECTION-B, PHYSIOLOGY

SHORT NOTES- ANSWER ANY FOUR **4x5=20**

- 16 Structure & functions of haemoglobin
- 17 Neuromuscular junction
- 18 Functions of bile
- 19 Defecation reflex
- 20 E.C.G

SHORT ANSWERS **10x3=30**

- 21 Landsteiner's law
- 22 Name mechanisms of clotting
- 23 Neuron
- 24 Cyanosis
- 25 Structure of nephron
- 26 Functions of thyroid hormone
- 27 Define blood pressure. Give normal values
- 28 Functions of C.S.F.
- 29 Define GFR, normal value
- 30 Contraceptive methods in female

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**I YEAR DIPLOMA/II YEAR CERTIFICATE COURSE IN MEDICAL
RECORDS TECHNOLOGY (DMRT)**

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2145, HOSPITAL STATISTICS & BIOSTATISTICS

(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY THREE 3x10=30

- 1 Define Statistics, Biostatistics and Hospital Statistics. Explain the uses of Hospital Statistics
- 2 What are Measures of Central tendency. Explain advantages disadvantages of each method
- 3 Define Vital Statistics. Explain crude birth rate and crude death rate
- 4 Define Gross Hospital death rate and Net Hospital death rate

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 5 Birth Rate and Death Rate
- 6 Frequency distribution
- 7 Regression
- 8 Simple random sampling
- 9 Graphical presentation methods
- 10 Standard deviation
- 11 Length of stay
- 12 Infant mortality rate
- 13 Bed occupancy rate
- 14 Systematic random sampling
- 15 Sampling and its advantages

SHORT ANSWERS- ANSWER ANY FIVE 5x2=10

- 16 Median
- 17 Range
- 18 Vital data
- 19 Correlation
- 20 In-patient day
- 21 Bed turn over interval

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 5146, HOSPITAL STATISTICS & BIOSTATISTICS

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE GREEN BOOKLET)

SHORT NOTES: ANSWER ANY EIGHT 8x5=40

- 1 Define Biostatistics, Hospital Statistics and Vital Statistics
- 2 Presentation of data by tabulation
- 3 Any one method of diagram and graph for presentation
- 4 Define Arithmetic mean and median
- 5 Define sampling and its advantages
- 6 Procedure of hospital data collection
- 7 Hospital inpatient and hospital outpatient statistics
- 8 Vital statistics registration procedure
- 9 Gross Hospital Death Rate and Net Hospital Death Rate
- 10 Length of stay and its calculation

SHORT ANSWERS 20 x3=60

- 11 Frequency distribution
- 12 Multiple Bar diagram
- 13 Birth Rate and Death Rate
- 14 Mode
- 15 Standard deviation
- 16 Simple Random sampling method
- 17 Correlation between Hospital and Primary Health Centre
- 18 Inpatient service days
- 19 Maternal Death Rate
- 20 Anaesthesia rate
- 21 Bed Occupancy Rate
- 22 Net Autopsy Rate
- 23 Daily inpatient census
- 24 Histogram
- 25 In-patient admission and In-patient discharge
- 26 Vital statistics
- 27 Hospital census taking
- 28 Systematic random sampling method
- 29 Transfer of patient
- 30 Stratified random sampling method

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY (DDT)

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2155, SECTION-A, ANATOMY

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE GREEN BOOKLET)

NOTE: ANSWER THE QUESTIONS IN ORDER

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Name the parts of respiratory system, describe the naso-pharynx in detail
- 2 Name the parts of the ear, explain middle ear in detail

SHORT NOTES ANSWER ANY FIVE 5x5=25

- 3 Lymph node
- 4 Thyroid gland
- 5 Parotid gland
- 6 Eye ball
- 7 Testis
- 8 Pancreas

SHORT ANSWERS 5x2=10

- 9 Blood supply to long bone
- 10 Name the 4 structure related to stomach bed
- 11 Name the 3 parts of adrenal cortex
- 12 Name the 4 tarsal bone
- 13 Name the 3 parts of brain stem

SECTION-B, PHYSIOLOGY

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 14 Describe the different steps of urine formation. Add a note on the normal constituents of urine
- 15 With the help of a neat diagram describe the different phases of a Cardiac cycle

SHORT NOTES ANSWER ANY FIVE 5x5=25

- 16 Body fluid compartments
- 17 Define blood pressure. Explain the factors affecting BP
- 18 Blood group systems
- 19 Draw a neat labelled diagram of the structure of a nephron
- 20 Hormonal regulation of spermatogenesis
- 21 Renal dialysis

SHORT ANSWERS 5x2=10

- 22 Define cardiac output and give its normal value
- 23 Define erythropoiesis
- 24 Write any two non renal functions of kidney
- 25 Write the normal value of a) Blood urea b) Serum uric acid
- 26 Define Erythrocyte Sedimentation rate (ESR) and give its normal value

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5155, SECTION-A, ANATOMY

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE GREEN BOOKLET)

NOTE: ANSWER THE QUESTIONS IN ORDER

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 1 Classify the tissue, describe the epithelial tissue with example
- 2 Describe the supra-renal gland under following heading
 - a. Situation b. covering c. relation d. applied aspect
- 3 Describe the larynx under following heading
 - a. Cartilage b. muscle c. action
- 4 Describe the blood supply of the heart under following heading
 - a. Coronary artery b. coronary sinus c. applied aspect
- 5 Describe the kidney under following heading
 - a. Situation b. covering c. relation

SHORT ANSWERS

10x3=30

- 6 Mention the 3 lymphoid organ
- 7 Name the 3 muscle of posterior abdominal wall
- 8 Name the 6 bone of uterine tube
- 9 Mention the 3 arteries of lower limb
- 10 Mention the 3 arteries of lower limb
- 11 Mention the 6 cranial nerve
- 12 Name the 3 muscles of pharynx
- 13 Name the 3 ligaments of urinary bladder
- 14 Name the parts of brain stem
- 15 Name the lobes of liver

SECTION-B, PHYSIOLOGY (RS -2 SCHEME)

SHORT NOTES -ANSWER ANY FOUR

4x5=20

- 16 Draw a neat labelled diagram of the structure of a Cell
- 17 Classify Body fluid compartments and give their normal values
- 18 Define Erythropoiesis. Describe the different stages of Erythropoiesis
- 19 Refractive errors of eye and their correction
- 20 Define Glomerular filtration rate (GFR). Describe the factors regulating GFR

SHORT ANSWERS

10x3=30

- 21 Define Blood pressure. Give its normal value
- 22 Name any three abnormal constituents of urine
- 23 Spermatogenesis
- 24 Define Anaemia. Name any two types of anaemia
- 25 Micturition reflex
- 26 Draw a neat labelled diagram of normal ECG
- 27 Give the normal value of a) Pulse rate b) Cardiac output
- 28 Define Cross matching. Mention the different types of cross matching
- 29 Name any three hormones produced from Placenta
- 30 Pulmonary surfactant

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN DENTAL
HYGIENE (DDH)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45

QP CODE: 2185, SECTION-A, BIOCHEMISTRY

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE BLUE BOOKLET)

NOTE: ANSWER THE QUESTIONS IN ORDER

LONG ESSAY-ANSWER ANY ONE

1x10=10

- 1 Explain about the special diet in maxillofacial injury cases
- 2 Explain the role of vitamins in relation to dental and oral health

SHORT NOTES -ANSWER ANY THREE

3x5=15

- 3 Effect of mal-nutrition on oral health
- 4 Functions of proteins in relation to dental and oral health
- 5 Food requirement for growth, maintenance and repair of the body
- 6 Role of trace elements and water in relation to dental and oral health

SECTION-B, RADIOLOGY (RS -1 SCHEME)

WRITE SHORT NOTES

4x5=20

- 7 Radiation hazard and protection
- 8 Write in detail processing and mounting of dental radiographs
- 9 Bite wing radiograph
- 10 Intraoral periapical x- ray

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN DENTAL HYGIENE (DDH)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 50

QP CODE: 5185, SECTION-A, BIOCHEMISTRY

(BOTH SEC. A & SEC. B MUST BE ANSWERED IN ONE GREEN BOOKLET)

NOTE: ANSWER THE QUESTIONS IN ORDER

SHORT NOTES 2x5=10

- 1 Classify carbohydrates with examples
- 2 Plasma proteins- definition, classification and reference values

SHORT ANSWERS 5x2=10

- 3 Milk sugar
- 4 Essential amino acids
- 5 Define nucleoside and nucleotide
- 6 Deficiency of vitamin A
- 7 Mention the normal values of a) Blood urea and b) serum creatinine

QP CODE: 5186, SECTION-B, RADIOLOGY (RS -2 SCHEME)

LONG ESSAY 2x5=10

- 8 With neat labelled diagram explain about structure of atom
- 9 Write in detail about processing and mounting of dental radiographs

SHORT NOTES 5x3=15

- 10 Radiation hazard
- 11 Bite wing radiograph
- 12 Paralleling technique.
- 13 Intraoral periapical x- ray
- 14 Short note on Dental x-ray film

SUPPLEMENTARY EXAMINATION, APRIL 2022

I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4195, BIOMECHANICS

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 What is mechanical advantage? Explain mechanical advantage in relation to pulley's
- 2 Explain the mechanism of rib cage movement during inspiration
- 3 Explain the phases of swing phase of a gait cycle
- 4 Explain the levers of 1st order and give an example of human movements
- 5 Explain the structure of typical lumbar vertebra, add a note on functions of the lumbar spine
- 6 Brief out weight bearing of hip joint and explain the muscle function in unilateral stance
- 7 Explain the structure of temporomandibular joint
- 8 Structure of shoulder complex
- 9 Describe stress and strain
- 10 Movement analysis of sitting to standing

SHORT ANSWERS

20 x3=60

- 11 Convex concave rule
- 12 Patellar movements
- 13 Static and dynamic friction
- 14 Metatarsal break
- 15 Mechanical advantage
- 16 Define work, power and energy
- 17 Name the muscles responsible for mastication
- 18 Active insufficiency and passive insufficiency
- 19 What are the factors that affect muscle function?
- 20 Properties of springs
- 21 Osteokinematics and orthokinematics
- 22 Palmar arches
- 23 Carpal tunnel syndrome
- 24 Lumbo-pelvic rhythm
- 25 DOMS
- 26 Metatarsal break
- 27 Features of synovial joint
- 28 Types of levers
- 29 Pronation twist
- 30 Importance of mobility aids

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6195, P.T.IN NEUROLOGY AND NEUROSURGERY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Physiotherapy management of acute median nerve palsy
- 2 Discuss associated problems in cerebral palsy
- 3 Management of hemiplegic shoulder
- 4 Classify head injury based on RLA scale
- 5 Gait in spastic diplegia
- 6 Physiotherapy management following transverse myelitis
- 7 Post-operative management for spinal disc herniation
- 8 Write physiotherapy management of a recovering GBS patient with respiratory muscle involvement
- 9 Explain physiotherapy management in spinal cord injury
- 10 Examination of higher mental functions

SHORT ANSWERS

20 x3=60

- 11 Reflex grading
- 12 Tests for co-ordination
- 13 Evaluation of 4th cranial nerve
- 14 Write a note on APGAR score
- 15 Causes of axillary nerve palsy
- 16 Define developmental screening
- 17 Down's syndrome
- 18 Note on sensory examination
- 19 Scissoring gait
- 20 Classification of spina bifida
- 21 Clinical features of cerebellar disorders
- 22 Causes of encephalitis
- 23 Complications of open head injury
- 24 Classification and clinical features of spinal tumors
- 25 Signs of meningitis
- 26 Clinical features of syringomyelia
- 27 Aeroplane splint
- 28 What is dysdiadokinesia?
- 29 Clinical features of viral encephalitis
- 30 Brudzinski sign

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA / III YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME:3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 3103, MICROBIOLOGY (WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO 2x10=20

- 1 Enumerate antigen antibody reactions. Describe precipitation reaction
- 2 Describe the morphology, pathogenesis of *Neisseria gonorrhoeae*. Write a note on laboratory diagnosis of gonorrhoea
- 3 Describe the life cycle, pathogenesis and laboratory diagnosis of *Entamoeba histolytica*

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 4 Laboratory diagnosis of cholera
- 5 Laboratory diagnosis of pulmonary tuberculosis
- 6 Laboratory diagnosis of Hepatitis B virus
- 7 Laboratory diagnosis of *Cryptococcus*
- 8 Life cycle of *Plasmodium falciparum*
- 9 Lepromin test
- 10 C-Reactive Protein test(CRP)
- 11 Biomedical waste management
- 12 Widal test
- 13 Anaphylaxis
- 14 ELISA
- 15 Venereal Disease Research Laboratory (VDRL)

SHORT ANSWERS 10x2=20

- 16 Name two toxins produced by *Staphylococcus aureus*
- 17 Name two Gram negative cocci
- 18 Name two anaerobic bacteria
- 19 Name two concentration techniques for feces
- 20 Name two acid fast bacilli
- 21 Significant bacteria
- 22 Name two bacteria causing Sexually transmitted diseases(STD)
- 23 Draw a neat labelled diagram of *Trichomonas vaginalis*
- 24 Name two intradermal tests
- 25 Name two non suppurative complications of *Streptococcus pyogenes* infection

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
(DMLT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 6105, MICROBIOLOGY (WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Lab diagnosis of Tuberculosis
- 2 VDRL
- 3 Serological Markers of hepatitis B and its detection
- 4 Complications of falciparum malaria
- 5 Cysticercus cellulosae
- 6 Methods of preservation of stock cultures
- 7 Lab diagnosis of candidiasis
- 8 MRSA
- 9 Collection, Transportation and processing of CSF sample
- 10 Biomedical waste management

SHORT ANSWERS

20 x3=60

- 11 Typhoid Vaccines
- 12 Classify Dermatophytes
- 13 Inoculation of pus sample with diagram
- 14 Draw the diagram of eggs of Taenia Solium
- 15 NIH Swab
- 16 Name any three components of universal precautions
- 17 Name three selective Media
- 18 Name three Acid fast organisms
- 19 Name three opportunistic fungi
- 20 Name three parasitic opportunistic infection in AIDS
- 21 Name different antibodies used to test pseudomonas species
- 22 Name any three latex agglutination Tests
- 23 Prophylaxis of tetanus
- 24 Principle and uses of ELISA Test
- 25 Draw a neat labelled diagram of HIV
- 26 Germ tube test
- 27 Lepromin test
- 28 Classification of V Cholerae
- 29 Montoux test
- 30 QBC test

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA / III YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR (DHI)

TIME:3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 3113, COMMUNITY MEDICINE, PAPER-III

(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Enumerate different levels of health care system in India. Write functions of Medical officers in Primary health centre
- 2 Write 4 Industries where Silicosis is common. Add a note on its prevention & control
- 3 Discuss about Registration of Vital events

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Functions of Voluntary Health Agencies
- 5 Occupational hazards of agricultural workers
- 6 Functions of WHO
- 7 Role of Health workers in primary Health centre
- 8 Subcenter
- 9 Discuss Panchayath Raj at village level
- 10 Contribution of Bhore Committee
- 11 Management of Sharp waste
- 12 Benefits of ESI act to Employees
- 13 Importance of management of Hospital waste
- 14 Warning signs of Poor mental health
- 15 Factories Act 1948

SHORT ANSWERS

10x2=20

- 16 Enumerate 4 physical factors in working environment
- 17 Cost benefit analysis
- 18 Define Sickness absenteeism
- 19 Write any 4 diseases for notification
- 20 Enumerate any 2 occupational cancers along with their etiological agents
- 21 Maternity benefits under ESI
- 22 Hospital records
- 23 Define Ergonomics
- 24 Enumerate 4 Chemical agents causing disease in working environment
- 25 Write 2 addictive substances

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN HEALTH INSPECTOR (DHI)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 6115, COMMUNITY MEDICINE, PAPER-III

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Medical measures to prevent and control occupational diseases
- 2 Health for all by 2000 AD
- 3 UNICEF
- 4 Benefits under ESI Act to workers
- 5 Community Health Center
- 6 Industrial accidents
- 7 Cyclone preparedness
- 8 Functions of Primary Health Centre
- 9 Lead poisoning
- 10 Hazards of Industrialization

SHORT ANSWERS

20 x3=60

- 11 Sickness absenteeism
- 12 Hazards of health care waste
- 13 Psychosocial hazards at work place
- 14 Enlist any three legislations done to protect workers welfare
- 15 DANIDA
- 16 Enlist any three engineering measures to prevent occupational diseases
- 17 Contributions of Indian Red Cross in health
- 18 Functions of health worker male
- 19 International health regulations
- 20 Rockefeller foundation
- 21 Mention any three occupational hazard of health care workers
- 22 Occupational dermatitis
- 23 Cost benefit analysis
- 24 International Labour Organization
- 25 Trained birth attendant
- 26 Hospital records
- 27 World Bank
- 28 Enlist manmade disasters
- 29 Disaster cycle
- 30 Role of tertiary care center in health sector

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE IN MEDICAL
X-RAY TECHNOLOGY (DMXT)**

TIME:3 Hrs

(RS -1 SCHEME)

MAX. MARKS: 90

**QP CODE: 3123, RADIOGRAPHY INCLUDING NEWER IMAGING
TECHNOLOGY**

(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1 Explain fluoroscopy and image intensifiers
- 2 Explain about patient preparation, positioning and CT imaging of abdomino-pelvis scan
- 3 Draw a neat labelled diagram of rotating X-ray tube and write about chest X-ray views

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Barium meal follow through- instruction given to patient , procedure and imaging
- 5 Soft tissue radiography
- 6 Different generations of computed tomography (CT)
- 7 Sinogram
- 8 Filters
- 9 Screening of patient before entering into MRI room
- 10 Principles of computed tomography (CT)
- 11 Foreign body localisation
- 12 Mammography with labelled diagram
- 13 High Kv technique. Explain with one example
- 14 Half value layer
- 15 Fluoroscopy

SHORT ANSWERS

10x2=20

- 16 Volta meter
- 17 Ohm's law
- 18 Safe light in dark room
- 19 T-tube cholangiogram
- 20 Knee joint views
- 21 Contrast reaction
- 22 Mentions radiation protection devices
- 23 T1 and T2 weighted images
- 24 View box
- 25 Hounsfield unit

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY (DMIT)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

**QP CODE: 6125, RADIOGRAPHIC PHOTOGRAPHY AND IMAGING
PROCESSING**

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Draw a typical film characteristic and label the parts
- 2 Film faults- Types, causes and prevention
- 3 Types of X-ray films
- 4 Automatic processors
- 5 Construction and types of X-ray cassettes
- 6 Working principle, Technique and merits of digital radiography
- 7 Sinogram
- 8 Points to be considered while planning a dark room
- 9 Film artefacts
- 10 Discuss structure and uses of intensifying screens

SHORT ANSWERS

20 x3=60

- 11 Ohm's law
- 12 List the different methods of film processing
- 13 Wetting agents
- 14 Define magnification, distortion and penumbra
- 15 Limitations of intensifying screens
- 16 Loading and unloading of a cassette
- 17 Replenishment
- 18 Splashes- Types, causes and prevention
- 19 Faults in automatic processors- Types and causes
- 20 Causes and prevention of fogs
- 21 Advantages of digital radiography
- 22 What is pH? What is its importance in processing films?
- 23 Graininess of film
- 24 Structure of X-ray film
- 25 Safelight tests
- 26 Hangers- Types and storage
- 27 Speed of a film
- 28 View box
- 29 Possible damages and maintenance of an intensifying screen
- 30 Write a note on primary radiological image, latent image and visible image

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN MEDICAL
RECORDS TECHNOLOGY (DMRT)

TIME:1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 40

QP CODE: 3143, COMPUTER SCIENCE (WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO 1x10=10

1 How many types of networking is there? Explain the minimum 3 networking in detail

2 What are the Uses of computers in Hospitals and in MRD?

SHORT NOTES -ANSWER ANY FOUR 4x5=20

3 What's E-hospital software?

4 Computers-uses in hospitals

5 Define viruses and malwares? How to get rid of them?

6 Explain all types of storage devices

7 What's EMR? HIMMS?

SHORT ANSWERS 5x2=10

8 HDD

9 Server

10 PPT

11 RAM

12 E-mail

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**II YEAR DIPLOMA COURSE IN MEDICAL RECORDS TECHNOLOGY
(DMRT)**

TIME:1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 50

Q P Code 6145 COMPUTER SCIENCE (WRITE IN BLUE ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR

4x5=20

- 1 Define computer. Name the parts of a computer with a neat labeled diagram
- 2 What is a Computer virus? Discuss how computers are protected by viruses
- 3 Describe the role of a computer in hospital management
- 4 Write in detail the uses of computer in Out patients and In-Patient Registration
- 5 List some common statistics generated annually, monthly and weekly

SHORT ANSWERS

10x3=30

- 6 Explain the Monitor and Hard Disk
- 7 RAM and ROM
- 8 Hospital management software in MRD
- 9 Laser printer and Dot Matrix Printer
- 10 Input and output devices of computer
- 11 Explain about the floppy disk
- 12 Write the uses of computer in different fields
- 13 What is the importance of computer programming?
- 14 List some disadvantages of computers
- 15 Explain about Pen drive and Networking

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE IN DENTAL HYGIENE
TIME:1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45
QP CODE: 3183
OPERATING ROOM TECHNIQUE, CHAIR SIDE ASSTS. & DENTAL
MATERIALS, ETHICS & JURISPRUDENCE
(WRITE IN BLUE ANSWER BOOK)

- LONG ESSAY** 1x10=10
1 Describe various specialties in dentistry
- SHORT NOTES** 5x5=25
2 Medico legal issues in dental practice
3 Sterilization and care of dental instruments
4 Billing and accounting
5 Dental ethics 1948
6 Charting and recording
- SHORT ANSWERS** 5x2=10
7 Computers in dentistry
8 Materials used for making impression
9 Photography in dentistry
10 Maintenance of records
11 Material maintenance

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN COURSE IN DENTAL HYGIENE

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

**QP CODE: 6185, PUBLIC HEALTH DENTISTRY, ETHICS &
JURISPRUDENCE, DENTAL MATERIALS**

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Dentist's act 1948 related to registration of dental hygienist
- 2 Aims and objectives of dental health education
- 3 General epidemiology and environmental health
- 4 HBV associated with periodontitis
- 5 Community dentistry
- 6 Child and parent counselling
- 7 Professional ethics and ethical matters relating to health care
- 8 Sterilization of dental instruments
- 9 Water supply to community and their implications on dental health
- 10 Oral cancer

SHORT ANSWERS

20 x3=60

- 11 Define epidemiology
- 12 Interdental cleaning brush
- 13 Stannous fluoride gel
- 14 Chair side assistance
- 15 HIV and periodontal disease
- 16 Zinc oxide impression paste
- 17 Alginate impression material
- 18 Impression paste
- 19 Zinc oxide eugenol cement
- 20 Plaster of paris
- 21 Topical fluoride application
- 22 Composite resin material
- 23 High copper amalgam
- 24 Dental stone
- 25 Glass ionomer cement
- 26 Die stone
- 27 Audiovisual aids
- 28 Disclosing agents
- 29 Model and charts
- 30 Fluoride varnish

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN PHYSIOTHERAPY (PT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5195, ELECTROTHERAPY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Bio feedback
- 2 Describe the production of short wave diathermy
- 3 Ultrasound therapy
- 4 Interferential therapy
- 5 LEWIS therapy
- 6 Cryotherapy
- 7 Indications and contraindications of Ultra violet radiation
- 8 Describe the physiological effects and uses of wax therapy
- 9 Strength duration curve
- 10 Low frequency currents using in physiotherapy management

SHORT ANSWERS

20 x3=60

- 11 Faradic current
- 12 Phonophoresis
- 13 Latent heat of fusion
- 14 Ohm's Law
- 15 Types of infrared generators
- 16 Dangers of Microwave Diathermy
- 17 Electromyography
- 18 Whirl pool bath
- 19 Contraindications of wax bath
- 20 Micro Current
- 21 Infrared radiation
- 22 Theories of pain
- 23 Indications for microwave diathermy
- 24 Physiological effects of TENS
- 25 Therapeutic effects of shortwave diathermy
- 26 LASER
- 27 Motor unit
- 28 Name six types of currents used in therapeutics
- 29 Contraindications of shortwave diathermy
- 30 Contraindications of LASER

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

FIRST YEAR ALL CERTIFICATE COURSES

TIME:1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS: 45

QP CODE: 1103, BIOLOGY (WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO

1x10=10

- 1 Describe the structure of animal cell with the neat labelled diagram
- 2 Draw a neat labelled diagram of nephron and describe the mechanism of urine formation

SHORT NOTES -ANSWER ANY FIVE

5x5=25

- 3 Functions of blood
- 4 Describe the structure of human sperm with diagram
- 5 Describe the structure of Neuron with diagram
- 6 Difference between DNA and RNA
- 7 Carcinogens
- 8 Hormones of anterior pituitary with functions
- 9 Causative organism, mode of transmission and prevention of AIDS

SHORT ANSWERS

5x2=10

- 10 Name two diseases caused by bacteria
- 11 Two types of blood group system in human being
- 12 Name the different chambers of human heart
- 13 Any two significance of mitosis
- 14 Two functions of placenta

**KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
FIRST YEAR ALL DIPLOMAIN COURSES**

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4105, BIOLOGY (WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Double helical structure of DNA
- 2 Labelled diagram of Neuron
- 3 DNA fingerprinting-applications
- 4 What is placenta? Mention its functions
- 5 Blood Pressure
- 6 Sexually transmitted diseases
- 7 Parts of eye ball
- 8 Fertilization- definition, types with examples

9 **Match the following**

i) Mitochondria	a) Kidney
ii) Nephron	b) Brain
iii) Neuron	c) Salivary gland
iv) Insulin	d) Power house of the cell
v) Amylase	e) Pancreas

10 **Multiple choice questions**

- A) Cardiac muscle fibers are found only in i) Heart ii) Liver iii) Lungs iv) Kidney
B) SA Node is also called as i) Purkinje fibers ii) Pace maker iii) Bundle of His iv) AV node
C) In which part of alimentary canal food is finally digested
i) Stomach ii) Mouth cavity iii) Large intestine iv) Small intestine
D) Blood group which has no antigens is i) A ii) B iii) AB iv) O
E) Acrosome is present in i) Ovum ii) Brain iii) Sperm iv) Eyes

SHORT ANSWERS

20 x3=60

- 11 Mention three functions of blood
- 12 Classification of chromosome based on the position of centromere
- 13 Functions of saliva
- 14 Difference between bone and cartilage
- 15 Blood Vessels
- 16 Muscular tissue
- 17 Applications of monoclonal antibodies
- 18 Name any three exocrine glands
- 19 Functions of skin
- 20 Thyroid gland
- 21 General structure of a virus
- 22 Functions of large intestine
- 23 Blood Pressure- definition, normal value and name the instrument used to measure blood pressure
- 24 Male and female sex hormones
- 25 Barr bodies
- 26 Name three parts of brain
- 27 Areolar tissue
- 28 Tidal volume
- 29 **Fill in the blanks**

- (i) Structural and functional unit of lung is-----
- (ii) AIDS is caused by -----
- (iii) ----- type of sex determination is seen in human being

30 **Answer in one word/ sentence**

- i) Name the pigment present in RBC
- ii) What are allosomes?
- iii) Name the acid present in the gastric juice

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

**I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN MEDICAL
LABORATORY TECHNOLOGY (DMLT)**

TIME: 3 Hrs (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2105, MICROBIOLOGY (WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-ANSWER ANY TWO 2x10=20

- 1 Define sterilisation. Enumerate different methods of sterilisation and add a note on hot air oven
- 2 Describe briefly the morphology of bacterial cell with neat diagram
- 3 Classify culture media and describe blood agar media

SHORT NOTES ANSWER ANYTEN 10x5=50

- 4 Chocolate agar media
- 5 Dark field microscope
- 6 Active immunity
- 7 Autoclave
- 8 Bacterial flagella
- 9 IgG
- 10 Gram stain
- 11 Fumigation
- 12 Transport media
- 13 Biomedical waste disposal
- 14 Endospore
- 15 Ionising radiation

SHORT ANSWERS 10x2=20

- 16 Name two Gram positive cocci
- 17 Name two catalase positive bacteria
- 18 Name two special staining methods
- 19 Name two capsulated bacteria
- 20 Oxidase reagent
- 21 Name two anaerobic culture media
- 22 Name two chemical disinfectants
- 23 Name two bacterial filters
- 24 Pasteurisation
- 25 Sugar media

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
(DMLT)

TIME: 3 Hrs (RS -2 SCHEME) **MAX. MARKS: 100**

QP CODE: 5107, MICROBIOLOGY (WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT **8x5=40**

- 1 Difference between prokaryotic and eukaryotes
- 2 Robert Koch postulates
- 3 Anaerobic culture media
- 4 Immunity
- 5 ZN stain
- 6 Glutaraldehyde
- 7 Triple sugar iron agar (TSI)
- 8 Autoclave
- 9 Properties of antigen
- 10 Handling of light microscope

SHORT ANSWERS

20 x3=60

- 11 MacIntoshfield jar
- 12 Transport media
- 13 Draw neat labelled diagram immunoglobulin G
- 14 Bacterial filters
- 15 Bacterial flagella
- 16 Indole test
- 17 Define hypersensitivity
- 18 Define Hospital acquired infections
- 19 MacConkey agar media
- 20 Negative staining
- 21 Name three live vaccines
- 22 Draw neat labelled diagram of hot air oven
- 23 Name three agglutination tests
- 24 Sterilisation control
- 25 Hand hygiene
- 26 Name gram stain reagents
- 27 Draw bacterial growth curve
- 28 Louise Pasteur
- 29 Bacterial capsule
- 30 Endospore

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN HEALTH
INSPECTOR (DHI)

TIME: 3 Hrs (RS -1 SCHEME) **MAX. MARKS: 90**

QP CODE: 2113, COMMUNITY MEDICINE, PAPER-III
(WRITE IN GREEN ANSWER BOOK)

LONG ESSAY-AANSWER ANY TWO **2x10=20**

- 1 Define statistics. What are the measures of statistics? Name the different branches of statistics. Name the sources of health statistics
- 2 Describe the morphology, life cycle and control measures of Aedes mosquitoes
- 3 Enumerate methods of excreta disposal. Discuss Oxidation pond in detail

SHORT NOTES ANSWER ANYTEN **10x5=50**

- 4 Mention the uses of health information
- 5 Natural history of disease
- 6 Write national immunization schedule in detail
- 7 Health advice to travellers
- 8 Define cold chain. Discuss the cold chain equipments
- 9 Mean, median and mode
- 10 Types of disinfection
- 11 Registration of vital events
- 12 Advantages and disadvantages of case control studies
- 13 Integrated Vector Control
- 14 Iodine deficiency disorders
- 15 Define the following
 - a) Epidemic
 - b) Endemic
 - c) Pandemic
 - d) Zoonotic disease

SHORT ANSWERS **10x2=20**

- 16 Expand DDT.
- 17 Disease eradication
- 18 Pie Chart
- 19 Relative risk
- 20 Standard of living
- 21 Opportunistic infection
- 22 Epidemic curve
- 23 Mention ill effects of noise pollution
- 24 Secondary attack rate
- 25 Define prevalence

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN HEALTH INSPECTOR (DHI)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5115, COMMUNITY MEDICINE, PAPER-III

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Universal Immunization Programme
- 2 Carriers-Classify and give suitable examples
- 3 Define Epidemiology. Enumerate the types of Epidemiological Studies
- 4 Investigation of an Epidemic
- 5 Modes of disease transmission.
- 6 Classify foods with suitable examples
- 7 Define Pasteurization. Discuss different methods of Pasteurization
- 8 Discuss in brief Community Nutrition Programmes
- 9 Define Health Information System (HIS) .Write Components of HIS
- 10 Discuss the Sources and Deficiencies of Water Soluble Vitamins

SHORT ANSWERS

20 x3=60

- 11 Adverse Events Following Immunization-any three
- 12 Uses of Screening
- 13 Vaccine Carrier
- 14 Types of disinfecting agents-with an example each
- 15 Measles vaccine-Dosage and Route of Administration
- 16 Live Vaccines-any three
- 17 Incubation Period
- 18 Reservoir
- 19 Define Endemic and Pandemic with example
- 20 Registration of Births and Deaths
- 21 Name diseases transmitted through milk
- 22 Food fortification
- 23 Food toxicants
- 24 Xerophthalmia
- 25 First Aid
- 26 Iodine deficiency
- 27 Low birth weight
- 28 Parboiling of rice
- 29 Types of sampling
- 30 Census

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY (DMXT)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45

QP:2124, PATHOLOGY (WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 What are the signs of inflammation? Describe fracture healing with diagram
- 2 Define Emphysema. Describe the pathogenesis of Emphysema. Mention types of Emphysema

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 3 Achalasia cardia
- 4 Gastric ulcer
- 5 Aortic aneurysm
- 6 Fatty liver
- 7 Tuberculous osteomyelitis
- 8 Differences between benign and malignant tumours
- 9 Hydronephrosis

SHORT ANSWERS 5x2=10

- 10 Mention two causes of Goitre
- 11 Vitamin D deficiency
- 12 Marasmus
- 13 Mention two causes of hyperplasia
- 14 Fibroid Uterus

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

II YEAR DIPLOMA IN MEDICAL IMAGING TECHNOLOGY (DMIT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 50

QP:5125, PATHOLOGY (WRITE IN BLUE ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR 4x5=20

- 1 Write short notes on Cirrhosis of liver
- 2 Differences between benign and malignant tumour
- 3 Gall bladder calculi
- 4 Gastric ulcer
- 5 Fibroid uterus

SHORT ANSWERS 5x2=10

- 6 Define Hypertrophy. Give two examples
- 7 Hydronephrosis
- 8 Marasmus
- 9 Mention factors affecting wound healing
- 10 What is Peptic ulcer? Mention its causes
- 11 Tuberculous osteomyelitis
- 12 Fibroadenoma
- 13 What is Epistaxis? Mention its causes
- 14 Mention causes of Goitre
- 15 What is Emboli? Write about fate of Emboli

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4197, SECTION-A, PSYCHOLOGY

(BOTH SEC.A & SEC.B QUESTIONS MUST BE ANSWERED IN ONE GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY FOUR

4x5=20

- 1 Define Perception and explain various principles of perception
- 2 Effective ways of learning
- 3 Write about Feeling and Emotion
- 4 Write about assessment of Intelligence
- 5 What are different types of Attention

SHORT ANSWERS

10 x3=30

- 6 Write about characteristics of a good leader
- 7 Ego
- 8 Creative thinking
- 9 Write about types of conflicts
- 10 What is motivational cycle?
- 11 Hallucination
- 12 Formation of attitude
- 13 What is Social psychology?
- 14 Introspection
- 15 Industrial psychology

SECTION-B, SOCIOLOGY (RS 2 SCHEME)

SHORTNOTES-ANSWER ANY FOUR

4x5=20

- 16 Define social group and write about classification of groups
- 17 What is geriatrics? Write about geriatrics problems
- 18 What are the characteristics of Social worker?
- 19 Mention about the stages of socialization
- 20 Poverty and its effects on society

SHORT ANSWERS

10 x3=30

- 21 Joint family
- 22 Culture
- 23 Unemployment
- 24 Social problem
- 25 Anthropology
- 26 Population EXPLOSION
- 27 Beggary
- 28 Alcoholism
- 29 Urban community
- 30 Social rehabilitation

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

QP CODE: 6197, C.B.R (COMMUNITY BASED REHABILITATION)

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Write about extension services
- 2 Define Community based Rehabilitation
- 3 Define Village rehabilitation worker and explain the role of village rehabilitation worker
- 4 Write about National level Rehabilitation programme
- 5 Define vocational training and its benefits
- 6 Describe CBR team members
- 7 Write about early detection of disabilities
- 8 Write about prevention and management of mental retardation
- 9 Define disability and its causes and types
- 10 Role of Anaganawadi worker in rehabilitation of Special abled child

SHORT ANSWERS

20 x3=60

- 11 Define rehabilitation and its types
- 12 Functions of District Rehabilitation centre
- 13 Models of CBR
- 14 Maternal nutrition and education
- 15 Role of Mobile units
- 16 Importance of screening
- 17 Importance of Genetic counseling
- 18 Need of vocational training
- 19 Importance of Primary rehabilitation unit
- 20 Methods of Social work
- 21 Developmental disorders
- 22 Institutional based Rehabilitation
- 23 Objectives of CBR
- 24 Rehabilitation of Behavioral disorders
- 25 Quantitative and Qualitative data
- 26 Two differences between Handicap and impairment
- 27 Define immunization programme
- 28 Write about types of Cerebral Palsies
- 29 Scope of CBR
- 30 Define Polio

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
II YEAR DIPLOMA/III YEAR CERTIFICATE COURSE IN MEDICAL
RECORD TECHNOLOGY (DMRT)

TIME: 1 Hr (RS -1 SCHEME) MAX. MARKS: 20

QP CODE: 3144, MEDICAL & SURGICAL CODING

(WRITE IN BLUE ANSWER BOOK)

ANSWER ANY THREE QUESTIONS 3x5=15

- 1 Write the sources of morbidity data?
- 2 Mention the chapters of ICD-10 in order
- 3 Define coding and uses of coding
- 4 What are the special points that a coder should remember while coding?

EXPAND THE FOLLOWING ABBREVIATIONS 5 x1=5

- 5 IHD
- 6 NVBS
- 7 TAH
- 8 MND
- 9 CHD

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022

III YEAR DIPLOMA IN MEDICAL RECORD TECHNOLOGY (DMRT)

TIME: 1 Hr (RS -2 SCHEME) MAX. MARKS: 30

QP CODE: 6146, MEDICAL & SURGICAL CODING

(WRITE IN BLUE ANSWER BOOK)

SHORT ANSWER- ANSWER ANY TEN

10x3=30

- 1 Define eponyms with two examples
- 2 Define cause of death
- 3 What are the uses of coding
- 4 Write the uses of mortality data?
- 5 Expand the abbreviation (a) RHD b) HIV c) BUN)
- 6 Dagger and asterisk system
- 7 Define parentheses
- 8 Name the sections of Volume - 3
- 9 Write any five differences between ICD-9 & ICD-10
- 10 Name the chapters of ICPM
- 11 Define colon (:) and square brackets []
- 12 Basic rules of coding

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS:

100

QP CODE: 5197, SECTION-A, ALLIED THERAPEUTICS

(BOTH SEC.A & SEC.B QUESTIONS MUST BE ANSWERED IN ONE GREEN ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 1 Write about indications and contraindications of Acupuncture
- 2 Write about evaluation of psychosocial aspects of Sports
- 3 Write about PT assessment and management of Sprains
- 4 Write about Pharmacology in Sports
- 5 Write about types of Alternative medicine

SHORT ANSWERS

10 x3=30

- 6 Exercise prescription
- 7 Assessment of Speed
- 8 Effect of Fatigue
- 9 Evaluation of Cardio-respiratory system in sports
- 10 Define Naturopathy
- 11 Benefits of Yogasanas
- 12 Investigative methods in Sports injuries
- 13 Benefits of Magnetotherapy
- 14 Effects of Acupuncture
- 15 Assessment of Co-ordination

SECTION-B, PHARMACOLOGY

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 16 Enumerate Parenteral routes of drug administration. Write 2 advantages of IV route
- 17 Atropine - 3 uses & 2 adverse effects
- 18 Phenytoin - 3 uses & 2 adverse effects
- 19 5 inhalational drugs in Bronchial Asthma
- 20 Insulin - Uses & adverse effects

SHORT ANSWERS

10 x3=30

- 21 Name 3 sedatives
- 22 Name 3 uses of diuretics
- 23 Name 3 uses of Diclofenac
- 24 Name 3 immunological agents
- 25 Mention 3 uses of Morphine
- 26 Name 3 Peripheral muscle relaxants
- 27 Name 3 antihypertensives
- 28 Name 2 uses of Adrenaline & 1 adverse effect
- 29 Name 2 mucolytic agents
- 30 Name 3 factors altering drug action

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
FIRST YEAR ALL CERTIFICATE COURSES

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 45

QP CODE: 1104, ENGLISH (WRITE IN BLUE ANSWER BOOK)

WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING 1x15=15

- 1 Pollution
- 2 The use and abuse of mobile phones

ANSWER ANY ONE 1 x10=10

- 3 Write a letter to your friend inviting him/her to your sister's marriage
- 4 Write a letter to your class teacher requesting to grant two days leave

WRITE THE OPPOSITE GENDER OF 5x1=5

- 5 Prince
- 6 God
- 7 Poet
- 8 Cock
- 9 Queen

WRITE THE OPPOSITE OF THE FOLLOWING 5x1=5

- 10 Rich
- 11 Quick
- 12 Obedient
- 13 Hot
- 14 Strong

MAKE SENTENCES USING THE FOLLOWING 5x1=5

- 15 Because
- 16 To look after
- 17 Fond of
- 18 Along with
- 19 Not only

FILL IN THE BLANKS 5x1=5

- 20 She died----- cancer
- 21 I prefer coffee ----- tea
- 22 He is ----- good friend
- 23 The book is ----- the table
- 24 I saw ----- elephant

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
FIRST YEAR ALL DIPLOMA COURSES

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4107, ENGLISH (WRITE IN GREEN ANSWER BOOK)

WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING

1x15=15

- 1 Role of technicians in hospitals
- 2 Pandemic diseases

ANSWER ANY ONE (LETTER WRITING)

1 x10=10

- 3 Write a letter to your principal requesting to grant two days leave as you are going to Mysore for your brother's marriage

- 4 Write a letter to your friend telling him/her about your paramedical course

5 USE THE FOLLOWING IDIOMS/PHRASES IN SENTENCE OF YOUR OWN

5x1=5

- A) Keep in touch B) Childs play C)Heart of gold D) Fish out of water E) For a while

6 CHANGE THE FOLLOWING INTO INDIRECT SPEECH

5x1=5

- A) She said" I am going to London" B) Ravi said" I saw your father yesterday"

C)Our head master said" Honesty is the best policy"

D) " Get me my glasses" asked grandfather E) Raman said" I will go"

7 CHANGE THE VOICE OF THE FOLLOWING

5x1=5

- A) Neha's father praised her B)Suman is writing a novel C)Everyone loved mother Teresa

D)The director will give you instructions E)Nests are built by birds

8 WRITE THE OPPOSITE OF THE FOLLOWING

5x1=5

- a) Early b)Ugly c)Gentlemen d) Master e) Broad

9 FILL IN THE BLANK WITH THE SUITABLE PREPOSITION

5x1=5

- A) I am fond ---- mangoes B) We live ---- Mysore C) I depend ---- you

D) This book belongs ---- him E) The sun rises ---- the east

10 FILL IN THE BLANKS WITH ARTICLES

5x1=5

- A) I am fond ---- mangoes B) ---- stars are in the sky C) He is ---- young boy

D) Delhi is ---- big city E) He sent me ---- gift

11 GIVE THE SYNONYMS OF THE FOLLOWING

5x1=5

- A) Come B)Get C)Have D)Happy E) Neat

12 Read the following passage carefully and answer the questions that follow =10

5x2

Gandhiji visited many small villages in India. He did not go by car or by bus but walked. He stayed with the poor people in their homes and helped them in many ways. They loved him very much and called him Bapu. He was called as the 'father of nation'. Many people in India loved him and many people in foreign countries too loved him. Hindus, Muslims, Christians and many other people called him 'father' and loved them all.

Questions: A)Where did Gandhiji stay during his visit to the village

B) How did he go from village to another

C) Who was called as the 'father of nation'?

D) Why was Gandhiji called Bapu?

E) People in both India and foreign countries loved him (true/false)

13 WRITE THE CORRECT MEDICAL TERM

1x10=10

- A) Oto B) Radio C) Gastro D) Derma E)H.I.V F)U.T.I G) HYPER H)I.V I) Bio J) T B

14 E MAIL WRITING

1x5=5

Write an e-mail to attend the meeting of the staff at 11 AM in the office meeting hall

15 FILL IN THE BLANKS WITH APPROPRIATE ARTICLES AND PREPOSITIONS

5x1=5

GIVEN IN THE BRACKET (at, the ,a ,at, of)

There was---- party ---- the club house. There were hundreds ---- people in that party.

The party started --- 12p.m. We all enjoyed ---- party.

16 RE-ARRANGE THE JUMBLED SEGMENTS TO FORM A SENTENCE

6x1=6

A)punish/shall/you/I

B)Work hard/to/pass/the/examination/shall/we

C)race/slow/wins/and/the/steady

D)river/is/holy/Ganga/a/the

E)you/nice/meet/to

F)better/cure/prevention/than/is

17 COMPLETE THE FOLLOWING DIALOGUE (SITUATION BASE CONVERSATION)

4 x1=4

Guide: Good morning sir -----

Tourist: Good morning -----

Guide: yes sir, I will take over to Mysore and inform about the place

Tourist: -----

Guide: ----- let us move

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, APRIL 2022
III YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY (DMRT)
TIME: 3 Hrs (RS -2 SCHEME) MAX. MARKS: 100
QP CODE: 6143, HOSPITAL ADMINISTRATION
(WRITE IN GREEN ANSWER BOOK)

I. SHORT NOTES - ANSWER ANY EIGHT 8X5=40

1. Explain quality control aspects in an hospital.
2. Explain Hospital acquired infection control committee (HICC).
3. Explain the process of drug indenting in a district hospital?
4. Briefly describe the organization of casualty and emergency services.
5. Planning of NICU in a district hospital.
6. Fire safety in hospitals.
7. Bed occupancy rate and Bed turnover ratio
8. Plan for dietary services in a district hospital
9. Describe briefly about outcome indicators in a district hospital.
10. Functions of Nursing Superintendent.

II. SHORT ANSWERS 20x3=60

11. High alert drugs in pharmacy.
12. Importance of police out post in hospitals.
13. Enumerate three committees in an hospital.
14. Length of Stay
15. Functions of housekeeping supervisors.
16. Dress code in an hospital.
17. Health Insurance.
18. Administrative organization in a district hospital
19. Average Daily Census
20. Functions of Medical Superintendent.
21. Bio-Medical waste management
22. Importance of medical record section in an hospital.
23. History of hospitals in India.
24. Hospital death rate.
25. Functions of resident medical officer (RMO).
26. Patient feedback surveys.
27. Standard operating procedure (SOP).
28. Helpdesk in hospital.
29. Functions of an electrician in hospital.
30. Electric generators in hospitals.
