

SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 90

9.30am - 11am, QP CODE: 2101 SECTION -A, ANATOMY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE 1x10=10

- 1 Briefly write about the parts of respiratory system
- 2 Write briefly on the parts of gastrointestinal system. Briefly mention the function and structure of each part of gastrointestinal system

SHORT ESSAY- ANSWER ANY FIVE 5x5 = 25

- 3 Right and left lung
- 4 Brief about excretory system
- 5 Histology of pituitary gland
- 6 Histology of kidney
- 7 Histology of skin
- 8 Structure and function of thyroid gland
- 9 Pancreas

SHORT ANSWERS 5 x2=10

- 10 Parts of stomach
- 11 Parts of small intestine
- 12 Name the endocrine glands
- 13 Name the bones of lower limb
- 14 Name the parts of excretory system

TIME: 1.30 Hrs, QP CODE: 2102 SECTION -B, PHYSIOLOGY

11AM - 12.30 PM (WRITE IN RED ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE 1x10=10

- 1 Give an account of extrinsic mechanism of coagulation of blood. Add a note on anticoagulation of blood. Add a note on anticoagulants
- 2 List the hormones secreted by pancreas. Explain function and regulation of secretion of Insulin

SHORT ESSAY-ANSWER ANY FIVE 5x5 = 25

- 3 Composition of CSF and its functions
- 4 Refractive errors
- 5 Waves of normal ECG
- 6 Hypoxia
- 7 Oral contraceptives
- 8 Functions of Kidney
- 9 Plasma Proteins

SHORT ANSWERS 5 x 2=10

- 10 Surfactant
- 11 Functions of saliva
- 12 Functions of WBC
- 13 Structure of nephron
- 14 Define cardiac output

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 100

9.30am - 11am, QP CODE: 5101 SECTION -A, ANATOMY

(WRITE IN BLUE ANSWER BOOK)

SHORT ANSWERS- ANSWER ANY FOUR

4x5=20

- 1 Write briefly about the veins of upper limb
- 2 Mention the types of muscles. Write briefly about skeletal muscle
- 3 Stomach
- 4 Uterus
- 5 Bones of upper limb

SHORT NOTES

10 x3 = 30

- 6 Name four arteries of upper limb
- 7 Name four veins of lower limb
- 8 Hip bone
- 9 Parts of male reproductive system
- 10 Liver
- 11 Write structure of neuron
- 12 Mention the anatomical planes
- 13 Mention the anatomical movements
- 14 Major salivary glands
- 15 Name the coverings of the brain

TIME: 1.30 Hrs, QP CODE: 5102 SECTION -B, PHYSIOLOGY

11AM - 12.30 PM (WRITE IN RED ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 1 Describe the Active transport mechanism across the cell membrane
- 2 Complications of Mismatched blood transfusion
- 3 Describe the Composition of Pancreatic juice
- 4 Peristalsis
- 5 Functions of Plasma proteins

SHORT NOTES

10 x3 = 30

- 6 Write the normal value of a) Erythrocyte sedimentation rate (ESR)
b) Packed cell volume (PCV)
- 7 Name any three types of Hypoxia
- 8 Define a receptor. Name any two sensory receptors
- 9 Write any three functions of Liver
- 10 Name any three Anticoagulants
- 11 Functions of Cerebrospinal fluid (CSF)
- 12 Draw a neat labelled diagram of Neuron
- 13 Name any three different types of White blood cells
- 14 Write the normal value of a) Bleeding time(BT) b) Clotting time (CT)
- 15 Name the different types of Muscle proteins

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY ONE

1x10=10

- 1 Define atom with labelled diagram. Briefly write about production of X-rays
- 2 Define transformer with labelled diagram. Mention types of transformers and uses in production of X-rays

SHORT NOTES - ANSWER ANY FIVE

5 x5 = 25

- 3 Write about different forms of energy
- 4 Capacitors with labelled diagram
- 5 Write about Rectification
- 6 AC and DC current
- 7 Rotating anode
- 8 Properties of X-rays

SHORT ANSWERS

5 x 2 = 10

- 9 Define Inverse square law
- 10 Define Ohms law and write its unit
- 11 Ammeter and write its unit
- 12 Two elements used in X-ray production/X-ray tube
- 13 Define space charge

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

SHORT NOTE- ANSWER ANY EIGHT QUESTIONS

8 x 5 = 40

- 1 Write brief note on radioactive decay
- 2 Labelled diagram of atom structure. Define a) Binding energy b) Valence shell c) ionisation
- 3 Mention types of generators. Briefly write about high frequency generator
- 4 Automatic exposure control devices
- 5 Construction and working of step up transformers
- 6 Write about components of ultrasonography machine
- 7 Compton and photoelectric effect
- 8 Effects of kVp and mAS on image quality
- 9 Define CT numbers(Hounsfield numbers) and mention base line reference numbers
- 10 Write short note on auto transformer and mention its uses

SHORT ANSWERS

20 x 3 = 60

- 11 Internal components of CT gantry
- 12 Collimators
- 13 Atomic number and mass number. Write their symbolic form
- 14 Electromagnetic spectrum and its two properties
- 15 Define isotope and half life
- 16 Automatic brightness control in fluoroscopy
- 17 Write a note on pair production
- 18 Artifacts
- 19 Region of interest (ROI)
- 20 Mention components of CT scan machine
- 21 State ohm's law with equation
- 22 Define potential difference, current and resistance
- 23 Merits of solid state detectors over ionisation chamber
- 24 What are non- ionising radiations? Give two examples
- 25 X- ray tube components
- 26 Filament and tube circuit
- 27 Short note on Acceleration of electrons
- 28 Focal spot size and tube geometry
- 29 Define pixel , voxel and attenuation
- 30 Filters

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO

2x 10 =20

- 1 Write in detail the organization of MRD
- 2 Medical audit and forms control program
- 3 Medical record committee

SHORT NOTES - ANSWER ANY TEN

10x5=50

- 4 Uses of medical records
- 5 Assembling & deficiency check
- 6 Cognizable and non cognizable offence
- 7 Rights of arrested person
- 8 Registration of birth & death act
- 9 List the basic and special medical record forms
- 10 Personal & impersonal documents
- 11 Values of medical records
- 12 Define bed occupancy rate & write the formula
- 13 Define net death rate & write the formula
- 14 Define average length of stay & write the formula
- 15 Summons & public servant

SHORT ANSWERS

10x2=20

- 16 Tracer card
- 17 Accession register
- 18 Wound certificate
- 19 Birth register
- 20 Types of court in India
- 21 Filing method
- 22 Types of indexing
- 23 Complaint
- 24 Decree
- 25 Discharge analysis

SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Medical record committee
- 2 Uses of medical record
- 3 Qualitative & Quantitative analysis of medical record
- 4 Assembling and deficiency check
- 5 Terminal digit filing
- 6 Cognizable and non cognizable offence
- 7 Summons & warrant
- 8 Rights of the arrested person
- 9 Compoundable and non compoundable offences
- 10 Complaint and plaintiff

SHORT ANSWERS

20x3=60

- 11 Government pleader
- 12 Decree
- 13 Public servant
- 14 Estoppel
- 15 Tracer card
- 16 Discharge analysis
- 17 Accident register
- 18 Accession register
- 19 Hospital census and its uses
- 20 Birth certificate uses
- 21 Diagnostic index and its uses
- 22 Filing methods
- 23 Medical audit
- 24 Personal & impersonal records
- 25 Difference between record and medical record
- 26 Types of courts in india
- 27 Types of MLC cases
- 28 Functions of MRD
- 29 Consent & informed consent
- 30 Workmen's compensation act

SUPPLEMENTARY EXAMINATION, JULY 2021
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

LONG ESSAY - ANSWER ANY TWO

2x10=20

- 1 Pre-operative preparation for surgery
- 2 Concept of Central sterile supply department (CSSD)
- 3 Day Care Surgery

SHORT NOTES - ANSWER ANY TEN

10x5=50

- 4 Electrocautery
- 5 Skin grafting
- 6 Wound healing
- 7 Bioburden
- 8 Manifold room
- 9 Health care team
- 10 Zones of operation theatre
- 11 Mop count and its importance
- 12 Scrubbing technique
- 13 Hand washing technique
- 14 Sterile team members
- 15 Types of suture materials

SHORT ANSWERS

10x 2=20

- 16 Position for thyroid surgery
- 17 Daily OT cleaning
- 18 Gauze
- 19 Asepsis
- 20 Tetanus toxoid
- 21 Airway
- 22 Pulse-oximeter
- 23 Gowning
- 24 Enema
- 25 Ryle's Tube

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

SHORT NOTES- ANSWER ANY EIGHT

8x5 =40

- 1 OT layout
- 2 Concept of CSSD
- 3 Wound management
- 4 Post op care
- 5 Sterile team member
- 6 Universal precautions
- 7 Flash sterilization
- 8 Draping technique
- 9 Bioburden
- 10 Consent

SHORT ANSWERS

20x3=60

- 11 Monopolar cautery
- 12 Lithotomy position
- 13 Movement in OT
- 14 Surgical gown
- 15 MOP count
- 16 OT cleaning
- 17 Laryngeal mask
- 18 Red rubber catheter
- 19 Duty diversion
- 20 Exchange areas in OT
- 21 Autoclave
- 22 Blood transfusion
- 23 Suction apparatus
- 24 PDS suture
- 25 Non-scrub member
- 26 Sitz bath
- 27 Patient nurse relationship
- 28 Foley's catheter
- 29 Painting
- 30 Hand wash steps

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO 2x10 = 20

- 1 Describe anatomy of lens and factors affecting the transparency of lens fibres
- 2 Define Retinoscopy. Mention its types and procedure
- 3 Describe Trial Set. Add a note on different components of Trial set

SHORT NOTES - ANSWER ANY TEN 10 x 5=50

- 4 Define Myopia. Add a note on Types of Myopia
- 5 Convex lenses
- 6 Gross anatomy of Eyeball
- 7 Bifocals
- 8 Components of accommodation
- 9 Cycloplegic drugs and its uses.
- 10 Types of contact lenses
- 11 Drainage of aqueous humour
- 12 Neutralization of lenses
- 13 Low vision Aids and its uses
- 14 Maddox rod
- 15 Visual pathway of eye

SHORT ANSWERS 10x2=20

- 16 Finger confrontation test
- 17 Tear film
- 18 Name Extraocular muscles
- 19 Parts of Uvea
- 20 Lacrimal apparatus
- 21 How to identify convex lens
- 22 Colour vision chart
- 23 Transpose +3DS/-2DC at 180°
- 24 Jackson's cross cylinder
- 25 Duochrome Test

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SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Define hypermetropia. Classify hypermetropia
- 2 Laws of refraction
- 3 Layers of retina
- 4 Define retinoscopy. Add a note on objective refraction
- 5 Cycloplegic refraction and its uses
- 6 Ocular coats of the eye
- 7 treatment of myopia
- 8 Extra ocular muscles and action of each muscle
- 9 Describe drainage of aqueous humour of the eye
- 10 Ascan biometry

SHORT ANSWERS

20x3=60

- 11 Prisms
- 12 Types of spectacle frames
- 13 Worth 4 dot test
- 14 Trial frame
- 15 Jackson cross cylinder and its uses
- 16 Lacrimal apparatus
- 17 Maddox rod
- 18 Types of contact lens
- 19 Tear film
- 20 Lasik
- 21 Structure of eyelid
- 22 Write simple transposition of +3DS-1DC at 180 degrees
- 23 How to identify concave lens?
- 24 Bifocal lens
- 25 Factors affecting corneal transparency
- 26 Types of tonometer
- 27 Fogging technique
- 28 Snellens chart
- 29 Pupillary reflexes
- 30 Homatropine

SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY (DDT)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 90

9.30 am -11 am, QP CODE- 2151, SECTION-A, PHARMACOLOGY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY - ANSWER ANY ONE 1 x10 = 10

- 1 Mention the various routes of drug administration with examples. Write the advantages and disadvantages of Intravenous route of drug administration
- 2 Name FOUR Opioid analgesics. Mention TWO therapeutic uses, TWO adverse effects and TWO contraindications of Morphine

SHORT NOTES -ANSWER ANY FIVE 5 x5=25

- 3 Paracetamol
- 4 Treatment of poisoning
- 5 Oral contraceptives
- 6 Insulin preparations
- 7 First line Antitubercular drugs
- 8 Aminoglycoside antibiotics

SHORT ANSWERS 5x2=10

- 9 Mention the disease caused due to deficiency of
a. Vitamin A b. Thiamine c. Vitamin C d. Vitamin B₁₂
- 10 Mention TWO topical dosage forms
- 11 Name FOUR enzymes used in therapy
- 12 Name TWO killed vaccines
- 13 Name TWO colouring agents

TIME: 1.30 Hrs, QP CODE- 2152, SECTION-B, THEORY OF DIALYSIS

11 am-12.30 pm (WRITE IN RED ANSWER BOOK)

LONG ESSAY - ANSWER ANY ONE 1x10 = 10

- 1 Dialysis system add a note on anatomy and physiology of artificial kidney
- 2 Define Hemodialysis. Brief about assessments of adequacy of dialysis

SHORT NOTES -ANSWER ANY FIVE 5x 5 = 25

- 3 Renal failure
- 4 Body fluid composition
- 5 Dialysers
- 6 Complications associated with dialysis
- 7 Access for dialysis or to the circulation
- 8 CAPD Catheter

SHORT ANSWERS 5x 2 = 10

- 9 Water analysis
- 10 Heparin
- 11 Wearable artificial kidney
- 12 Reverse osmosis/RO
- 13 Common investigations before dialysis

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SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 100

9.30 am -11 am, QP CODE- 5151, SECTION-A, APPLIED PHARMACOLOGY

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR 4 x 5 =20

- 1 Describe the mechanism of action and uses of NSAIDs
- 2 Uses and adverse effects of Diazepam
- 3 Write the mechanism of action, uses and adverse effects of Aminoglycosides
- 4 Treatment of Acute severe asthma
- 5 Liquid dosage forms of drugs

SHORT ANSWERS 10 x 3=30

- 6 Name THREE antiemetics
- 7 Post exposure prophylaxis in HIV
- 8 Write THREE advantages and disadvantages of Oral route of drug administration
- 9 Management of Hypertensive crisis
- 10 Write SIX uses of Corticosteroids
- 11 Hepatitis B vaccine
- 12 Write THREE differences between Heparin and Warfarin
- 13 Name THREE nephrotoxic drugs
- 14 Erythropoietin
- 15 Mention THREE drugs eliminated by dialysis

TIME: 1.30 Hrs, QP CODE- 5152, SECTION-B, THEORY OF DIALYSIS

11am-12.30 pm (WRITE IN RED ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR 2 x 5=20

- 1 Peritoneal Dialysis
- 2 Ultra filtration
- 3 Anticoagulation
- 4 Renal function test
- 5 Dialysate

SHORT ANSWERS 9 3=30

- 6 Vascular access in HD
- 7 Acid concentrate composition
- 8 Steps in storage of dialyser
- 9 Dialyser reuse
- 10 AV fistula failure
- 11 Transmembrane pressure
- 12 Ultrafiltration coefficient of a dialyser
- 13 When to discard dialyser?
- 14 Acute kidney injury
- 15 Osmosis

LONG ESSAY ANSWER ANY ONE

1 x10=10

- 1 Classify waxes and write in detail about inlay wax
- 2 Classify gypsum products and describe in detail about type II gypsum product

SHORT NOTES -ANSWER ANY FIVE

5x5=25

- 3 Tarnish and Corrosion
- 4 Denture base resins
- 5 Duplicating materials
- 6 Gypsum bonded investment
- 7 Tray materials
- 8 Types and uses of flux
- 9 Gold alloys

SHORT ANSWERS

5 x 2=10

- 10 Electroplating
- 11 Nickel Chromium alloys
- 12 Niti wires
- 13 Divestment
- 14 Soldering

SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES -ANSWER ANY FOUR QUESTIONS

4X5=20

- 1 Metals used in dentistry and write in detail about base metal alloys
- 2 Classify impression material, write in detail about agar-agar
- 3 Classify denture base material sand composition of heat cure acrylic
- 4 Phosphate bonded investment material
- 5 Write in detail about casting defects

SHORT ANSWERS

10 x3 =30

- 6 Uses of wax
- 7 GIC uses
- 8 Separating media
- 9 Flux and anti flux
- 10 Types of sprues
- 11 Wet strength
- 12 Mention any three difference of alpha and beta hemi hydrate
- 13 Classify dental cements
- 14 Classify trays depending on materials used in fabrication
- 15 Define soldering and welding

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY ANSWER ANY ONE 1 x9=9

- 1 Mention the bones skull. Write briefly about mandible bone
- 2 Name the cranial nerves of the body. Write briefly about any one cranial nerve

SHORT ESSAY -ANSWER ANY TWO 2 x 5 = 10

- 3 Maxillary artery
- 4 Muscles of facial expression
- 5 Parotid salivary glands

WRITE SHORT ANSWERS 3 x 2 = 6

- 6 Name the types of epithelium
- 7 Dental formula
- 8 Nerve supply of the tongue

QP CODE- 2182, SECTION-B, GENERAL PHYSIOLOGY
(WRITE IN RED ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR 4x4=16

- 1 Functions of saliva
- 2 Components of blood
- 3 Classify salivary glands with example
- 4 Deglutition
- 5 Coagulation factors
- 6 Functions of hormones

SHORT ANSWERS 2x2=4

- 7 Taste buds
- 8 Hyper salivation

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

SHORT NOTES -ANSWER ANY TWO 2x5=10

- 1 Describe 5th cranial none
- 2 Describe Tongue
- 3 Describe facial muscles of expression

SHORT ANSWERS 5 x 3 = 15

- 4 Name branches of facial nerve
- 5 Name parts of mandible
- 6 Name muscles of mastication
- 7 Name blood vessels of face
- 8 Names the hormones of pituitary

QP CODE: 5182, SECTION-B, GENERAL PHYSIOLOGY
(WRITE IN RED ANSWER BOOK)

SHORT NOTES -ANSWER ANY TWO 2 x 5=10

- 1 Functions of saliva
- 2 Functions of plasma proteins
- 3 Transport of oxygen in blood

SHORT ANSWERS 5 x 3 = 15

- 4 Contraception methods in males
- 5 Sensory receptors
- 6 Actions of Insulin
- 7 Normal pulse rate and blood pressure
- 8 Function of WBC

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SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 4191, ANATOMY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES- ANSWER ANY EIGHT

8 x 5 = 40

- 1 Blood supply of heart
- 2 Female reproductive system
- 3 Blood supply to brain
- 4 Lungs
- 5 Extraocular muscles
- 6 Stomach
- 7 Cubital fossa
- 8 Kidney
- 9 Functional areas of brain
- 10 Brain stem

SHORT ANSWERS

20 x 03 = 60

- 11 Pectoral region
- 12 Muscles of upper limb
- 13 Bones forming elbow joint
- 14 Name tarsal bones
- 15 Gluteus muscle
- 16 Contents of femoral triangle
- 17 Lymphatic drainage of lower limb
- 18 Bones forming ankle joint
- 19 Cervical vertebrae
- 20 Name anterior abdominal muscles
- 21 Name ear ossicles
- 22 Name papillae of tongue
- 23 Conducting system of heart
- 24 Bronchopulmonary segments
- 25 Diaphragm
- 26 Parts of small intestine
- 27 Male reproductive system
- 28 Pancreatic islets
- 29 Neuromuscular junction
- 30 Pyramidal system

SUPPLEMENTARY EXAMINATION, JULY 2021
III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 100
9.30AM-11AM, QP CODE: 6191- SECTION-A, P.T. IN MEDICAL CONDITIONS
(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR 4 x5=20

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

SHORT ANSWERS 10 x3=30

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

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

TIME: 1.30 Hrs;11AM-12.30 PM (WRITE IN RED ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR 4 x5=20

- 1 Explain PT management of Above Knee amputation
- 2 Principle of Tendon Transfer and PT management
- 3 PT management for antenatal and post natal period
- 4 PT management of ACL injury
- 5 What are the deformities after radial nerve injury? Write its assessment and PT management

SHORT ANSWERS 10 x3=30

- 6 Guyon's canal syndrome
- 7 Huffing and coughing
- 8 Tendon transfer
- 9 Crush injury
- 10 Breast Radical Mastectomy
- 11 Ilizarov fixator
- 12 Skin graft
- 13 Sprain and strain management
- 14 Colles fracture
- 15 Dyskinesia

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SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Write principle, types and applications of electrophoresis
- 2 Explain the digestion and absorption of carbohydrates
- 3 Describe the liver function tests LFT in detail

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Importance of gluconeogenesis
- 5 Write principle and applications of ISE (Ion selective Electrodes)
- 6 Quality control
- 7 Mention the precautionary measures to be taken while a) recording of patients data b) investigations and c) reporting
- 8 Cardiac profile tests
- 9 Abnormal constituents of urine
- 10 Write about the steps of Glycolysis
- 11 Write principle, types and applications of RIA
- 12 Formation of urea
- 13 Applications of chromatography
- 14 Autoanalyser
- 15 Clearance tests

SHORT ANSWERS

10x2=20

- 16 Name the ketone bodies
- 17 Reagent kits
- 18 Constituents of gastric juice
- 19 Name electrolytes and their normal values
- 20 Batch analyzer
- 21 Name two enzymes involved in digestion of proteins
- 22 Specific gravity of urine
- 23 Applications of Enzyme Linked Immuno Sorbent Assay (ELISA)
- 24 What are micelles?
- 25 Normal values of a) Urea b) Uric acid

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Write instrumentation and benefits of autoanalyser
- 2 Explain laws, parts, instrumentation and applications of spectrophotometer
- 3 Write principles and applications of Radio Immuno Assay (RIA)
- 4 Patterns of cardiac enzymes in heart diseases
- 5 Write principle and applications of electrolyte analyser
- 6 Renal regulation of acid base balance
- 7 Define jaundice and write different types of jaundice with their characteristics features
- 8 External Quality Control
- 9 Write principle, types and applications of electrophoresis
- 10 Write advantages and disadvantages of different methods of glucose estimation

SHORT ANSWERS

20x3=60

- 11 Isoenzymes
- 12 Explain accuracy and precision
- 13 Percentage error in laboratory
- 14 Respiratory acidosis and Respiratory alkalosis
- 15 Fouchet test
- 16 Reference value and its interpretation
- 17 Applications of flame photometry
- 18 Chloride shift
- 19 Define hypertension. Write different types of hypertension
- 20 Pre analytical factors in clinical chemistry
- 21 Principle and applications of blood gas analyser
- 22 Biochemical finding in hepatic jaundice
- 23 Principle and advantages of glucose oxidase method
- 24 Lipid profile
- 25 Blood buffers
- 26 Biochemical findings in pre hepatic jaundice
- 27 Post analytical factors in clinical chemistry
- 28 Benedict's test
- 29 Principles of quality assurance
- 30 Test for bile salts

**KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)**

LONG ESSAY - ANSWER ANY TWO **2x 10 =20**

- 1 Define HIV/AIDS. Discuss the magnitude, prevention and control
- 2 Describe the steps in an investigation of food poisoning in the hostel. How do you prevent the recurrence in future?
- 3 Describe the epidemiology of Dengue fever. Describe the methods of prevention.

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

- 4 Enumerate National Health Programs. Describe the National Immunization Programme in detail
- 5 Prevention of coronary heart disease
- 6 Primary factors in accidents
- 7 Tracking in Hypertension
- 8 Diseases transmitted by faeco-oral route
- 9 Blindness control programme
- 10 Role of ASHA
- 11 Integrated child development scheme
- 12 Carriers in typhoid
- 13 Prevention of Diabetes mellitus
- 14 Janani Suraksha Yojana
- 15 Rehabilitation in Leprosy

SHORT ANSWERS **10x2=20**

- 16 Body Mass index (BMI)
- 17 Enumerate viral hepatitis transmitted through blood
- 18 DOTS treatment in tuberculosis
- 19 Organisms causing Diarrhea
- 20 Functions of anganwadi centre
- 21 Paramedical worker
- 22 Hazards of obesity
- 23 Integrated Counselling and Testing Centre (ICTC)
- 24 Danger signs of cancer
- 25 Name four zoonotic diseases

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Write in detail about ICDS (Integrated child development service)
- 2 Vision 2020
- 3 Epidemiology and control of Malaria
- 4 Enumerate mosquito borne diseases. Write in detail on antivector measures
- 5 Investigation of an epidemic
- 6 ESI act
- 7 Janani Suraksha Yojana
- 8 Pulse polio Immunization
- 9 Revised National Tuberculosis Control Program (RNTCP)
- 10 Mid day meal programme

SHORT ANSWERS

20x3=60

- 11 School health programme
- 12 List causes of blindness in India
- 13 Diabetic foot
- 14 Incubatory carriers
- 15 Rule of Halves
- 16 Body mass index
- 17 Rehabilitation in Leprosy
- 18 Cancer registry
- 19 First aid in dog bite
- 20 Hazards of obesity
- 21 Tracking of BP
- 22 Routes of transmission of HIV virus
- 23 Epidemiology of Typhoid.
- 24 ORS
- 25 Types of epidemic
- 26 ASHA
- 27 Enumerate National Health Programs
- 28 Pandemic
- 29 Minimum Needs program
- 30 Oral cancer

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Draw neat labelled cross sectional diagram of x-ray film and write the uses
- 2 Explain the steps of x-ray film processing
- 3 Mention the types of interaction of radiation with matter and write about Compton effect with diagram

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Storage of exposed films.
- 5 Scattered radiation
- 6 Properties of x-rays.
- 7 Briefly explain about IITV
- 8 Collimation
- 9 Stationary anode
- 10 Write about factors affecting X-rays
- 11 Alpha and beta decay
- 12 Fixing agent
- 13 Write about general care of Intensifying screens.
- 14 Radiation protection devices
- 15 Define grids and mention types of grids used in radiography

SHORT ANSWERS

10x2=20

- 16 High kV technique
- 17 Latent image
- 18 Write in brief about hangers
- 19 Define Half life of an radioactive element
- 20 Periodic table
- 21 Cathode tube
- 22 Define radioactivity and mention types
- 23 X ray film hangers
- 24 X ray film Drying methods
- 25 Capacitor

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Write a short note on sources of radiation
- 2 Write short note on environmental safety measures in radiology department
- 3 Write short note on mobile radiography
- 4 Write a short note on grids, function and its uses
- 5 Steps to be followed for bedside procedure of orthopedic patient
- 6 Signs and symptoms of contrast reactions and management
- 7 Mention any three views of shoulder joint and explain any one positioning
- 8 ALARA concept
- 9 Mobile radiography
- 10 Short note on fluoroscopic procedures

SHORT ANSWERS

20x3=60

- 11 MAs and KVP with units
- 12 Write Short term effects of radiation exposure
- 13 Write short note on bone survey
- 14 Beam limiting devices
- 15 Positioning of skyline view
- 16 Mention any three anatomical planes
- 17 Name any three skull lines
- 18 Lead strips and lead markers
- 19 Immobilization devices in radiography
- 20 Uses of sponges and sandbags in radiography
- 21 Para nasal sinus radiographic views
- 22 Views for scaphoid imaging
- 23 Mention responsibilities of radiographer in department
- 24 Source to image distance
- 25 Mention cardinal principles in radiation protection
- 26 Steps followed during bedside procedures
- 27 Mention signs and symptoms of shock patient
- 28 Fog
- 29 Mention Paranasal sinuses (PNS) views
- 30 Beam restriction and shielding

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO 2 x 10 =20

- 1 What is epidural anesthesia? Write in detail about positioning, needles, drugs used & its complications
- 2 What is non-invasive monitoring? Explain in detail about capnography
- 3 Classify neuromuscular blockers. Explain in detail about succinyl choline - mechanism of action, uses and its side effects

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 4 Hydroxyethyl starch
- 5 CPR
- 6 Thiopentone
- 7 Morphine
- 8 Blood transfusion reaction
- 9 Halothane
- 10 Intra operative hypotension
- 11 Lignocaine
- 12 Care and sterilization of anesthesia equipments
- 13 Occupational hazards of OT personnel
- 14 Vasodilators
- 15 Medicolegal aspects of anesthesia

SHORT ANSWERS 10x2=20

- 16 Prone position
- 17 Informed written consent
- 18 Laryngeal mask airway
- 19 Glycopyrolate
- 20 How to prevent hypothermia inside OT
- 21 Dexamethasone
- 22 JR circuit
- 23 Oxygen cylinder
- 24 What are the agents used in nebulization
- 25 Laryngoscopes

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Safety features of Anaesthesia workstation
- 2 Patient positioning, hazards and care of patients during spinal anesthesia
- 3 Suction apparatus - principles and uses
- 4 Propofol - content, dosage, uses and its adverse effects
- 5 Oxygen flush - why, when and how to use
- 6 Explain in detail about basic standard non invasive monitoring
- 7 Occupational hazard to OT personnel
- 8 Details of Bain's circuit with functional analysis
- 9 Laryngeal mask airway
- 10 Tourniquets

SHORT ANSWERS

20x3=60

- 11 JR circuit
- 12 Fentanyl
- 13 Venturi mask
- 14 Ondansetron
- 15 Normal saline
- 16 Atropine
- 17 Vecuronium
- 18 Airway exchange catheter
- 19 Face mask - sizes and triple maneuver
- 20 Record keeping
- 21 Combitube
- 22 Spinal additives
- 23 Preoperative fasting guidelines
- 24 Preloading
- 25 Endotracheal tubes- sizes, types and fixing
- 26 Informed written consent
- 27 Drugs used in CPR
- 28 Hydroxyethyl starch
- 29 Drug labelling
- 30 Spinal needles

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

- 1. ANSWER THE FOLLOWING** **3x 5 =15**
 - i. What are the objectives of learning medical terminology?
 - ii. What are the chief sources of medical words? Give one example for each
 - iii. What are the elements of medical terminology? Give one example for each

- 2. GIVE THE MEANING FOR THE FOLLOWING PREFIX** **5x1=5**
 - a) Cata b) Anti c) Hemi d) Macro e) Meso
- 3. GIVE THE MEANING FOR THE FOLLOWING SUFFIXES** **5x1=5**
 - a) Itis b) Rhexis c) Centesis d) Pexy e) Plasty
- 4. GIVE THE MEANING FOR THE FOLLOWING ROOTS** **5x1=5**
 - a) Aden b) Cardi c) Cysto d) Cheil e) Hyster
- 5. GIVE THE MEANING FOR THE PHOBIAS** **10x1=10**
 - a) Telephonophobia b) Zoophobia c) Parthenophobia d) Genophobia
 - e) Hydrophobia f) Cynophobia g) Autophobia h) Acrophobia i) Erythrophobia
 - j) Algoophobia
- 6. DIFFERENTIATE THE FOLLOWING TERMS** **5x2=10**
 - a) Addiction & Adduction
 - b) Antiseptic & Aseptic
 - c) Bradycardia & Tachycardia
 - d) Carpus & Corpus
 - e) Callus & Callous
- 7. WRITE THE TERMS FOR THE FOLLOWING NUMERALS** **5x1=5**
 - a) Mini b) Bini c) Tri d) Duo e) Octo
- 8. GIVE THE MEDICAL TERMS FOR THE FOLLOWING** **10x1=10**
 - a) Temporary absence of respiratory
 - b) A drug that reduces fever
 - c) Before birth
 - d) Painful urination
 - e) Difficult in child birth
 - f) Enlargement of spleen
 - g) Any disease of the skin
 - h) Enlargement of heart
 - i) Inflammation of the cervix
 - j) Inflammation of bile duct
- 9. DEFINE THE FOLLOWING** **10x1=10**
 - a) Pyelitis b) Hepatitis c) Pyogenic d) Glycosuria e) Hematoma
 - f) Hypotension g) Anemia h) Proctoplasty i) Congenital j) Dysphagia
- 10. EXPAND THE FOLLOWING ABBREVIATIONS** **10x1=10**
 - a) SMC b) SARS c) HIV d) IHD e) FTND
 - f) KUB g) DM h) COPD i) HOPI j) MRI
- 11. GIVE THE MEANING FOR THE FOLLOWING COLOURS** **5x1=5**
 - a) Polios b) Xanthos c) Cyanos d) Albus e) Niger

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Name the clinical division of abdomen
- 2 Name the five planes of the body
- 3 Define phobia with three examples
- 4 What are the elements of medical words? Give one example for each
- 5 What is the purpose of learning medical terminology
- 6 What are the objectives of medical terminology
- 7 Define word roots & combining form
- 8 Define noun suffix & adjective suffix with two examples
- 9 Define simple fracture and compound fracture
- 10 Define Eponyms and Homonyms

SHORT ANSWERS

20x3=60

- 11 Define Bradycardia and Tachycardia
- 12 Differentiate between Amenorrhea & Dysmenorrhea
- 13 Differentiate between Addiction & Adduction
- 14 Give the meaning for the colours a) Erythros b) Glaucos c) Niger
- 15 Write the medical term for the colours a) Yellow b) White c) Grey
- 16 Give the meaning for the Numericals a) Monos b) Deca c) Mini
- 17 Write the medical term for the numerals a) Seven b) Two c) One
- 18 Write the meaning of a) Autophobia b) Chromatophobia c) Belone phobia
- 19 Give the meaning of the prefix a) Cata b) Dys c) Dia
- 20 Give the meaning of the suffix a) Itis b) Pathy c) Ptosis
- 21 Give the meaning of the operative suffix a) Desis b) Plasty c) Scopy
- 22 Give the meaning of the symptomatic suffix a) Genic b) Dynia c) Stasis
- 23 Give the meaning of the roots a) Cysto b) Angio c) Gastr
- 24 Write the medical term for the roots a) Finger b) Intestine c) Blood
- 25 Define the Medical Terms a) Anemia b) Apnea c) Adrenal
- 26 Define the medical term a) Hydrocele b) Hyperglycemia c) Hepatomegaly
- 27 Define the operative medical term a) Tonsillectomy b) Hysteropexy
c) Proctoplasty?
- 28 Define the medical term a) Gastralgia b) Acrodynia c) Cephalgia
- 29 Expand the abbreviation a) HIV b) COPD c) CSOM
- 30 A) The medical term for pain in the joints is called _____
B) Crushing of stones in the bladder is called _____
C) Inflammation of the middle ear is called _____

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO

2 x 10 =20

- 1 Define hemodialysis. Brief about assessment of adequacy of dialysis. Add note on complications associated with hemodialysis
- 2 Chronic kidney disease. Add a note on medical problems in dialysis patient
- 3 Peritoneal dialysis. Add a note on its complication

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Hypertension add a note on Antihypertensive
- 5 Heparin
- 6 Dialysate
- 7 Disinfection and sterilization of HD machine
- 8 Composition of dialysate
- 9 Water treatment
- 10 Acute kidney injury
- 11 Reverse osmosis
- 12 Preparation of dialysis concentrate and dialysate
- 13 Medical problems with CKD
- 14 SLEP
- 15 Vaccination for hemodialysis

SHORT ANSWERS

10x2=20

- 16 Uremic pericarditis
- 17 Monitors in dialysis machine
- 18 Priming the dialyser
- 19 AV fistula
- 20 Saline rinse
- 21 Functions of Kidney
- 22 Renal function test
- 23 Dialysis and common infection
- 24 Erythropoietin
- 25 Re use of dialyser

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Plasmapheresis
- 2 Anemia in CKD
- 3 Extra corporeal dialysis circuit
- 4 Acute kidney injury
- 5 Medical problems in HD patients
- 6 Chemistry of Hemodialysis
- 7 Heparin free dialysis
- 8 Anatomy and Physiology of kidney
- 9 Universal precaution
- 10 A V fistula

SHORT ANSWERS

20x3=60

- 11 Renal diet
- 12 Renal function test
- 13 Fibre bundle volume
- 14 Back wash
- 15 Antibiotic lock
- 16 Erythropoietin
- 17 AAMI
- 18 Emergency dialysis -3 indications
- 19 Cyclers
- 20 Name 3 antihypertensive
- 21 Adequacy tests for PD
- 22 Infections in HD
- 23 Monitoring of patients during HD
- 24 Checklist for HD
- 25 CRRT
- 26 Ultra filtration
- 27 Sodium remodeling
- 28 Alarms in dialysis machine
- 29 Hepatitis B & C
- 30 Urea reduction ratio

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY - ANSWER ANY TWO 2 x 10 =20

- 1 Define Retinoscopy. Mention its types and describe the procedure in brief
- 2 Laying of trolley for cataract surgery
- 3 Discuss maintenance of operating theatre sterilization, personnel and instruments

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 4 Maintenance of operating theatre register
- 5 Postoperative instructions after cataract surgery
- 6 Trial set
- 7 Cycloplegic refraction
- 8 How to calculate IOL power
- 9 Instruments used in Dacryocystorhinostomy
- 10 Uses of cryo machine
- 11 Segregation of OT waste, colour coding on disposable bins
- 12 Colour vision testing and its importance
- 13 Advantages of progressive spectacles over bifocals
- 14 Chalazion surgery
- 15 Therapeutic contact lenses

SHORT ANSWERS 10x2=20

- 16 Pinhole test and its importance
- 17 Mention 2 instruments in squint surgery
- 18 Laying a trolley for dressing in wards
- 19 Preoperative instructions for cataract surgery
- 20 Agents used in fumigation
- 21 Epilation
- 22 Mention two indications for ocular bandaging
- 23 Mention two instruments for enucleation
- 24 Maddox rod test
- 25 Drugs used in general anaesthesia

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES - ANSWER ANY EIGHT

8 x 5=40

- 1 Laying of instruments trolley for pterygium surgery
- 2 Postoperative instructions for cataract surgery
- 3 Agents used in fumigation
- 4 Neutralization of spectacle lenses
- 5 Name all the instruments used in dacryocystorhinostomy
- 6 Pinhole test and its importance
- 7 Describe procedure of retinoscopy
- 8 Mention different components of trial set
- 9 Define keratometry. Mention its uses
- 10 Chalazion surgery

SHORT ANSWERS

20x3=60

- 11 Instruments used in squint surgery
- 12 Describe simple transposition of lenses and its importance
- 13 Epilation
- 14 SRK formula
- 15 Red Green glasses
- 16 Progressive spectacles
- 17 Maintenance of OT register
- 18 How to perform lacrimal syringing
- 19 Maddox rod test
- 20 Name three topical anaesthetic agents
- 21 Pinhole test
- 22 How do you do ocular bandaging
- 23 Name three instruments in squint surgery
- 24 How to check spectacle power?
- 25 Name three low vision aid devices
- 26 Define enucleation. Where is it done?
- 27 Gonioscopy
- 28 Therapeutic contact lenses
- 29 Uses of Slit lamp examination
- 30 Uses of povidone iodine

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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)

LONG ESSAY

1 x 10=10

- 1 Describe in detail the principal factors of teeth arrangement

SHORT NOTES

5x5=25

- 2 Relining and Rebasing
- 3 Draw the diagram of mean value articulator and label it
- 4 Uses of occlusion rims
- 5 Beading and Boxing
- 6 Polishing of dentures

SHORT ANSWERS

5 x 2=10

- 7 Zero degree teeth
- 8 Master cast
- 9 Curing cycle
- 10 Porcelain teeth
- 11 SPA factor

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

SUPPLEMENTARY EXAMINATION, JULY 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)

SHORT NOTES- ANSWER ANY FOUR

4 x 5=20

- 1 Define Articulator. Write any two classifications
- 2 Relining and rebasing
- 3 Advantages and Disadvantages of Immediate denture
- 4 Selection of anterior teeth
- 5 Describe anatomical land marks of upper edentulous arch

SHORT ANSWERS

10 x 3=30

- 6 Uses of Occlusal rims
- 7 Repair of the denture
- 8 Compensating curves
- 9 Laboratory remounting
- 10 Acrylic curing cycles
- 11 Denture polishing agents
- 12 Incisive papilla
- 13 Types of cast
- 14 Beading and Boxing
- 15 Non anatomic teeth

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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)

LONG ESSAY

1 x 10=10

- 1 Define and classify Cementum. Describe Cemento-enamel junction

SHORT NOTES

5x5=25

- 2 Extrinsic and intrinsic dental stains
- 3 Periodontal abscess
- 4 Theories of mineralization of calculus
- 5 Acute gingival lesions
- 6 Stages of dental plaque formation

SHORT ANSWERS

5 x 2=10

- 7 Dentifrice
- 8 Explorer
- 9 Alveolar bone proper
- 10 Interdental cleaning aid
- 11 Tooth mobility

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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)

SHORT NOTES- ANSWER ANY EIGHT

8 x 5=40

- 1 Microscopic features of gingiva
- 2 Functions of periodontal ligament
- 3 Supra and subgingival dental plaque
- 4 Define and classify Calculus
- 5 Define and classify periodontal pocket
- 6 Acute necrotizing ulcerative gingivitis
- 7 Causes for gingival recession
- 8 Drug induced gingival enlargement
- 9 Clinical features of Chronic periodontitis
- 10 Composition and functions of saliva

SHORT ANSWERS

20 x 3=60

- 11 Composition of Calculus
- 12 Cemento-enamel junctions
- 13 Alveolar bone proper
- 14 Food impaction
- 15 Clinical features of gingivitis
- 16 Radiographic features of aggressive periodontitis
- 17 Name the theories of mineralization of calculus
- 18 Contents of periodontal pocket
- 19 Free gingiva
- 20 Cells of periodontal ligament
- 21 Gingival abscess
- 22 Name Principal fibres of Periodontal ligament
- 23 Puberty gingivitis
- 24 Periodontal abscess
- 25 Cemento dentinal junction
- 26 Extrinsic stains
- 27 Inflammatory gingival enlargement
- 28 Clinical significance of calculus
- 29 Alveolar bone proper
- 30 Pericoronitis

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

SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME:1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS:100

QP CODE: 5191, SECTION-A, PATHOLOGY

(9.30AM-11 AM) (WRITE IN BLUE ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR QUESTIONS

4 x 5=20

- 1 What is jaundice? Mention its types, etiology and diagnosis
- 2 Discuss the etiopathogenesis and laboratory diagnosis of Myocardial Infarction
- 3 Anemia: Classification, clinical features and lab diagnosis
- 4 Tuberculosis of lung. Add a note on lab diagnosis
- 5 Factors promoting and delaying wound healing

SHORT ANSWERS

10 x 3=30

- 6 Types of necrosis with example
- 7 Granulomatous Inflammation
- 8 Thrombosis - fate and its effects
- 9 Types of Shock
- 10 Atherosclerosis
- 11 Components of Fallots Tetralogy
- 12 Ulcerative lesions of intestine
- 13 Hematopoiesis regulators
- 14 Mention different types of infarctions with examples
- 15 Alcoholic liver diseases

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

TIME: 1.30 HRS (11AM-12.30 PM) (WRITE IN RED ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR QUESTIONS

4 x5=20

- 1 Type 1st hypersensitivity
- 2 Antibiotic susceptibility test
- 3 Dry heat sterilization
- 4 Cell mediated immunity and its function
- 5 IgA antibody

SHORT ANSWERS

10 x 3=30

- 6 Poliomyelitis
- 7 Properties of antigen
- 8 Agglutination reaction
- 9 Define infection and classify infection
- 10 Universal precautions
- 11 Meningitis
- 12 UTI
- 13 Hospital acquired infection
- 14 Ionizing radiation
- 15 Name three disease caused by S. Pneumoniae

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
FIRST YEAR ALL CERTIFICATE COURSES

TIME: 1.30 Hrs

(RS -1 SCHEME)

MAX. MARKS:45

QP CODE: 1101, PHYSICS

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE

1 x 10=10

- 1 State and explain law of conservation energy with respect to freely falling body
- 2 What is radio activity? Give the properties of nuclear radiations

SHORT NOTES- ANSWER ANY FIVE

5x5=25

- 3 Ohms law
- 4 Ultrasonic's
- 5 Refraction
- 6 Thermal radiations
- 7 Surface tension
- 8 Newton's law of gravitation
- 9 Parallelogram law of forces

SHORT ANSWERS

5 x 2=10

- 10 Dimension
- 11 Simple harmonic motion
- 12 Capacitors
- 13 Resistors
- 14 X-rays

**KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021**

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 Define centrifugal and centripetal force. list any three uses of centrifuges in medical laboratory
- 2 Write a short note on microscope
- 3 What is the principle of thermometer. Name any four types of medical thermometers used in hospitals
- 4 What is atom? Briefly explain the structure of atom
- 5 **Match the Following**

i) Length	a) Kelvin
ii) Mass	b) Meter
iii) Time	c) Ampere
iv) Current	d) Kilogram
v) Temperature	e) Second

- 6 Outline the principle and working of ultrasonography
- 7 Explain surface energy and surface tension
- 8 State ohms law, make use of ohms derive the expression for equivalent resistance when two resistors are connected in series
- 9 What is stream line flow and turbulent flow? Give one example for both?
- 10 **Multiple Choice questions**
A) In endoscopy which of the following device is used i) lens ii) prism iii) optical fibres iv) glass
B) The phenomena of splitting of light into its components colours is called
i) Reflection ii) refraction iii) Interference iv) circumference
C) For critical angle, angle of refraction is i) 90 degree ii) 60 degree iii) 30 degree iv) 180 degree
D) The phenomenon of superposition of two or more light waves is called
i) Reflection ii) interference iii) polarization iv) depolarisation
E) Apparatus used to examine human eye is
i) Colorimeter ii) Spectrometer iii) Centrifuges iv) Ammeter

SHORT ANSWERS

20 x 3=60

- 11 State and explain Newton's law of gravitation
- 12 What is Osmosis, Diffusion, Convection ?
- 13 State Bernoulli's theorem and mention any two applications of it
- 14 Explain Isothermal and adiabatic process
- 15 What is refraction ? write the statement of two laws of refraction
- 16 Give any three difference between transverse wave and longitudinal wave
- 17 Write short note on ammeter and Voltmeter
- 18 Define electric current and electric potential. And hence state ohms law
- 19 What is kinetic energy, mention the formula for Kinetic energy and explain the terms
- 20 **Fill in the blanks**
a) The acceleration due to gravity on the earth surface is _____
b) Silicon is a _____
c) Dimension of pressure is _____
- 21 Explain Beer & lamberts law
- 22 What is capacitors? write the formula for effective capacitance when two capacitors connected parallel
- 23 What are photo cells? Mention any two uses
- 24 Write short note NMR
- 25 Define three modes of heat transformation
- 26 What is thermal conductivity and mention any two applications?
- 27 What is flotation and explain Archimedes principle
- 28 Define stress, strain and modulus of elasticity
- 29 Give any three uses of cathode rays
- 30 **Answer in one word/sentence**
A) What are conductors? B) What are semi conductors? C) What are insulators?

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Vitamin A deficiency diseases
- 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

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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, JULY 2021

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 and the levels of prevention
- 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 Define Health
- 25 Name three social problems

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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 Medico Social worker.
- 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, JULY 2021

**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

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021

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, JULY 2021
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY (DOTT)

TIME: 1 Hr;9.30 am to 10.30am (RS -1 SCHEME) MAX. MARKS: 90

QP CODE: 2132, SECTION-A, BIOCHEMISTRY (WRITE IN BLUE 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?

QP CODE: 2133, SECTION-B, PHARMACOLOGY (RS -1 SCHEME)

TIME: 1 Hr;10.30 am to 11.30 am (WRITE IN RED ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

1 Mention the various routes of drug administration with examples. Write the advantages and disadvantages of Oral route of drug administration

2 Mention the Inhalational and Intravenous General Anaesthetics. Describe the actions and uses of Thiopentone sodium

SHORT NOTES -ANSWER ANY TWO 2x5=10

3 First line drugs used in Tuberculosis

4 Morphine

5 Spinal Anaesthesia

SHORT ANSWERS 5x2=10

6 Anaphylaxis

7 Name FOUR Benzodiazepines.

8 Mention TWO uses and TWO adverse effects of Sulfonamides

9 Mention FOUR drugs used in the treatment of Malaria

10 Mention TWO disinfectants used in the sterilization of OT

QP CODE: 2134, SECTION-C, MICROBIOLOGY (RS 1 SCHEME)

TIME:1 Hr;11.30 am to 12.30pm (WRITE IN PURPLE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

1 Define and classify sterilization, add a note on autoclave

2 Describe morphology, pathogenesis, and lab diagnosis of mycobacterium tuberculosis

SHORT NOTES -ANSWER ANY TWO 2x5=10

3 Prophylaxis of hepatitis

4 Active immunity

5 Gaseous method of sterilization

SHORT ANSWERS 5x2=10

6 Name two bacterial vaccines

7 Name two DNA viruses

8 Name two opportunistic fungi

9 Name any four normal flora of body

10 Different forms of bacteria

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

SUPPLEMENTARY EXAMINATION, JULY 2021
II YEAR DIPLOMA IN OPERATION THEATRE & ANAESTHESIA
TECHNOLOGY (DOT &AT)

TIME: 1 Hr;9.30 am to 10.30am

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5133, SECTION-A, BIOCHEMISTRY

(WRITE IN BLUE ANSWER BOOK)

SHORT ESSAY - ANSWER ANYFIVE

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

QP CODE: 5134, SECTION-B, APPLIED PHARMACOLOGY (RS -2 SCHEME)

TIME: 1 Hr;10.30 am to 11.30 am (WRITE IN RED ANSWER BOOK)

SHORT ESSAY - ANSWER ANY THREE

3x5=15

- 1 Name FOUR commonly used NSAIDs. Write the uses and adverse effects of NSAIDs
- 2 Uses and adverse effects of Corticosteroids
- 3 Name FOUR Local Anaesthetics. Explain the techniques of local anaesthesia
- 4 Inhalational route of administration of drugs

SHORT ANSWERS

5x3=15

- 5 Write three differences between crystalloids and colloids
- 6 Mention three groups of drugs used in Pre-anaesthetic medication
- 7 Write SIX uses of Sedative hypnotics
- 8 Name THREE emergency drugs used in OT and write one use for each
- 9 Mention three advantages and three disadvantages of Intravenous route of drug administration

QP CODE: 5135, SECTION-C, MICROBIOLOGY (RS2 SCHEME)

TIME:1 Hr;11.30 am to 12.30pm (WRITE IN PURPLE ANSWER BOOK)

SHORT ESSAY - ANSWER ANY THREE

3x5=15

- 1 Louis Pasteur
- 2 Active immunity
- 3 Laboratory diagnosis of HIV
- 4 Biomedical waste disposal

SHORT NOTES

5x3=15

- 5 Name gaseous disinfectants
- 6 Prophylaxis for tetanus
- 7 Alcohol ,mode of action and uses
- 8 Types of hospital acquired infections
- 9 Candida albicans

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA /II YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 1 Hr;9.30 am to 10.30am

(RS -1 SCHEME)

MAX. MARKS: 90

QP CODE: 2142, SECTION-A, ANATOMY (WRITE IN BLUE 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

QP CODE: 2143, SECTION-B, PHYSIOLOGY (RS -1 SCHEME)

TIME: 1 Hr;10.30 am to 11.30 am (WRITE IN RED ANSWER BOOK)

SHORT NOTES-ANSWER ANY FOUR

4x5=20

- 1 Composition and functions of blood
- 2 Name hormones of anterior pituitary, explain growth hormone
- 3 Transport of oxygen
- 4 Define artificial respiration. List two indications for it
- 5 Conducting system of heart

SHORT ANSWERS

5x2=10

- 6 Name clotting factors
- 7 Define GFR and give its normal value
- 8 Define stroke volume
- 9 Function of saliva
- 10 Functions of ovary

QP CODE: 2144, SECTION-C, PATHOLOGY & MICROBIOLOGY

TIME:1 Hr;11.30 am to 12.30pm (RS-1 SCHEME) (WRITE IN PURPLE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE

1x10=10

- 1 Mention different types of microscopes. Describe briefly about different investigations in microbiology
- 2 What are the various investigations done in Pathology

SHORT NOTES -ANSWER ANY TWO

2x5=10

- 3 Write difference between gram positive and gram negative bacteria
- 4 Write a note on maintenance of medical records in pathology
- 5 Tuberculosis

SHORT ANSWERS

5x2=10

- 6 Name 2 chemical tests for urine analysis
- 7 Define hypertrophy and hyperplasia
- 8 Name TWO fungal diseases
- 9 Name four culture media
- 10 Name TWO intestinal parasites

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 1 Hr;9.30 am to 10.30am

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE:5143, SECTION-A, ANATOMY
(WRITE IN BLUE 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

QP CODE:5144, SECTION-B, PHYSIOLOGY (RS 2 SCHEME)

TIME: 1 Hr;10.30 am to 11.30 am (WRITE IN RED ANSWER BOOK)

SHORT NOTES - ANSWER ANY THREE

3x5=15

- 1 Describe hypoxia. Classify hypoxias
- 2 Neuro muscular junction
- 3 Composition and function of pancreatic juice
- 4 Renal function tests

SHORT ANSWERS

5x3=15

- 5 Contraceptive methods in males
- 6 Refractive errors
- 7 Functions of progesterone
- 8 Functions of WBC
- 9 Conductive system of heart

QP CODE: 5145, SECTION-C, PATHOLOGY & MICROBIOLOGY (RS 2 SCHEME)

TIME:1 Hr;11.30 am to 12.30pm (WRITE IN PURPLE ANSWER BOOK)

SHORT NOTES- ANSWER ANY THREE

3x5=15

- 1 Define inflammation. Add a note on types with examples
- 2 Rheumatic Heart Disease and laboratory diagnosis
- 3 Etiology and types of carcinoma stomach
- 4 Tuberculosis of lung including primary complex

SHORT ANSWERS

5x3=15

- 5 Osteomyelitis
- 6 Hydronephrosis
- 7 Gall stones
- 8 Thyrotoxicosis
- 9 Name 3 parasitic infestation

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

SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY (DDT)

TIME: 1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 90
9.30 am to 11 am QP CODE: 2153, SECTION-A, BIOCHEMISTRY
(WRITE IN BLUE 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

TIME: 1.30 Hrs, QP CODE: 2154, SECTION-B, MICROBIOLOGY
11 am to 12.30 pm (WRITE IN RED ANSWER BOOK)

LONG ESSAY- ANSWER ANY ONE 1x10=10

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

SHORT ESSAY- ANSWER ANY FIVE 5x5=25

- 3 Robert Koch
- 4 Endotracheal tube
- 5 Bacterial cell wall
- 6 Diagnosis of diptheria
- 7 Nosocomial infections
- 8 Live & Killed Vaccines

SHORT ANSWERS 5 x2=10

- 9 Candidiasis
- 10 Universal precautions
- 11 Toxoids
- 12 DPT vaccine
- 13 Gram negative bacteria

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

SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)

TIME: 1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

9.30 am to 11 am

QP CODE: 5153, SECTION-A, BIOCHEMISTRY

(WRITE IN BLUE 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 Deficiency diseases of Vitamin A
- 9 Name the types of RNAs. Mention their functions
- 10 Different methods of cholesterol estimation
- 11 Lipid profile
- 12 Mention normal serum calcium level. Write two functions of calcium
- 13 Lipoproteins
- 14 Water crystallization
- 15 Acid-base disorders

TIME: 1.30 Hrs, QP CODE: 5154, SECTION-B, MICROBIOLOGY (RS-2 SCHEME)

11 am to 12.30 pm

(WRITE IN RED ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 1 Pathogenicity of clostridium tetani
- 2 Moist heat sterilization
- 3 Morphology of bacteria
- 4 Operation theatre sterilization
- 5 Delayed hypersensitivity

SHORT ANSWERS

10x3=30

- 6 Pasteurization
- 7 Active immunity
- 8 Atopy
- 9 Joseph Lister
- 10 Line infections
- 11 Prophylaxis
- 12 Hepatitis infection
- 13 Classification of streptococci
- 14 Toxins
- 15 Live and killed vaccines

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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, JULY 2021

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

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 sound
- 11 Cusp of cerebella
- 12 Centre relation
- 13 Buccinator muscle
- 14 Rugae

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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

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SUPPLEMENTARY EXAMINATION, JULY 2021
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

QP CODE: 2184, SECTION-B, PHARMACOLOGY (RS-1 SCHEME)
(WRITE IN RED ANSWER BOOK)

SHORT ANSWERS

5 x2=10

- 1 Write 2 sources of Vitamin A
- 2 Name 2 uses of Paracetamol
- 3 Name 2 uses of Metronidazole
- 4 Name 2 disinfectants used in OT
- 5 Name 2 Oral anticoagulants

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SUPPLEMENTARY EXAMINATION, JULY 2021

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

QP CODE: 5184, SECTION-B, APPLIED PHARMACOLOGY (RS 2 SCHEME)

(WRITE IN RED ANSWER BOOK)

SHORT NOTES-ANSWER ANY ONE

1 x5=5

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

SHORT ANSWERS

5x2=10

- 3 Define antiseptic, give two examples
- 4 Write briefly on lignocaine
- 5 Mention four parental route of drug administration
- 6 Name two uses and two adverse effects of metronidazole
- 7 Name four glucocorticoids

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SUPPLEMENTARY EXAMINATION, JULY 2021

I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 1.30 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

9.30 am to 11 am, QP CODE: 4193, SECTION-A, PHYSIOLOGY

(WRITE IN BLUE 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

TIME: 1.30 Hrs, QP CODE: 4194, SECTION-B, BIOCHEMISTRY

11 am to 12.30pm (WRITE IN RED ANSWER BOOK)

SHORT NOTES - ANSWER ANY FOUR

4x5=20

- 1 Define carbohydrates. Classify carbohydrates with examples
- 2 Explain the Liver function tests
- 3 Write the sources dietary requirement and functions of Vitamin A
- 4 Explain the structure and function of a cell
- 5 Explain the clinical significance of enzymes with examples

SHORT ANSWERS

10x3=30

- 6 Essential Amino acids
- 7 Phospholipids and its importance
- 8 Calcium and its functions
- 9 Balanced diet
- 10 Detoxification reactions
- 11 Creatinine Clearance tests
- 12 Isoenzymes
- 13 Importance of Hormones on metabolism
- 14 Denaturation of protein
- 15 Poly unsaturated fatty acids (PUFAs)

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SUPPLEMENTARY EXAMINATION, JULY 2021

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

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 What is Coomb's test? Describe in detail Procedure and indication for Direct Coomb's test
- 2 Mention different types of Hematoxylin. Describe procedure for Hematoxylin and eosin stain (H&E)
- 3 Mention the Donor selection criteria for blood donation. Describe storage of blood in blood banks

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Write short notes on gross examination of sputum sample and slide preparation
- 5 ABO Blood group
- 6 Demonstration of Barr bodies
- 7 Forward blood grouping
- 8 Microscopy of semen sample
- 9 Preparation of Hematoxylin stain
- 10 Histokinetete.
- 11 Anticoagulants used in Haematology.
- 12 Automation in Hematology
- 13 Write a note on Activated Partial Thromboplastin Time (APTT)
- 14 Organization of blood bank
- 15 Quality control and Quality assurance in Blood bank

SHORT ANSWERS

10x2=20

- 16 Write normal bleeding time and clotting time
- 17 Mention two indications for frozen sections
- 18 Mention mountants used in museum specimen
- 19 Mention three special stains used in histopathology
- 20 Sickling test
- 21 Mention three minor blood groups
- 22 Mention three Immuno HistoChemical Stains used in Histopathology
- 23 Fibrin degradation products
- 24 Mention three transfusion reactions
- 25 Mention three clearing agents in histopathology

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Prothrombin time
- 3 Vitamin D deficiency
- 4 Donor selection in blood bank
- 5 What are blood transfusion reactions?
- 6 Steps in histopathology tissue processing
- 7 What are the different types of Hematoxylin? Write procedure for Hematoxylin and Eosin (H&E) Staining
- 8 Write briefly about principle and procedure of Direct Coomb's test
- 9 Importance of Differential Leukocyte count
- 10 Draw a neat labelled diagram of normal sperm. Mention the different abnormalities seen in semen analysis

SHORT ANSWERS

20 x3=60

- 11 Mention about errors in histopathology section cutting and their correction
- 12 What is Bleeding time (BT) and clotting time (CT)
- 13 What is Forward blood grouping?
- 14 Write the normal range of Activated Partial Thromboplastin time (APTT)
- 15 Mention some minor blood grouping system
- 16 Give three examples of Fixatives used in Histopathology
- 17 Mention the composition of Leishman Stain
- 18 Mention different sites for bone marrow aspiration
- 19 Mention the different anticoagulants used in Hematology
- 20 What is Laboratory Information System (LIS)
- 21 What is Perl's stain? Mention its use?
- 22 What are blood components? Mention uses of each component
- 23 Histokinette
- 24 Storage of blood in blood bank
- 25 Indications for frozen sections
- 26 Mention three connective tissue stains
- 27 Mention various mounting solutions used mounting museum specimen
- 28 What is Microwave tissue processing in histopathology
- 29 Indirect coomb's test
- 30 ABO Blood grouping

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Mention MCH indicators. Discuss briefly about causes and measures to reduce maternal mortality
- 2 Discuss the role of health worker in the treatment of minor ailments
- 3 Classify contraceptive methods; add a note on IUCD

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 MTP act
- 5 Differences between health education and health propaganda
- 6 Infant mortality rate
- 7 Exclusive breastfeeding
- 8 Post coital contraception
- 9 Demography and its uses
- 10 Mother card
- 11 Net Reproduction Rate
- 12 No scalpel vasectomy
- 13 School health programme
- 14 Prevention of neo natal tetanus
- 15 Post-natal advice

SHORT ANSWERS

10x2=20

- 16 Child abuse
- 17 Essential drugs
- 18 Demographic cycle
- 19 Factors affecting fertility
- 20 Dietary advice to a pregnant lady
- 21 Male sterilization
- 22 Types of communication
- 23 Street children
- 24 Principles of health education
- 25 Folk Media

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Food adulteration act
- 2 Principles of Health education
- 3 Couple Protection Rate
- 4 Maternal -mortality rate
- 5 PNDT act
- 6 Geriatric health problem
- 7 Demography cycle
- 8 Role of Health inspector in PHC
- 9 Domiciliary care
- 10 Indian Factories Act

SHORT ANSWERS

20 x3=60

- 11 Exclusive breast feeding
- 12 Weaning
- 13 Baby friendly hospital initiative
- 14 Post natal advice
- 15 Nutrition in pregnancy
- 16 Pre lacteal feeds
- 17 Contents Of Health Education
- 18 First aid in case of dog bite
- 19 Colostrum
- 20 Female sterilization
- 21 Uses of Demography
- 22 Sex ratio
- 23 Vasectomy
- 24 Crude birth rate
- 25 Audio Visual aids
- 26 Health education
- 27 Primary Health care approach for health education
- 28 Drug used in malaria
- 29 Essential Drugs
- 30 Barriers of Communication

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Mention the parts of IITV with neat labelled diagram and write briefly about IITV
- 3 Write about intravenous pyelography (IVP) -preparation, procedure

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

- 4 Short note on Ionic and non ionic contrast agent
- 5 Write about chest x ray positioning. Any five.
- 6 Write about C-arm and uses
- 7 Write about stock maintenance and indenting in radiology department.
- 8 Write short note on Picture archiving, computerising and storing (PACS)
- 9 Write brief note on barium meal follow through
- 10 Preparation of patient and procedure - HSG.
- 11 Instruction given to patient for chest x ray imaging - five points.
- 12 Define centring and mention centring for DL spine(AP), chest x-ray(PA) and for shoulder joint (AP)
- 13 Barium swallow- patient preparation and procedure
- 14 Mobile radiography
- 15 Loopogram

SHORT ANSWERS **10x2=20**

- 16 Contraindication for use of binders in imaging
- 17 Milliampere (MA)
- 18 General x-ray film storage
- 19 Two uses of collimation
- 20 X-ray film numbering
- 21 Name two radiotherapy equipments
- 22 Write full form of DSA and MRI
- 23 Write two sequences used in MRI- brain imaging
- 24 First aid to contrast reaction in radiology department
- 25 Define cavitogram

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Post operative T tube cholangiography- radiographic position , procedure
- 2 Patient preparation, positioning and procedure of barium meal follow through
- 3 Micturating cystourethrography (MCU)
- 4 Small bowel enema – technique and procedure
- 5 HSG- hysterosalpingogram – instruction given to patient, preparation and procedure
- 6 Role of MRI in central nervous system investigation and mention two indications
- 7 Mobile radiography
- 8 Arteriography- Technique and its uses
- 9 Intravenous urography – technique and procedure
- 10 Computed tomography and write its uses

SHORT ANSWERS

20 x3=60

- 11 Bronchography – definition and procedure
- 12 Fistulogram
- 13 Name three instruments used in arteriography
- 14 Percutaneous nephrostomy
- 15 Three uses of ultrasound scan in urinary tract system
- 16 Mammography
- 17 Hypotonic duodenography – technique
- 18 Forensic radiography
- 19 Define radio isotope and mention two uses in radiology
- 20 Lymphangiography
- 21 Myelography- technique
- 22 Expand MRI and write four uses
- 23 Sialography
- 24 Dacrocystography
- 25 Regional arteriography
- 26 Types of contrast media
- 27 Write uses of digital subtraction angiography
- 28 X-ray film numbering
- 29 Foreign body localisation
- 30 Ultrasonography scanning

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Hemithyroidectomy
- 2 Describe Cholecystectomy procedure
- 3 Define amputation and types of amputation

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Types of traction
- 5 Retractors
- 6 Endoscopy
- 7 Tracheostomy
- 8 Circumcision
- 9 Closed reduction
- 10 Flash sterilization
- 11 Biopsy
- 12 Colostomy care
- 13 Fistulectomy
- 14 OT nurse
- 15 Suction drain

SHORT ANSWERS

10x2=20

- 16 Weekly OT cleaning and wash
- 17 Position for thyroid surgery
- 18 Abdominal drain
- 19 Babcock's forceps
- 20 Fasciotomy
- 21 Debridement
- 22 Enema
- 23 Sitz bath
- 24 Foley's catheter
- 25 Instrument count

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Cystoscopy
- 2 Bronchoscopy
- 3 Fistulectomy
- 4 Mesh repair
- 5 Biopsy
- 6 Hydrocele surgery
- 7 Skin graft
- 8 Tracheostomy
- 9 Above knee amputation
- 10 Appendicectomy

SHORT ANSWERS

20 x3=60

- 11 Seizures
- 12 Factors influencing wound healing
- 13 Manifold rule
- 14 Surgical scrub
- 15 Sterile zone
- 16 Enema
- 17 High risk consent
- 18 Skin staplers
- 19 Povidine iodine
- 20 Electrical hazards in OT
- 21 Mop count
- 22 Surgical site infection
- 23 Surgical checklist
- 24 Retractors
- 25 Corrugated rubber drain
- 26 Disinfection
- 27 Surgical needles
- 28 Health care team
- 29 Haemostasis methods
- 30 C-arm

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Write about analysis of hospital organization
- 2 Describe the organization and administration of medical records department of a medical college hospital
- 3 Total Quality Management in health care services

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Voluntary health agencies
- 5 Fire protection services in a hospital
- 6 Mention personal protective measures in handling hospital waste
- 7 Qualities of a hospital administrator
- 8 Public health care system in India
- 9 Principles of inventory analysis
- 10 Explain the problems in OPD
- 11 Objective, role, functions and types of pharmacy service
- 12 Safety of medico-legal documents
- 13 Grievance redressal system
- 14 Mention functions of laboratory
- 15 Types of security in hospital organization

SHORT ANSWERS

10x2=20

- 16 Ancillary services at OPD
- 17 Ambulance services
- 18 Preventive measures to control rodents in hospitals
- 19 Disaster preparedness
- 20 PERT
- 21 Purchasing Committee
- 22 Medical Audit
- 23 Role of Medico-social worker
- 24 Cost-benefit Analysis
- 25 Nursing audit

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Renal replacement therapy
- 2 CAPD
- 3 Write about renal failure

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 4 Renal transplant
- 5 Immunization for dialysis patients
- 6 Plasmapheresis
- 7 AV Fistula
- 8 Anticoagulation
- 9 Brief about dialysis and poisoning
- 10 Anatomy and physiology of kidney
- 11 Acute complications for HD
- 12 Erythropoietin
- 13 Dialysis in acutely ill patients
- 14 Concentration gradient
- 15 Diuretics

SHORT ANSWERS 10x2=20

- 16 Dialysis team
- 17 Artificial kidney
- 18 Psychological problems with HD
- 19 Renal function test
- 20 Anatomy of peritoneum
- 21 Iron therapy
- 22 Priming of dialyser
- 23 Complications of peritoneal dialysis
- 24 Reverse osmosis
- 25 Antihypertensive

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Dialysis in poisoning scenario
- 2 Hemodialysis Machine
- 3 Slow continuous ultra-filtration
- 4 Inotropes
- 5 CAPD Peritonitis
- 6 Complications of hemodialysis
- 7 Biocompatible dialyser
- 8 Hemodialysis and psychosocial problems
- 9 Water treatment
- 10 Standard dialysate composition

SHORT ANSWERS

20 x3=60

- 11 Rule of 6 in AV fistula
- 12 Diuretics
- 13 Drugs decreasing potassium level
- 14 Three manifestations of inadequate dialysis
- 15 Pre dialysis patient assessment
- 16 Physiology of PD
- 17 Complications of CVP
- 18 Indications for plasmapheresis
- 19 Anticoagulation
- 20 Indications for Hemodialysis
- 21 Indications for SLED
- 22 Pre dialysis screening tests
- 23 No infectious complications of PD
- 24 PD fluid composition
- 25 Merits of Hemodialysis
- 26 Osmosis
- 27 Kt/V
- 28 Define pet. How do you perform it?
- 29 Vaccines for CKD patients.
- 30 Priming of hemodialysis machine

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 major and minor surgical records
- 2 Write in detail about Eye bank- collection, preservation , transportation and publicity
- 3 How do you plan for cataract camp under National programme for control of blindness?

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Survey methodology
- 5 Childhood blindness- causes and prevention
- 6 Role of teacher in school screening
- 7 ICD-10
- 8 How to give eye wash? Mention 2 indications
- 9 Describe vision testing
- 10 Prisms in ophthalmology
- 11 What are the camp activities done in your hospital?
- 12 Rehabilitation of blind
- 13 Differences between spherical and cylindrical lenses
- 14 Nursing care
- 15 How is a optometrist useful in the field of ophthalmology?

SHORT ANSWERS

10x2=20

- 16 Name 2 charts to test near vision
- 17 Name 2 common eye diseases
- 18 Why statistics is important in hospital setup?
- 19 Mention 2 major surgical records
- 20 Classification of vitamin A deficiency
- 21 Types of progressive lenses
- 22 What are minor surgical procedures
- 23 Disease index
- 24 Alphabetical index
- 25 Name 2 antibiotics

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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 Describe vision recording in detail
- 2 Write in detail about prescription of glasses
- 3 What is A scan? What is its function? Mention its usage in ophthalmology
- 4 NPCB
- 5 Mention 10 clinical signs in Ophthalmology
- 6 Describe various methods of drug administration
- 7 What is Rehabilitation of blind? Mention the types of rehabilitation
- 8 Eye bank and its functions
- 9 What are consent forms? Describe the contents of consent forms
- 10 Why is lacrimal syringing done? What is its importance?

SHORT ANSWERS

20 3=60

- 11 Three functions of DBCS
- 12 ICD 10
- 13 Three types of blindness
- 14 Name 3 anti fungal drugs
- 15 Name 3 anti glaucoma drugs.
- 16 Name 3 indications of fluorescein
- 17 Name 3 mydriatic drugs
- 18 How do you identify shallow anterior chamber?
- 19 Three causes for no visual improvement in a pinhole
- 20 What is dacrocystitis ? name 2 surgeries for chronic dacrocystitis
- 21 Three methods of drug administration in ophthalmology
- 22 Three side effects of indiscriminate use of steroids
- 23 Mention 3 protective eye gear at workplace
- 24 Three causes of loss of window reflex
- 25 Mention 3 myths around eye donation
- 26 Three eye conditions that can be picked up in school eye screening
- 27 Three causes for red eye
- 28 Three causes for white reflex
- 29 Mention 6 symptoms in Ophthalmology
- 30 What is epilation? Write indications for the same

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Describe in detail with diagrams, Kennedy's Classification and Applegate's Rules

SHORT NOTES 5 x5=25

- 2 Expansion screws
3 Obturators
4 Pontics in Fixed Partial Dentures
5 Components of Cast Partial Dentures with diagrams
6 Casting Defects

SHORT ANSWERS 5 x2=10

- 7 Hawley's Appliance
8 Indirect Retainer
9 Occlusal Rest
10 Tripoding
11 Materials used in Maxillofacial Prosthesis

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Kennedy's Classification with diagrams
- 2 Maxillary Major connectors with diagrams
- 3 Obturator
- 4 Mechanical principles of orthodontia
- 5 Survey lines and surveying tools

SHORT ANSWERS 10 x3=30

- 6 Minor connector
- 7 Arbitrary blockout
- 8 Types of pontic
- 9 Soldering
- 10 Duplicating materials
- 11 Suck back porosity
- 12 Refractory cast
- 13 Lingual bar
- 14 Adam's clasp
- 15 Connectors in FPD

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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 in Indian population prevalence and prevention of Periodontal disease

SHORT NOTES 5 x5=25

- 2 Dental Health education
- 3 Oral hygiene index simplified
- 4 Chemical plaque control measures
- 5 Oral health in handicapped patients
- 6 Interdental Cleaning aids

SHORT ANSWERS 5 x2=10

- 7 Topical fluoride application
- 8 School dental camps
- 9 Tongue trusting habit
- 10 Pit and Fissure sealants
- 11 Child care counselling

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

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Principles of periodontal instrumentation
- 2 Mouth breathing habit
- 3 Case history recording
- 4 Ultrasonic scaler
- 5 Define dental hygiene .Write objectives of dental hygiene
- 6 Management of medically compromised patients
- 7 Chemical plaque control measures
- 8 Trauma from occlusion
- 9 Sutures and periodontal dressing
- 10 Oral hygiene index simplified

SHORT ANSWERS

20 x3=60

- 11 Diabetes mellitus
- 12 Management of haemophilia patients
- 13 Management of pregnant patients.
- 14 Prognosis
- 15 Dentifrices
- 16 Oral irrigation devices
- 17 Instrument maintenance
- 18 Tongue trusting habit
- 19 Bruxism
- 20 Syncope
- 21 Asthma patient management
- 22 Management of Paediatric patient
- 23 Basic sharpening principles
- 24 Hypertensive patient management
- 25 Interdental cleaning aids
- 26 Powered tooth brushes
- 27 Bass method of tooth brushing
- 28 Rules and regulation of dental hygiene
- 29 Treatment plan
- 30 Plaque control around dental implant

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Define Suspension therapy. Explain the types of suspension therapy
- 2 What are group exercises? Advantages and disadvantages of group exercises
- 3 Define Hydro therapy. Write about merits and demerits of Hydrotherapy
- 4 Principles of Proprioceptive Neuromuscular Facilitation
- 5 Define Passive movements. And write its principles
- 6 Different types of Breathing exercises
- 7 Define relaxation. And write about types of relaxation
- 8 Define co-ordination exercises. Write about its tests of co-ordination
- 9 Define Balance. How to examine Balance?
- 10 Define Massage. Write about indications and contraindications of Massage

SHORT ANSWERS

20 x3=60

- 11 Mat exercises
- 12 Components of Gait
- 13 Define Posture
- 14 What is Frenkel's exercise?
- 15 Types of walking aids
- 16 Therapeutic uses of massage
- 17 Equilibrium tests
- 18 Define stretching
- 19 What is Aerobic capacity?
- 20 Functional Re-education Benefits
- 21 Two types of Resisted exercises
- 22 Mulligan mobilization
- 23 Hold relax technique
- 24 Uses of walker
- 25 Contraindications of Stretching
- 26 Define Strength
- 27 Concentric and eccentric exercises
- 28 Open kinematic chain exercises with example
- 29 Active posture
- 30 Types of Stretching exercises

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 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 with one example for each
- 11 Uses of chlorine
- 12 Types of RNA
- 13 Milk sugar
- 14 Isotopes

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
 PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Describe the preparation of hydrogen peroxide. Mention its uses
- 2 Define isotope and mention the applications of Cobalt-60, iodine-131 isotope
- 3 What are the strategies to control environmental pollution
- 4 Explain the manufacture of ethyl alcohol from molasses
- 5 Classify the proteins on the basis of composition and biological importance
- 6 **Match the following**

i) Acid	a) Calcium Carbonate
ii) Colloid	b) Chlorine
iii) Hydrocarbon	c) Hydrogen chloride (HCl)
iv) Halogen	d) Methane
v) Salt	e) Milk

- 7 Define carbohydrates. Give the classification with example
- 8 What is the action of concentrated H_2SO_4 acid on
 a) Zn b) Mg c) Cu d) Fe e) $C_{12}H_{22}O_{11}$
- 9 Explain oxidation and reduction with example
- 10 **Choose the correct answers**
 - a) Plant cell wall is chemically.....
 - 1) Fat 2) Protein 3) Carbohydrate 4) Cellulose
 - b) Hybridization of ammonia.....
 - 1) sp^3 2) sp 3) sp^2 4) sp^3d^2
 - c) is caused due to depletion of ozone layer
 - 1) Thyroid cancer b) skin cancer c) breast cancer d) Pulmonary cancer
 - d) Ethane is.....
 - 1) Alkane 2) Alkene 3) Alkyne 4) None of these
 - e) Ethene has carbon-carbon
 - 1) Single bond 2) double bond 3) triple bond 4) None of those

SHORT ANSWERS

20 x3=60

- 11 Name the SI units of a) Length b) Mass c) Time
- 12 Mention the importance of buffers in medicine
- 13 What is washing soda? mention its uses
- 14 Define p^H . Write Henderson equation
- 15 Mention the chemical composition and application of plaster of paris
- 16 Calculate the molecular weight of a) CO_2 b) CH_4 c) $C_{12}H_{22}O_{11}$
- 17 Acid rain
- 18 Define enzyme. Name any three enzymes
- 19 Uses of Iodoform
- 20
 1. NaCl is the chemical formula of
 2. Na_2CO_3 is the chemical formula of
 3. H_2SO_4 is the chemical formula of
- 21 Define saturated and unsaturated hydrocarbons and give one example for each
- 22 Mention any three laws of chemical combinations
- 23 Give the calculation for preparing 100 ml of 0.1 N NaOH from 1N NaOH
- 24 Name purine and pyrimidine bases present in DNA and RNA
- 25 Mention uses of phenol
- 26 Give the classification of amines. Mention one example for each
- 27 Types of RNA and their functions
- 28 Calculate the percentage of sodium in sodium hydroxide (NaOH)
- 29 Expand IUPAC. Mention the number of groups and periods in modern periodic table
- 30 Define an atom. Name the sub atomic particles of an atom

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Mention different steps in tissue processing. Describe in detail about different fixatives used in histopathology with their advantages and disadvantages
- 2 Describe the procedure and complications of plebotomy. Mention the various anticoagulants with their uses
- 3 Leishman stain- composition, preparation and staining of a peripheral smear

SHORT NOTES ANSWER ANYTEN 10x5=50

- 4 Dehydration in histopathology
- 5 Microscopic examination of urine
- 6 Reticulocyte count
- 7 Manual tissue processing
- 8 Packed cell volume (PCV)
- 9 Differential leucocyte count- importance
- 10 Benedict's test-principle and procedure
- 11 Absolute eosinophilic count
- 12 Sahli's haemoglobin estimation methods- advantages and disadvantages. Mention the normal range of haemoglobin levels in adults
- 13 Chemical tests for protein in urine
- 14 Grossing Technique in histopathology
- 15 Quality control in haematology

SHORT ANSWERS 10x2=20

- 16 Mention two clearing agents used in histopathology
- 17 Mention preservatives used for urine samples
- 18 Mention uses of improved Neubauer's chamber
- 19 Mention different methods for haemoglobin estimation
- 20 Mention the instruments used in haematology
- 21 Mention components of blood
- 22 Mention four uses of EDTA anticoagulant
- 23 Mention stains used in cytology
- 24 Mention red cell indices
- 25 Mention two causes of increased Erythrocyte sedimentation rate (ESR)

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Fixatives used in Histopathology
- 2 Chemical tests for protein in urine
- 3 Sputum examination
- 4 Preparation and staining of peripheral smear
- 5 Reticulocyte count
- 6 Methods of haemoglobin estimation
- 7 Benedict's test- principle, procedure, importance
- 8 Tissue processing
- 9 Methods of Blood collection
- 10 Different types of anticoagulants

SHORT ANSWERS

20 x3=60

- 11 Microscopic examination of urine
- 12 Microscopy of ova cyst
- 13 Packed cell volume (PCV)
- 14 Pap smear- uses
- 15 Preservation and transport of cerebrospinal fluid (CSF)
- 16 Absolute eosinophilic count (AEC)
- 17 Decalcification
- 18 Barr bodies
- 19 Name body fluids
- 20 Fixation of cytology smears
- 21 Mention the instrument used in Haematology
- 22 Blood grouping
- 23 MCV- calculation and importance
- 24 Morphology of abnormal RBC's
- 25 Platelet count
- 26 Name Romanowsky stains
- 27 Preparation of WBC diluting fluid
- 28 Stool for occult blood
- 29 Equipments used in Histopathology lab
- 30 Different types of vacutainers

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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-ANSWER ANY TWO **2x10=20**

- 1 What are the functions of proteins ?Discuss the factors involved in protein energy malnutrition
- 2 What are the causes of air pollution? What are the hazards? How do you prevent them?
- 3 What do you mean by refuse? What are the sources & hazards? Describe methods of disposal of refuse

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

- 4 Measures of dispersion
- 5 Sanitation barrier
- 6 Incineration
- 7 Pasteurization of milk
- 8 Essential fatty acids
- 9 Manifestation of Iodine deficiency disorder
- 10 Iron deficiency anaemia
- 11 Types of ventilation
- 12 Food adulteration
- 13 Integrated vector control
- 14 Management of head louse
- 15 Conservation of water

SHORT ANSWERS **10x2=20**

- 16 Aflatoxins
- 17 Types of Family
- 18 Comfort zone
- 19 Bitot spots
- 20 Low Birth Weight (LBW)
- 21 DDT
- 22 Oxidation pond
- 23 Pellagra
- 24 Super Chlorination
- 25 Diseases transmitted by sand fly

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

SUPPLEMENTARY EXAMINATION, JULY 2021

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 Types of ventilation. Explain in detail about natural ventilation
- 2 Effects of water pollution
- 3 Global warming
- 4 Chlorination of water
- 5 Indicators of housing
- 6 Rapid sand filter
- 7 Life cycle of house fly
- 8 Diseases transmitted by mosquitoes. Discuss regarding control measures
- 9 Criteria for sanitary well
- 10 Briefly explain the different methods for disposal of solid waste

SHORT ANSWERS

20 x3=60

- 11 Effects of noise exposure
- 12 Diseases caused by itch mite
- 13 Iron deficiency anemia
- 14 Three vector born diseases
- 15 Three methods of water purification at house hold level
- 16 What is set back?
- 17 Three diseases caused by house fly
- 18 Effects of heat
- 19 Sanitation barriers
- 20 Effects of radiation
- 21 Anti larval measures
- 22 Three sources of air pollution
- 23 Sources of refuse
- 24 Three water born diseases
- 25 Advantages of water seal latrines
- 26 Safe and whole some water
- 27 Aflotoxins
- 28 Give three examples of diseases transmitted by rat
- 29 Pellagra
- 30 Give three examples of diseases transmitted by mosquito

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY
PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 List the various clotting factors. Explain the different pathways of coagulation
- 2 Synthesis, Actions of Thyroid hormone. Add a note on hypothyroidism

SHORT NOTES -ANSWER ANY FIVE

5x5=25

- 3 Menstrual cycle
- 4 Refractive errors and its correction
- 5 Pulmonary Function Tests
- 6 Cardiac output
- 7 Formation of urine
- 8 Composition and functions of saliva
- 9 Blood Pressure

SHORT ANSWERS

5x2=10

- 10 Name primary taste sensations
- 11 Two Functions of CSF
- 12 Name two hormones of pancreas
- 13 Types of hypoxia
- 14 Normal Value of a) Heart rate b) Respiratory rate

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Explain mechanisms involved in transport of substances across Cell membrane
- 2 Define blood pressure (BP). Explain regulation of blood pressure
- 3 Composition and functions of C.S.F
- 4 Explain structure and transmission across Neuro Muscular Junction (NMJ)
- 5 Explain transport of carbondioxide in cardiorespiratory system

SHORT ANSWERS

10x3=30

- 6 Body fluid compartment
- 7 Surfactant
- 8 Functions of testosterone
- 9 Pregnancy tests
- 10 Functions of Parathyroid hormone
- 11 Structure of Nephron
- 12 Define stroke volume. Mention its normal value
- 13 Movements in GIT
- 14 Types of anaemia
- 15 Components of Reflex arc

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA/II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY (DOTT)

TIME:1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 90

9.30 am to 11 am QP CODE: 2135, SECTION-A, ANATOMY

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Name the parts of Respiratory System with a labelled diagram. Describe trachea in brief
- 2 Name of the parts of the Digestive System with a labelled diagram. Describe stomach in brief

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 3 Duodenum
- 4 Kidney
- 5 Cerebrum
- 6 Supra renal gland
- 7 Vermiform Appendix
- 8 Left lung
- 9 Functions of large intestine

SHORT ANSWERS 5x2=10

- 10 Name the parts of Gall bladder
- 11 Name four cranial nerves
- 12 Name two muscles where intra muscular injection is given
- 13 Name the tarsal bones
- 14 Name two veins of lower limb

Time: 1.30 Hrs QP CODE: 2136, SECTION-B, PHYSIOLOGY (RS 1 SCHEME)

11 am to 12.30 pm (WRITE IN RED ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Describe in detail clotting mechanism. Add a note on Anticoagulants
- 2 Hormones of thyroid gland and actions of thyroid hormone

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 3 Composition and functions of saliva
- 4 Functions of skin
- 5 Functions of Estrogen
- 6 Blood Pressure
- 7 Nephron
- 8 Transport of oxygen in blood
- 9 Conductive system of heart

SHORT ANSWERS 5x2=10

- 10 Hormones of pancreas
- 11 Types of Hypoxia
- 12 Two Family planning methods
- 13 Normal value of 1) Pulse rate 2) Respiratory rate
- 14 Name plasma proteins

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

SUPPLEMENTARY EXAMINATION, JULY 2021
II YEAR DIPLOMA IN OPERATION THEATRE & ANAESTHESIA
TECHNOLOGY (DOT&AT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 100

9.30 am to 11 am QP CODE: 5136, SECTION-A, ANATOMY

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR

4x5=20

- 1 Describe the kidney
- 2 Describe the adductor canal
- 3 Describe the tibia bone
- 4 Describe the pituitary gland
- 5 Functions of large intestine

SHORT ANSWERS

10x3=30

- 6 Name the contents of inguinal canal
- 7 Name the nerves of tongue
- 8 Name the parts of urethra
- 9 Name the muscles of thigh
- 10 Name the parts of stomach
- 11 Name the types of epithelium
- 12 Name the types of muscles
- 13 Name the parts of reproductive organs
- 14 Name the extraocular muscles of eye
- 15 Name the branches of arch of aorta

Time: 1.30 Hrs, QP CODE: 5137, SECTION-B, PHYSIOLOGY

11 am to 12.30 pm (WRITE IN RED ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 1 Plasma proteins
- 2 Neuromuscular transmission across neuromuscular junction (NMJ)
- 3 Cardiac output
- 4 Movements of small intestine
- 5 Errors of refraction with correction

SHORT ANSWERS

10x3=30

- 6 Functions of Mitochondria
- 7 List three functions of RBC
- 8 Three conditions causing increased Eosinophil count
- 9 Complications of mismatched blood transfusion
- 10 Receptors of vision
- 11 Hypoxia
- 12 Aqueous humour
- 13 Rh typing
- 14 Functions of Cerebrospinal fluid (CSF)
- 15 Structure of Nephron

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

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Biostatistics and its uses
- 2 Define data. What are different sources of data? Describe presentation of data
- 3 Describe measures of central tendency
- 4 What are the uses of registration of births and deaths? What's the procedure for registration of births and deaths in our state?

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 5 Simple Random Sampling
- 6 Histogram
- 7 Incidence and its uses
- 8 How to calculate bed turnover ratio?
- 9 Life table
- 10 Uses of computers in medical records department
- 11 Infant mortality rate
- 12 Census
- 13 ICD classification of diseases
- 14 Uses of health information system
- 15 Pie Chart

SHORT ANSWERS- ANSWER ANY FIVE 5x2=10

- 16 Medical audit
- 17 Queue system in OPD
- 18 Average length of stay
- 19 Standard error
- 20 Sex ratio
- 21 Record linkage

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

SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY (DMRT)

TIME: 3 Hrs

(RS -2 SCHEME)

MAX. MARKS: 100

QP CODE: 5146, HOSPITAL STATISTICS & BIOSTATISTICS

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY EIGHT

8x5=40

- 1 Define statistics. Enumerate different branches of statistics
- 2 Census
- 3 Characteristics of standard normal curve
- 4 Registration of vital events
- 5 Types of sampling
- 6 Prevalence and Incidence
- 7 Tabulation of data
- 8 Rules of tables
- 9 Types of data and methods of its collection
- 10 Standard deviation

SHORT ANSWERS

20 x3=60

- 11 Uses of Biostatistics
- 12 Birth rate
- 13 Range
- 14 Random sampling
- 15 Frequency polygon
- 16 Histogram
- 17 Survey
- 18 Name three vital statistics
- 19 Mean
- 20 Mode
- 21 IMR
- 22 MMR
- 23 Define data
- 24 Incidence
- 25 Name three notifiable diseases
- 26 Chi square test
- 27 Death rate
- 28 Bar charts
- 29 Birth registration
- 30 Types of variables

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
I YEAR DIPLOMA /III YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY (DDT)

TIME:1.30 Hrs (RS -1 SCHEME) MAX. MARKS: 90
9.30 am to 11 am, QP CODE: 2155, SECTION-A, ANATOMY
(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Describe the heart under the following heading:
(a) Chambers, (b) Covering, (c) Blood supply
- 2 Name the parts of the Brain. Describe cerebrum in brief

SHORT NOTES ANSWER ANY FIVE 5x5=25

- 3 Urinary bladder
- 4 Femoral artery
- 5 Histology of hyaline cartilage
- 6 Thyroid gland
- 7 Spleen
- 8 Stomach

SHORT ANSWERS 5x2=10

- 9 Name any two muscles of abdomen
- 10 Name the bones of fore arm
- 11 Name two veins of upper limb
- 12 Name the parts of urinary system
- 13 Name any two lymphoid organs

Time: 1.30Hrs, QP CODE: 2156, SECTION-B, PHYSIOLOGY
11 am to 12.30 pm (WRITE IN RED ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Describe the steps involved in urine formation
- 2 Describe the composition of Blood. Add a note on Plasma proteins

SHORT NOTES ANSWER ANY FIVE 5x5=25

- 3 Properties of Cardiac muscle
- 4 Explain the functions of Liver
- 5 Conducting system of heart
- 6 With a neat diagram , explain the structure of a nephron
- 7 Hormonal regulation of menstrual cycle
- 8 Actions of Growth hormone

SHORT ANSWERS 5x2=10

- 9 Name any two types of refractive errors of eye
- 10 Name any two lung volumes
- 11 Give the normal values of i) WBC count ii) Platelet count
- 12 Name any two temporary family planning methods
- 13 Give the normal values of i) Blood urea ii) Serum creatinine

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

SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN DIALYSIS TECHNOLOGY (DDT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 100

9.30 am to 11 am, QP CODE: 5155, SECTION-A, ANATOMY

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR

4x5=20

- 1 Describe heart in detail
- 2 Name the parts of urinary system, describe kidney in detail
- 3 Name the endocrine glands, describe suprarenal gland
- 4 Name the parts of respiratory system, describe trachea briefly
- 5 Classify the nervous system, describe nerve supply and blood supply to the urinary bladder briefly

SHORT ANSWERS

10x3=30

- 6 Mention the joints of the lower limb
- 7 Mention the lymphoid organs
- 8 Mention the different types of muscles
- 9 Mention the arteries of upper limb
- 10 Mention the parts of peritoneum
- 11 Mention the parts of uterus
- 12 Mention any six bones of the skull
- 13 Mention the different types of cartilage
- 14 Name the muscles of anterior abdominal wall
- 15 Name the parts of brain stem

Time: 1.30 Hrs, QP CODE: 5156, SECTION-B, PHYSIOLOGY (RS -2 SCHEME)

11 am to 12.30pm

(WRITE IN RED ANSWER BOOK)

SHORT NOTES -ANSWER ANY FOUR

4x5=20

- 1 Define Secondary active transport. Explain with an example
- 2 Draw neat labelled diagram of conducting system of the heart
- 3 Counter-current mechanism in the kidneys
- 4 Explain the stages of erythropoiesis
- 5 Write the functions of cortisol hormone

SHORT ANSWERS

10x3=30

- 6 Write the source and function of Erythropoietin
- 7 Name the types of cell junctions
- 8 Name three anticoagulants
- 9 Name the types of dialysis
- 10 What are the functions of platelets?
- 11 Functions of haemoglobin
- 12 State Landsteiner's law of blood groups
- 13 Functions of parathormone
- 14 Write the normal values of heart rate and blood pressure
- 15 Write the steps of urine formation

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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

(WRITE IN BLUE ANSWER BOOK)

LONG ESSAY-ANSWER ANY ONE 1x10=10

- 1 Define lipid. Classify them with suitable example
- 2 Sources, RDA, Biochemical functions and deficiency disorders of Vitamin C

SHORT NOTES -ANSWER ANY THREE 3x5=15

- 3 Biomedical significance of carbohydrates
- 4 Factors regulating serum calcium level
- 5 Functional classification of proteins
- 6 Functions of calcium

QP CODE: 2186, SECTION-B, RADIOLOGY (RS -1 SCHEME)

(WRITE IN RED ANSWER BOOK)

WRITE SHORT NOTES 4x5=20

- 1 Processing and mounting of dental radiographs
- 2 Hazards of radiation and protection against it
- 3 Intraoral periapical X-ray
- 4 Parallel technique

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SUPPLEMENTARY EXAMINATION, JULY 2021

II YEAR DIPLOMA IN DENTAL HYGIENE (DDH)

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

QP CODE: 5185, SECTION-A, BIOCHEMISTRY

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES 2x5=10

- 1 Define enzyme and discuss the factors effecting enzyme activity
- 2 Nutrition in relation to oral health

SHORT ANSWERS 5x2=10

- 3 Difference between DNA and RNA
- 4 Functions of plasma proteins
- 5 Deficiency of Vitamin A
- 6 Abnormal constituents of urine
- 7 Essential amino acids

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

(WRITE IN RED ANSWER BOOK)

LONG ESSAY 2x5=10

- 1 Write in detail bisecting angle technique
- 2 Write in detail about developing and fixing solution

SHORT NOTES 5x3=15

- 3 Structure of an atom
- 4 Bite wing radiograph
- 5 Parallel technique
- 6 Occlusal radiograph
- 7 Orthopantomogram

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Define levers. Explain its types and its mechanical advantages
- 2 Define Lordosis and Kyphosis
- 3 Define gravity. Explain line of gravity & center of gravity with diagram
- 4 Explain composition and resolution of forces
- 5 Describe biomechanics of hip joint
- 6 Describe biomechanics of vertebral column
- 7 Define Scapulo-humeral rhythm
- 8 Explain concurrent forces, coplanar forces, and parallel forces
- 9 Define gait and analysis of gait
- 10 Define force. Give a diagrammatic representation of forces

SHORT ANSWERS

20 x3=60

- 11 Use of spring in series and parallel in physiotherapy
- 12 Biceps muscle
- 13 Quadriceps muscles
- 14 Advantages and disadvantages of friction
- 15 Momentum
- 16 Pulleys and its types
- 17 Define Energy, mention the unit of measurement
- 18 Uses of Goniometer
- 19 Ataxic gait
- 20 Name the ligaments of knee joint
- 21 Name four pelvic floor muscles
- 22 Q angle of knee joint
- 23 Apply first and second law in elbow flexion
- 24 Action and reaction
- 25 Hook's law
- 26 Mechanical advantages of lever
- 27 Range of movement
- 28 Rotation about a pivot
- 29 Friction
- 30 Work and power

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 What is Parkinsonian gait? How will you do gait training for 65 years old parkinsonism patient
- 2 IVDP, cause, clinical features, and its management
- 3 Write short note on Sciatic Nerve Palsy
- 4 Write about importance of APGAR score in early diagnosis
- 5 Cause, clinical features and management of head injury
- 6 What are tremors? Management of tremors
- 7 Dandy walker syndrome? Its management
- 8 What is cerebro-vascular accident? Explain its management
- 9 Define stroke. Etiology, type and management of stroke
- 10 What is femoral nerve palsy? Write down its management

SHORT ANSWERS

20 x3=60

- 11 Asphyxia
- 12 Choreaform gait
- 13 Brachial plexus palsy
- 14 Wilsons disease
- 15 Management of parkinsons gait
- 16 Hydrocephalus and its management
- 17 Friedreich's ataxia
- 18 Obturator nerve palsy
- 19 Guillain Barre Syndrome
- 20 Encephalitis
- 21 Brucellosis
- 22 Chorea
- 23 Tabes dorsalis
- 24 Transverse myelitis
- 25 Clipping of aneurysm
- 26 Septic encephalopathy
- 27 Laminectomy
- 28 Post polio syndrome
- 29 Down syndrome
- 30 Babinski sign

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Give an account of pathogenesis and lab diagnosis of Vibrio Cholera
- 2 Name hepatitis viruses. Describe the pathogenesis and laboratory diagnosis of Hepatitis B virus
- 3 Define Hospital acquired infections and enumerate organisms causing and prevention of Hospital acquired infections.

SHORT NOTES -ANSWER ANY TEN 10x5=50

- 4 Coagulase negative staphylococci
- 5 WIDAL test
- 6 Describe urinary tract infections. Add a note on significant Bacteriuria
- 7 ZN stain
- 8 Laboratory diagnosis of Cryptococcal meningitis
- 9 Hand hygiene
- 10 Laboratory diagnosis amoebic dysentery
- 11 Aspergillosis
- 12 Laboratory diagnosis of HIV
- 13 C -reactive protein (CRP)
- 14 Herpes virus
- 15 ELISA

SHORT ANSWERS 10x2=20

- 16 Name four oxidase positive bacteria
- 17 Name four acid fast organisms
- 18 Name malarial parasites
- 19 Ova of Ascarislumbricoids
- 20 Bacterial spore
- 21 Name four RNA viruses
- 22 Negative staining
- 23 KOH mount
- 24 Name four live vaccines
- 25 PPE kit

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Discuss laboratory diagnosis of pulmonary tuberculosis
- 2 Enumerate the organisms causing meningitis? Add a note on lab diagnosis of bacterial meningitis.
- 3 Stool examination
- 4 Write a note on universal precautions in the laboratory
- 5 Candidiasis
- 6 WIDAL test
- 7 Laboratory diagnosis of Hepatitis B virus
- 8 VDRL test
- 9 Antibiotic resistance
- 10 Enumerate malarial parasites. Add a note on its lab diagnosis

SHORT ANSWERS

20 x3=60

- 11 Coagulase test
- 12 Negative staining
- 13 Hepatitis B viral markers
- 14 ASLO test
- 15 Blood culture bottles
- 16 Draw a neat diagram of HIV
- 17 L J media
- 18 Oxidase reagent
- 19 ELISA
- 20 Bile stained ova in stool
- 21 SDA
- 22 BCG vaccine
- 23 RA test
- 24 Black water fever
- 25 Haemolysins
- 26 Albert stain
- 27 Name three acid fast organisms.
- 28 C Reactive protein
- 29 Name four culture media for Vibrio Cholera
- 30 Gas gangrene

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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 List the levels of health care in India. Describe primary health centre in detail
- 2 Categories and color coding of Biomedical waste
- 3 Job responsibilities of a Medical Officer of a primary health centre

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 International Red cross society
- 5 Health team concept
- 6 Pneumoconiosis
- 7 Health Hazards of agricultural workers
- 8 Swacch Bharat Abhiyan
- 9 Disaster cycle
- 10 Sickness absenteeism
- 11 Indigenous system of Health care
- 12 WHO day
- 13 UNICEF
- 14 Silicosis
- 15 Health hazards due to Health care waste

SHORT ANSWERS

10x2=20

- 16 Sub centre
- 17 ASHA workers
- 18 Importance of Pre-placement Examination in Occupational Health
- 19 Occupational cancers
- 20 World Bank
- 21 Ergonomics
- 22 Community health center
- 23 Ford foundation
- 24 Anganwadi worker
- 25 Quarantine

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Principles of Primary health care
- 2 Occupational hazards of health care waste handlers
- 3 Models in health management
- 4 Bhore Committee
- 5 Role of paramedical workers in hospitals
- 6 Public and private partnership
- 7 Social Security
- 8 Health for All
- 9 Panchayath Raj Institutions
- 10 G.O.B.I campaign

SHORT ANSWERS

20 x3=60

- 11 Mudaliar committee
- 12 Community participation
- 13 Functions of Primary Health Care
- 14 Staff pattern of PHC
- 15 Sub centre
- 16 Millenium development goals
- 17 levels of Health Care System in India
- 18 Trained Dais
- 19 Enumerate voluntary health agencies in India
- 20 Anganwadi worker
- 21 Roles of ASHA
- 22 ANM
- 23 Disaster mitigation
- 24 Health team concept
- 25 Methods of disposal of biomedical waste
- 26 Medical social worker
- 27 Types of disaster
- 28 World Bank
- 29 ILO
- 30 Preparedness for Cyclone

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Mention the parts of CT- scan machine with labelled diagram and write about instruction given patient for CT scan
- 2 What is digital subtraction angiography? Discuss in detail the principles and technique and mention its uses
- 3 Write in detail intravenous urogram procedure

SHORT NOTES -ANSWER ANY TEN

10x5=50

- 4 Fistulogram
- 5 Radiation protection
- 6 High voltage radiography
- 7 Bronchography
- 8 Foreign body localisation
- 9 Mammography
- 10 Post operative T-tube cholangiogram
- 11 Darcocystography
- 12 Testing of screen-film contact
- 13 Loopogram
- 14 Stereoscopy
- 15 Ultrasonography

SHORT ANSWERS

10x2=20

- 16 Film fogging
- 17 TLD badge
- 18 Ohms law
- 19 Cine angiography
- 20 Myelogram- technique
- 21 Two characteristics of semi-conductor
- 22 Artefacts
- 23 Sinogram
- 24 Half value layer
- 25 Fluoroscopy

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Working principle, Technique and merits of digital radiography
- 2 Dark room planning for large hospitals
- 3 Draw a neat labelled diagram of double emulsion film and write its uses
- 4 Mention different types of cassettes and write about construction of x-ray cassette
- 5 Automatic processor - principle, types and features
- 6 Discuss the different types of film faults and procedures to prevent the same
- 7 Record of film stock and radiographs
- 8 Write short note on Safe light
- 9 Latent image - definition and formation of latent image
- 10 Advantages and disadvantages of intensifying screens

SHORT ANSWERS 20 x3=60

- 11 Hangers- Types and storage
- 12 Graininess of film
- 13 What is pH? What is its importance in processing films?
- 14 How to avoid scatter radiation?
- 15 Wetting agents
- 16 Methods of rinsing
- 17 Causes and prevention of fogs
- 18 Mention types of entrance to dark room
- 19 Mention three rare earth elements
- 20 Write about screen film contact tests
- 21 Write constituents of fixer
- 22 Mention various fogging of x- ray film
- 23 Film drying methods
- 24 Write about deterioration of films on storage
- 25 Loading and unloading of cassettes
- 26 Three differences between digital radiography and conventional radiography
- 27 Ventilation of a dark room
- 28 Single coated films
- 29 Regeneration of solution
- 30 Factors affecting fixing time, mention any three

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Define computer. Explain the uses of computer in Medical records Department.
- 2 Draw the computer memory hierarchy chart from binary digit to terabyte

SHORT NOTES -ANSWER ANY FOUR 4x5=20

- 3 Memory
- 4 Bar code reader
- 5 Hospital Information System (HIS)
- 6 Software
- 7 Internet

SHORT ANSWERS 5x2=10

- 8 Define networking
- 9 Explain the Input Unit
- 10 Explain the Uses of computer in Indexing of Medical Records
- 11 Expand the following abbreviations
- 12 Explain the graphical presentation of statistical report

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SUPPLEMENTARY EXAMINATION, JULY 2021

**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 Uses of Computers in Medical Records Department
- 2 Networking
- 3 Output unit
- 4 Uses of M.S. Excel in medical records indexing
- 5 Application Software

SHORT ANSWERS

10x3=30

- 6 Define networking. List out the types of networking.
- 7 Explain the advantages of computer.
- 8 Briefly explain the units of computer.
- 9 List out the types of keys in Standard Computer Keyboard.
- 10 Expand
1)GUI 2) HTML 3) OMR 4)CPU 5) ALU
- 11 Write the keyboard shortcut keys for
1)Cut 2) Copy 3) Paste
- 12 Name the functions used in M.S. excel
1) To add values of the cells 2) To find out the mean value
- 13 Write a note on M.S.Word formatting tools
- 14 Write the uses of M.S. PowerPoint application in statistical presentation.
- 15 Explain the characteristics of computer?

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SUPPLEMENTARY EXAMINATION, JULY 2021
II YEAR DIPLOMAIN/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 in detail dentist act 1948 and its relation to registration of dental hygienist
- SHORT NOTES** 5x5=25
- 2 Medico legal issues in dental practice
3 Sterilization and care of dental instruments
4 Appointment and recall
5 Dental specialties
6 Charting and recording
- SHORT ANSWERS** 5x2=10
- 7 Billing
8 Topical fluorides
9 Types of periodontal dressing
10 Dental auxiliary
11 Four handed dentistry

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SUPPLEMENTARY EXAMINATION, JULY 2021
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 Write Dentist Act 1948
- 2 Psychological aspects of child and parents
- 3 Environmental health
- 4 Write in brief oral cancer
- 5 Aims and objectives of dental health education
- 6 Sterilization techniques
- 7 Write various impression materials used in dentistry
- 8 Write briefly about HBV associated with Periodontitis
- 9 Water supply to community and their implications on dental health
- 10 Oral manifestations of HIV

SHORT ANSWERS

20 3=60

- 11 Billing
- 12 Audio-visual aids
- 13 Various methods of oral prophylaxis
- 14 Suture materials
- 15 Accounts
- 16 Dentifrice composition
- 17 Water fluoridation
- 18 Name plaque detection methods
- 19 Oral hygiene instructions
- 20 Cavity varnish
- 21 Write dental specialities
- 22 Defluoridation of water
- 23 Oral hygiene aids
- 24 Space maintainers in child
- 25 Appliances used in Prosthodontics
- 26 Periodontal dressing
- 27 Name suture materials
- 28 Four handed dentistry
- 29 Chlorhexidine mouth wash
- 30 Computers in dentistry

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Write in detail about anodal galvanism
- 2 Give the physiological effects of IRR
- 3 Explain the types of electrode placement in interferential therapy
- 4 What is biofeedback? Give the importance of its use in Physiotherapy
- 5 Techniques of electrical stimulation of denervated muscles
- 6 Principles and advantages of iontophoresis
- 7 Precautions and treatment of shock
- 8 Therapeutic exercises of whirlpool bath
- 9 Fluidotherapy
- 10 Explain various method of application of cryotherapy

SHORT ANSWERS

20 x3=60

- 11 Types of valves used in electrotherapy unit
- 12 Define condensers
- 13 What are electrical burns?
- 14 Pain gate theory
- 15 Benefits of hot pack unit
- 16 Spacing in short wave diathermy
- 17 Drugs used for iontophoresis
- 18 Uses of contrast bath
- 19 Physiological effects of faradic current
- 20 Define chronaxie and rheobase
- 21 FG Test
- 22 What is PUVA?
- 23 Sinusoidal currents
- 24 Therapeutic effects of galvanic currents
- 25 Define H Reflex
- 26 Micro currents
- 27 Define electromagnetic induction
- 28 Skin impedance
- 29 Classify pain fibres
- 30 Types of transformers

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Draw a neat labelled diagram of nephron and describe urine formation
- 2 Draw a neat labelled diagram of respiratory system and explain mechanism of breathing

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 3 ABO blood grouping
- 4 Structure of a typical chromosome
- 5 Mechanism of enzyme action
- 6 White blood corpuscles
- 7 Structure of a bacterial cell
- 8 Name the parts of brain and mention their functions
- 9 Structure and functions of placenta

SHORT ANSWERS 5x2=10

- 10 Name any four hormones secreted by anterior pituitary gland
- 11 Mention the applications of genetic finger printing
- 12 Name any four diseases caused by virus
- 13 Name any four differences between DNA and RNA
- 14 Mention the normal systolic and diastolic blood pressure for adult healthy human

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Describe the structure of DNA with a neat labelled diagram
- 2 Meiosis
- 3 With a neat labelled diagram explain the structure of chromosome
- 4 Explain the structure of spermatozoa
- 5 Describe the hormones secreted by anterior pituitary and their function
- 6 Explain the mechanism of breathing
- 7 Brief account of steps involved in DNA finger printing
- 8 Explain hindbrain
- 9 **Match the following**

i) Pericardium	a) Protein factory
ii) Sebaceous gland	b) Heart
iii) Ribosome	c) Skin
iv) Amylase	d) Large intestine
v) Colon	e) Salivary gland

10 Multiple choice questions

- A. Power house of a cell is (lysosome, mitochondrion, Golgi body, smooth ER)
- B. Bile is stored in (liver, urinary bladder, pancreas, gall bladder)
- C. Functional unit of lung is (nephron, neuron, alveolus, none of the above)
- D. Blood group without antibody is (A, B, AB, O)
- E. Example for granulocyte is (lymphocyte, monocyte, neutrophil, none of the above)

SHORT ANSWERS

20 x3=60

- 11 Name the parts of human eye and mention their function
- 12 Placenta - formation and functions
- 13 Tidal volume
- 14 Structure of Graafian follicle
- 15 Mention any three functions of skin
- 16 Name the accessory glands of digestive system and their function
- 17 Areolar connective tissue
- 18 Mention any three functions of blood
- 19 ABO blood grouping
- 20 Name thyroid gland hormones and mention their function
- 21 Blood vessels
- 22 Muscular tissue
- 23 Structure of Golgi apparatus and its function
- 24 Name the parts of stomach
- 25 Differences between bone and cartilage
- 26 Mention any three functions of kidney
- 27 Name the parts of female reproductive system
- 28 Sex determination in human
- 29 **Fill in the blanks**
 - (i) Tuberculosis is caused by
 - (ii) Sex chromosome is also known as
 - (iii) Duodenum is a part of
- 30 **Answer in one word/ sentence**
 - i) Normal value of systolic and diastolic blood pressure in adult
 - ii) Name the bones present in the middle ear
 - iii) Name the fluid surrounding the brain

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Enumerate various methods of dry heat sterilization. Add a note on hot air oven
- 2 Mention different staining techniques. Write in detail about principle, procedure, and uses of ZN staining
- 3 Define and classify culture media. Add a note on antibiotic sensitivity test

SHORT NOTES ANSWER ANYTEN 10x5=50

- 4 Light microscope and its handling
- 5 IgM antibody
- 6 Preparation of smear
- 7 Active immunity
- 8 Bacterial filters
- 9 Louis Pasteur
- 10 Blood agar media
- 11 Forms of bacteria
- 12 Chemical methods of sterilization
- 13 Exotoxins
- 14 Indole test
- 15 ELISA test

SHORT ANSWERS 10x2=20

- 16 Name Two Covid vaccines.
- 17 Name any four transport media
- 18 Uses of electron microscope
- 19 Name the gaseous disinfectants
- 20 Bacterial spore
- 21 STDs
- 22 Name any four gram positive bacteria
- 23 Toxoids
- 24 Universal precautions
- 25 Streak plate technique

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Classify and describe hypersensitivity reaction
- 2 Define sterilization. Write in detail about chemical sterilization
- 3 Write in brief about structure of bacterial cell
- 4 Modes of transmission of infection
- 5 Uses and care of compound microscope
- 6 Define selective media with three examples
- 7 Reagents used in gram staining techniques
- 8 Contribution of Louis Pasteur
- 9 Innate immunity
- 10 Bacterial growth curve

SHORT ANSWERS

20 x3=60

- 11 Structure of antibody
- 12 Write a neat labelled diagram of bacterial spore
- 13 Cold sterilization
- 14 Name three gram negative cocci
- 15 Cleaning of body fluid spill in laboratory
- 16 Enriched media
- 17 Define precipitation with example
- 18 Preparation of safranin stain
- 19 Functions of bacterial capsule
- 20 Name gaseous disinfectants
- 21 Fumigation
- 22 Bacterial loop
- 23 Different types of infection
- 24 Write three different between active and passive immunity
- 25 Bacterial filters
- 26 Name three live vaccines
- 27 Name three anaerobic bacteria
- 28 Name three articles to be sterilised in hot air oven
- 29 Name three transport media
- 30 Gram positive bacterial cell wall

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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 epidemic, enumerate the steps in the investigation of epidemic
- 2 What is natural history of diseases? Discuss different levels of prevention
- 3 Discuss about Life cycle of house fly and add a note on diseases transmitted

SHORT NOTES ANSWER ANYTEN

10x5=50

- 4 Epidemiological triad
- 5 Difference between Cohort and Case control study
- 6 Quarantine
- 7 Insecticides
- 8 Killed vaccines
- 9 Arithmetic mean and median
- 10 What is screening; mention the uses and criteria for screening
- 11 Droplet infection
- 12 Histogram
- 13 Incidence rate and prevalence rate
- 14 Index case
- 15 Health advice to travellers

SHORT ANSWERS

10x2=20

- 16 Herd immunity
- 17 Bar Chart
- 18 Case fatality rate
- 19 Opportunistic infection
- 20 BCG Vaccine
- 21 Spot map
- 22 Notification of diseases
- 23 Mention the sources of health information
- 24 Cancer registry
- 25 Secondary attack rate

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021

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 Sampling methods
- 3 Define Epidemiology. Enumerate the types of epidemiological studies
- 4 Balanced diet
- 5 Differences between screening test and diagnostic test
- 6 Census
- 7 Cold chain system
- 8 Incidence rate and prevalence rate with an example each
- 9 Pasteurisation
- 10 Web of causation-with a suitable example

SHORT ANSWERS

20 x3=60

- 11 Incubation period
- 12 Parboiling of rice
- 13 Vitamin A deficiency, prevention and control
- 14 Food adulteration
- 15 Age pyramid
- 16 Define sensitivity and specificity
- 17 Sources of health information
- 18 Sources of vitamin D
- 19 Types of disinfecting agents-with an example each
- 20 Integrated Child Development Scheme
- 21 Name some foods rich in calcium
- 22 Name some water soluble vitamins
- 23 Write three adverse effects of vaccination
- 24 Uses of demography
- 25 Bar charts
- 26 Meat Inspection
- 27 Define Zoonotic diseases, give 2 example
- 28 Iodized salt
- 29 Mean, Median and Mode
- 30 Pentavalent vaccine

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021
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 Define primary tuberculosis. Name the components of primary complex. Write the gross and microscopic picture of TB lung with the note on complication
- 2 Define inflammation. Mention the signs of inflammation. Describe the types with examples

SHORT NOTES -ANSWER ANY FIVE 5x5=25

- 3 Define hyperplasia with examples
- 4 Osteoclastoma
- 5 Pneumonia
- 6 Renal cell carcinoma
- 7 Cholecystitis
- 8 Rheumatic heart disease
- 9 Nasal polyps

SHORT ANSWERS 5x2=10

- 10 Causes of pericardial effusion
- 11 Phylloides tumor
- 12 Achalasia cardia
- 13 Kwashiorkor
- 14 Name 4 ovarian tumours

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021

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 List the macroscopic and microscopic differences between benign and malignant tumors
- 2 Achalasia cardia
- 3 Pneumonia
- 4 Carcinoma thyroid
- 5 Fibroid uterus

SHORT ANSWERS 10x3=30

- 6 Renal calculus
- 7 Microscopic features of cirrhosis
- 8 Gastric ulcer
- 9 Phylloides tumor
- 10 Nasal polyps
- 11 Vitamin D deficiency
- 12 Causes of cardiomegaly
- 13 Primary complex
- 14 Osteochondroma
- 15 Types of necrosis

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021

I YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 1.30 Hrs (RS -2 SCHEME) MAX. MARKS: 100

9.30 am to 11 am QP CODE: 4197, SECTION-A, PSYCHOLOGY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES: ANSWER ANY FOUR

4x5=20

- 1 Classification of personality
- 2 Development and growth of behaviour during infancy and childhood
- 3 Explain the assessment of intelligence
- 4 What is motivation? classify motivation
- 5 Factors influencing perception

SHORT ANSWERS

10 x3=30

- 6 Psychological needs
- 7 Schools of psychology
- 8 Feelings and emotions
- 9 Conflict and illusion
- 10 Methods to improve memory
- 11 Problem solving
- 12 Qualities of leadership
- 13 Characteristics of intelligent person
- 14 Social psychology
- 15 Effective ways of learning

TIME: 1.30 Hrs

QP: 4198, SECTION-B, SOCIOLOGY (RS 2 SCHEME)

11 am to 12.30 pm

(ANSWER IN RED BOOK)

SHORTNOTES-ANSWER ANY FOUR

4x5=20

- 1 Explain the problems due to over population
- 2 Advantages and disadvantages of joint family system
- 3 Write a note on unemployment
- 4 Note on factors on social change
- 5 Explain geriatric problems

SHORT ANSWERS

10 x3=30

- 6 Causes of poverty
- 7 Social group
- 8 Classification of group
- 9 Alcoholism
- 10 Beggary
- 11 Culture and health
- 12 Write a note on features of urban community
- 13 Medical social worker
- 14 Problems of women I employment
- 15 Functions of family

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SUPPLEMENTARY EXAMINATION, JULY 2021

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 Role of social worker in CBR and methods of social work
- 2 Write a note on mobile outreach extension services
- 3 Define CBR. Describe approaches in CBR
- 4 What is disability evaluation, uses of evaluation
- 5 Differentiate between disability, handicap and impairment with an example for each
- 6 Camp approach in CBR
- 7 Mention the services provided by the government for person with disability
- 8 Immunization programs
- 9 Role of physiotherapy in rehabilitation of a child with Down's syndrome
- 10 Write a note on importance of early intervention in high risk babies

SHORT ANSWERS

20 x3=60

- 11 Classification of mental retardation
- 12 Post-polio residual paralysis
- 13 Functions of regional centres
- 14 Clinical features of muscular dystrophy
- 15 Advantages of outreach services
- 16 Limitations of CBR
- 17 Disability in Down's syndrome
- 18 Different forms of institutional based rehabilitation
- 19 Role of mobile units
- 20 Importance of maternal nutrition
- 21 Importance of anganwadi worker
- 22 Uses of disability evaluation findings
- 23 Behavioural disorders
- 24 Define rehabilitation
- 25 Qualitative and quantitative data
- 26 Importance of screening
- 27 Types of cerebral palsy
- 28 Importance of disability evaluation
- 29 Genetic counselling
- 30 Primary health centres

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SUPPLEMENTARY EXAMINATION, JULY 2021

**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 details about the basic coding guidelines?
- 2 Differentiate the nomenclature and classification?
- 3 What do you mean by clinical coding and statistical classification?
- 4 Explain about two codes? Certain condition as per ICD 10

EXPAND THE FOLLOWING ABBREVIATIONS

5 x1=5

- 5 TAO
- 6 AAH
- 7 HIE
- 8 APH
- 9 PPH

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021

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 Give explanation about Dagger and Asterisk?
- 2 What is the principle of ICD 10?
- 3 How to use ICD? explain
- 4 Basic guidelines for Mortality and Morbidity Code?
- 5 Structure of ICD Classification
- 6 Expand the Abbreviation of NEC,HIV and CHD
- 7 History of ICD?
- 8 Chapters of ICD-10?
- 9 Define underlying the cause of death?
- 10 Write details about the Coding rules?
- 11 Write 3 character categories
- 12 Assign the Codes for 1)Acute Appendicitis, 2) Anemia 3) AGE

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
III YEAR DIPLOMA IN PHYSIOTHERAPY (DPT)

TIME: 1.3 Hrs (RS -2 SCHEME) MAX. MARKS: 100

9.30 am to 11 am, QP CODE: 5197, SECTION-A, ALLIED THERAPEUTICS

(WRITE IN BLUE ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR 4x5=20

- 1 Principles of Sports Nutrition
- 2 Methods of Skill training
- 3 Methods of stress management
- 4 Write about causes of sports injuries
- 5 Principles of Sports injuries

SHORT ANSWERS 10 x3=30

- 6 Define Physical fitness
- 7 Explain Golfers elbow
- 8 Body measurement techniques
- 9 Pranayama and its benefits
- 10 Dangers of Acupuncture
- 11 Mention Common sports injuries of Shoulder
- 12 Write about management of Acute Anterior Cruciate ligament injury
- 13 Role of physical training
- 14 Write about prognosis in Sports injury
- 15 Classify Naturopathy

Time: 1.30 Hrs, QP CODE: 5198 SECTION-B, PHARMACOLOGY

11 am to 12.30 pm (WRITE IN RED ANSWER BOOK)

SHORT NOTES- ANSWER ANY FOUR 4x5=20

- 1 Mention factors modifying drug response
- 2 Name systemic route of drug administration, Add note on inhalational route
- 3 Define essential drugs, Mention five essential drugs
- 4 Uses and adverse effects of corticosteroids
- 5 Name five sedatives, mention two uses and two adverse effects of diazepam

SHORT ANSWERS 10 x3=30

- 6 Define prodrug, give examples
- 7 Name drugs used in severe acute asthma
- 8 Write three drugs used as anti pyretic
- 9 Name three drugs used in pre anesthetic medication
- 10 Define disinfectant, give examples
- 11 Mention 3 major tranquilizers
- 12 Name three oral hypoglycemic drugs
- 13 Write about fat soluble vitamin.
- 14 Rationale behind use of adrenaline with lignocaine
- 15 Name three central nervous system stimulants

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Newspapers
- 2 Mobile phones

ANSWER ANY ONE 1 x10=10

- 3 Write a letter to the Director of health and family welfare, applying for appointment as a Lab technician in the Hospital
- 4 Write a letter to your principal requesting him/her to issue a transfer certificate

WRITE THE OPPOSITE GENDER OF 5x1=5

- 5 Man
- 6 Blue
- 7 King
- 8 Peacock
- 9 Poet

WRITE THE OPPOSITE OF THE FOLLOWING 5x1=5

- 10 Legal
- 11 Wise
- 12 Big
- 13 Cheap
- 14 Happy

MAKE SENTENCES USING THE FOLLOWING 5x1=5

- 15 Afraid of
- 16 Besides
- 17 Look into
- 18 To and pro
- 19 As well as

FILL IN THE BLANKS 5x1=5

- 20 She is _____ honest girl
- 21 The sun rises _____ the east
- 22 Raju and Ravi _____ good friends
- 23 He is _____ good man
- 24 He died _____ cholera

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PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, JULY 2021
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 Online teaching- pros and cons
- 2 Role of Television and Print media

ANSWER ANY ONE (LETTER WRITING) **1 x10=10**

- 3 Write a letter to your friend telling him/her about your paramedical course
- 4 Write a letter to your Principal requesting him to "grant five days leave" as you are going to Bengaluru

5 USE THE FOLLOWING IDIOMS/PHRASES IN SENTENCE OF YOUR OWN **5x1=5**

- A) In the air B) Back up C) A bed of roses D) Zip your lip E) Call back

6 CHANGE THE FOLLOWING INTO INDIRECT SPEECH **5x1=5**

- A. Chaithra said, " I am not free" .
- B. Madhu said, " please lend me some money"
- C. Kavya said, " I am returning to Nagpur next Friday"
- D. "What a huge hill it is!" The traveller said.
- E. He said to me, "What is the prize of this cup"?

7 CHANGE THE VOICE OF THE FOLLOWING **5x1=5**

- A. Our boys won many prizes
- B. The children are eating oranges
- C. Loki is practicing yoga
- D. Rakshitha was learning typing
- E. The antique was stolen

8 WRITE THE OPPOSITE OF THE FOLLOWING **5x1=5**

- A. Beautiful
- B. Honest
- C. Success
- D. Happy
- E. Rich

9 FILL IN THE BLANK WITH THE SUITABLE PREPOSITION **5x1=5**

- A. I depend you
- B. Sahana is taller Her brother
- C. The class will begins10'0 clock
- D. Divya is looking a job
- E. He goes to work train

10 FILL IN THE BLANKS WITH ARTICLES **5x1=5**

- A. Stars are in the sky
- B. I am Student of this college
- C. I will send SMS to you
- D. Bangalore is Big city
- E. I checked Mail box again

11 GIVE THE SYNONYMS OF THE FOLLOWING **5x1=5**

- A. Come
- B. Use
- C. Help
- D. Blank
- E. Plan

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

(1). There was once a king of Scotland whose name was Robert Bruce. He needed to be both brave and wise, for the times in which he lived were wild and rude. The king of England was at war with him, and lead a great army into Scotland to drive him out of the land. Battle after battle had been fought. six times had Bruce led his brave little army against foes and six times had his men beaten and driven into fight. At last his army was scattered and he was forced to hide himself in the woods and in lonely places among the mountains.

(2). One rainy day, Bruce lay on the ground under a rude shed, listening to the patter of the drops on the roof above him. He was tired and sick at heart and ready to give up all hope. It seemed to him that there was no use for him to try to do anything more.

(3). As he laid thinking, he saw a spider over his head, making ready to weave her web. He watched her as she toiled slowly and with great care. Six times she tried to throw her frail thread from one beam to another and six times it fell short "poor thing!" said Bruce. 'you too, know what it is to fail'.

(4) But the spider did not lose hope with the sixth failure. With still more care, she made ready to try for the seventh time. Bruce almost forgot his own troubles as he watched her swing herself out upon the slender line. Would she fail again? No! the thread was carried safely to the beam and fastened there.

[P.T.O]

(5). I too will try a seventh time! Cried Bruce.

(6). He arose and called his men together. He told them of his plans and sent out with messages of cheer to his disheartened people. Soon there was an army of brave Scotchmen around him. Another battle was fought and king of England was glad to go back into his own country.

QUESTIONS:-

5x2 =10

- A. How was the time in which the king lived?
- B. Who was Robert Bruce fighting against?
- C. How many times did Bruce fight against his foes?
- D. What did Bruce see while he was lying?
- E. What made Bruce try a seventh time?

13 WRITE THE CORRECT MEDICAL TERM

1x10=10

- A. Patho
- B. Onco
- C. Cardio
- D. Derma
- E. Embreyo
- F. Histo
- G. Hepa
- H. Endocri
- I. Andro
- J. Nephro

14 E MAIL WRITING

1x5=5

Write an e-mail to your friend about your new college

15 FILL IN THE BLANKS WITH APPROPRIATE ARTICLES AND PREPOSITIONS GIVEN IN THE BRACKET (of, a, to, in, of)

5x1=5

A farmer owned piece Land in a village. He grew paddy it, he took 10 bags paddy sells in the market.

16 RE-ARRANGE THE JUMBLED SEGMENTS TO FORM A SENTENCE

6 x1=6

- A. Lovely/ city/ is/Verona/a
- B. Hates/doges/she
- C. Is/what/name/your
- D. French/I/speak
- E. film/saw/we/a
- F. Always/I/a/lot/eat

17 COMPLETE THE FOLLOWING DIALOGUE (SITUATION BASE CONVERSATION)

4 x1=4

- A. Jyothi : Chaithra (greetings).
- B. Chaithra :(Reply for greeting)
- C. Jyothi : You are looking pretty in this new dress (compliments)
- D. Chaithra : (Replying for compliments) Today is my birthday
- E. Jyothi : wish you happy birthday
- F. Chaithra :(express gratitude)
- G. Jyothi : ok bye,Chaithra
- H. Chaithra : bye Jyothi.
