

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY
Subject: BIOCHEMISTRY
QP CODE – 3101

Time: 3 hrs

Max. Marks: 90

I. Long Essay – answer any TWO

2x10 = 20

1. Explain Tricarboxylic acid cycle (TCA cycle) with a note on its energetics.
2. Name the abnormal constituents of urine. What are the qualitative methods for estimation of the same.
3. Describe in detail about kidney function tests.

II. Write short notes on any TEN

10x5=50

4. Urea cycle.
5. Random Access Analyzers.
6. Internal quality control
7. Electrophoresis – definition, principle and applications.
8. Cardiac profile tests
9. Digestion and absorption of lipids.
10. Uric acid synthesis.
11. Formation of ketone bodies
12. Liver function tests
13. Enzyme-linked immunosorbent assay (ELISA) – definition and applications with schematic diagram.
14. Tests for organic constituents of urine
15. Chromatography – definition, types and applications

III. Write short answers.

10x2=20

16. Full form of RIA, analytes measured by RIA.
17. Reagent kits
18. Test for creatinine in urine
19. Physical properties of normal urine
20. Normal range of Total, Direct and Indirect bilirubin.
21. Constituents of gastric juice
22. Normal range of Random Blood Sugar (RBS) and Post Prandial Blood Sugar (PPBS)
23. Statistical significance in Biochemistry lab.
24. Micelles
25. Lipid profile.

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
HEALTH INSPECTORS
Subject: Paper I
QP CODE – 3111

Time: 3 hrs

Max. Marks: 90

I Long Essay – Answer any TWO

2 X 10 = 20

1. What are the diseases spread by mosquitoes? Explain briefly various mosquito control measures.
2. What are the Causes for road traffic accidents (RTA)? Name five measures to prevention RTAs.
3. With a neat labelled diagram explain the chain of transmission of diseases

II Short Essay – Answer any TEN

10 X 5 = 50

4. What is cancer? Write briefly on screening for cancer.
5. What is meat hygiene? Name any three diseases caused by eating contaminated meat.
6. How do you know fish is good for consumption? What is the nutritional importance of fish as a food item?
7. Explain briefly on measures you will take to control food poisoning in a village.
8. What are the harmful effects of tobacco on health? Mention two measures to control and prevent tobacco use in the population.
9. Hospital acquired infections and its control
10. Prevention of hypertension in a community
11. Explain briefly methods of food preservation in India
12. Name three causes for neonatal tetanus in India. List any three control-measures.
13. Name four Sexually transmitted diseases (STDs). List any three measures to control STDs.
14. Explain Directly Observed Treatment (DOTs) in treatment of Tuberculosis
15. First aid measures in the victims of dog bite

III Short Answers

10 X 2 = 20

16. Name two risk factors for diabetes mellitus
17. Name two causes of blindness in India
18. Expand RNTCP & NVBDCP
19. Two used of insecticide treated mosquito nets
20. Bacillus Calmette–Guérin (BCG) vaccine
21. Name two hazards of obesity
22. Name two sexually transmitted diseases
23. Name two zoonotic diseases.
24. Name two health benefits of using sanitary latrines
25. Name two domestic accidents

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY
Subject: Radiography Including Radiology Physics (Ns) R-I
QP CODE – 3121

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY – ANSWER ANY TWO

2X10=20

- 1) Explain structure of intensifying screens and write brief about types
- 2) Describe effects of radiation on human body. Add a note on permissible dose
- 3) Describe about X-ray beam restriction . write different types and one use of Each

II. WRITE SHORT NOTES ON ANY TEN

10X5=50

- 4) Automated film processing
- 5) Sinogram
- 6) Anode heating effect
- 7) Beta decay
- 8) Radio pharmaceuticals
- 9) Factors affecting radiographic films
- 10) Define Grid ratio and write briefly about type of grids
- 11) Latent image
- 12) Difference between CR (computed radiography) and DR(Digital Radiography)
- 13) Photo electric effect
- 14) Unexposed X-ray film storage
- 15) Barium meal follow – through (BMFT)

III. WRITE SHORT ANSWERS

10X2= 20

- 16) Half life
- 17) Picture Archiving and Communication System (PACS)
- 18) Artifacts
- 19) Scattered radiation
- 20) Film fog
- 21) Hangers
- 22) Mammography Cassette
- 23) Fluorescence
- 24) Mention different types of cassettes
- 25) Fixing agent

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OPERATION THEATER TECHNOLOGY
Subject: Anaesthesia And Allied Topics(N.S)
QP CODE – 3131

Time: 3 hrs

Max. Marks: 90

1. ANSWERE ANY TWO

2 X 10 = 20

1. Classify Muscle relaxants. Write in detail about succinylcholine.
2. Describe in detail about the safety systems in anaesthesia machine and medical gas supply
3. What are the indications of spinal anaesthesia. Write about the technique and complications of Spinal anaesthesia.

II. WRITE SHORT NOTES ON ANY TEN

10 X 5 = 50

4. Central venous pressure monitoring
5. Propofol.
6. Oropharyngeal and Nasal airways.
7. Lignocaine.
8. Basic life support.
9. Induced Hypotension
10. Morphine
11. Capnography.
12. Bains circuit.
13. Blood transfusion reactions
14. Drug interactions.
15. Halothane.

III. WRITE SHORT ANSWERES

10 X 2 = 20

16. Blood storage.
17. Colloids.
18. Reversal of patient after general anaesthesia.
19. Monitoring in post operative anaesthesia care unit.
20. Spinal needles.
21. Noradrenaline.
22. Magills forceps.
23. Clinical Competence.
24. Atropine.
25. Patient safety programme.

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY
Subject: Medical Terminology
QP CODE – 3141

Time: 3 hrs

Max. Marks: 90
3X5=15

I. ANSWER THE FOLLOWING

1. What is medical terminology?
2. Define what is Root? Prefix? Suffix? And give examples
3. Explain how Terminology is different from common language?

II. GIVE THE MEANING OF THE FOLLOWING PREFIXES

5X1=5

- | | | |
|--------|----------|---------|
| 4. ANA | 5. Anti | |
| 6. Dys | 7. Hyper | 8. Post |

III. WRITE PHOBIA'S OR MEANING VICEVERS

10X1=10

- | | | |
|---------------------------|---------------------------------|------------------|
| 9. Belonophobia | 10. Fear of Bees | 11. Fear of wind |
| 12. Fear of floods | 13. Fear of immobility of joint | |
| 14. Chorophobia | 15. Fear of skin lesion | |
| 16. Fear of double vision | 17. Fear of cats | |
| 18. Fear of handwriting | | |

IV. DIFFERENTIATE THE FOLLOWING TERMS

5X2=10

- | | |
|----------------|-------------|
| 19. Cardial | Cardiogenic |
| 20. Orifies | Oral |
| 21. Mortality | Morbidity |
| 22. Postpartum | postmortem |
| 23. Iris | Ileum |

V. WRITE THE MEANING OF THE FOLLOWING ROOTS

10X1=10

- | | | |
|------------|------------|--------------|
| 24. Cephal | 25. Costa | 26. Dactylos |
| 27. myelos | 28. Odonto | 29. Salpinx |
| 30. Hemat | 31. Opia | 32. Opthol |
| 33. Phagia | | |

VI. WRITE THE MEANING OF THE FOLLOWING SUFFIXES

5 X2=10

- | | | |
|-------------|-----------|-----------|
| 34. Aphagia | 35. Lith | 36. Mania |
| 37. Rrhia | 38. Otomy | |

VIII. MATCH THE FOLLOWING

5X2=10

- | | |
|-----------|--------|
| 39. Eye | Bone |
| 40. Ortho | Odonto |
| 41. Tooth | Ribs |
| 42. Costa | Optho |
| 43. Cord | Vocal |

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Supplementary EXAMINATION March - 2016

VIII. GIVE THE MEDICAL TERMS

10X2=20

44. Inflammation of the Bursa
 45. Inflammation of the spinal cord
 46. Tumor of cartilage
 47. Tumor of bone
 48. Pain in muscle
 49. Inflammation of the skin due to allergy
 50. Inflammation of the heart muscle
 51. A tumor of the Lymph vessel and channel
 52. Increase in blood pressure
53. Blood in stools

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PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
Dialysis Technology
Subject: Fundamentals Of Hemodialysis And Components (N.S)
QP CODE – 3151

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAYS – ANSWER ANY TWO

2 x 10 = 20

1. HEMODIAFILTRATION
2. ASSESSMENT OF ADEQUACY OF HEMODIALYSIS
3. DIALYSATE AND DAILY SATE DELIVERY SYSTEM

II. WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

4. ULTRAFILTRATION
5. DIALYSER REUSE
6. BACTERIOLOGY OF HEMODIALYSIS
7. CATHETER RELATED BLOOD STREAM INFECTIONS
8. DISINFECTION OF Hemodialysis (HD) MACHINE
9. DIALYSIS SOLUTION PREPARATION
10. THERAPEUTIC APHERESIS
11. ACUTE COMPLICATIONS OF HEMODIALYSIS
12. MONITORS AND ALARMS IN HEMODAILY SIS
13. CANNULATION SITE INFECTION
14. STERLIZATION
15. ANTICOAGULATION

III. WRITE SHORT ANSWERS

10 X 2 = 20

16. MONITORING OF AV FISTULA
17. TWO TYPES OF EPO
18. SALINE RINSE
19. REVERSE OSMOSIS
20. DEFINE CONDUCTITIVITY AND NORMAL VALUE
21. NAME TWO AGENTS USED IN DISINFECTION
22. TWO INDICATIONS TO START DIALYSIS
23. NORMAL LEVELS OF SODIUM AND POTASSIUM
24. TEMPERATURS
25. TYPES OF CANNULATION

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OPHTHALMIC TECHNOLOGY
Subject: Paper-I
QP CODE – 3161

Time: 3 hrs

Max. Marks: 90

Your answers should be specific to the questions asked
Draw neat labelled diagrams wherever necessary.

I. LONG ESSAY (Answer any two) **2 X 10 = 20**

1. Mention some of the major and minor surgical procedures and how to obtain consent for the same
2. Ocular bandaging
3. Post-operative measures to be taken after eye surgery?

II. SHORT ESSAY ANY TEN **10 X 5 = 50**

4. Retinoscopy
5. How to perform Ophthalmoscopy
6. How to dispense spectacles
7. How to maintain surgical instruments in operation theatres
8. Pterygium —define ,signs ,symptoms and treatment.
9. Steps of Chalazion surgery
10. What is Focimeter
11. Progressive spectacles-advantages and disadvantages
12. Maintenance of contact lenses .
13. Procedure for Epilation
14. Trial set
15. Slit lamp-uses,types of illuminations

III. Write Short Answers **10X2=20**

16. Indications for intralesional triamcilonie in chalazion
17. Name types of progressive lenses
18. Uses keratometry
19. Diagnostic Uses of contact lens
20. Indications for Eucleation
21. Two of bifocals
22. Complications of pterygium surgery
23. Complications of chalazion
24. What is back vertex distance and its importance
25. What are the causes of dull fundal glow in pupillary area when retinoscopy done at 1 meter

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
Dental Mechanics
Subject: COMPLETE DENTURES
QP CODE – 3171

Time: 1 1/2 hrs

Max. Marks: 45

I. LONG ESSAY

1 X 10 = 10

1) Define dental cast. Mention the different types of cast and write the parts of cast.

II. WRITE SHORT NOTES

5 X 5 = 25

- 2) Relining and Rebasing
- 3) Anterior teeth selection principles
- 4) Cast preparation and trimming
- 5) Mean value Articulator
- 6) Flasking and deflasking

III. WRITE SHORT ANSWERS

5 X 2 = 10

- 7) Acrylic teeth
- 8) Repair of denture
- 9) Curve of spee
- 10) Dewaxing
- 11) Zero Degree teeth

PARAMEDICAL BOARD, BANGALORE
Supplementary EXAMINATION March - 2016
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE
Subject: Dental Hygiene And Prophylaxis
QP CODE – 3181

Time: 1 1/2 hrs

Max. Marks: 45

I LONG ESSAY

1 X 10 = 10

1) Define Periodontitis. Write in detail about the clinical features of Periodontitis. Write about the methods of relieving pain due to periodontal diseases.

II SHORT NOTES

5 X 5 = 25

- 2) Oral Hygiene Index Simplified.
- 3) Various methods of oral prophylaxis.
- 4) Dental calculus.
- 5) Periodontal abscess.
- 6) Gingival fibers.

III WRITE SHORT ANSWERS

5 X 2 = 10

- 7) Name the indices that measure the oral hygiene status.
- 8) Give 2 causes of intrinsic and extrinsic stains on teeth.
- 9) Objectives of Dental Hygiene.
- 10) Periodontal pocket.
- 11) Definition of Hygiene.

PARAMEDICAL BOARD, BANGALORE

Supplementary EXAMINATION March - 2016

I YEAR CERTIFICATE COURSE

Subject: Physics

QP CODE – 1101

Time:1 1/2 hrs

Max. Marks: 45

I.LONG ESSAY- ANSWER ANY ONE

1X10=10

- 1.State and explain Gas laws. Mention perfect gas equation.
- 2.Explain Nuclear fission and nuclear fusion reactions. Write the properties of Nuclear radiations.

II.WRITE SHORT NOTES ON ANY FIVE

5X5=25

- 3.Energy..
- 4.Ohm s law.
- 5.P type and n type Semiconductors.
- 6.Newton s law of Gravitation.
- 7.Ammeter and voltmeter.
- 8.X-Rays.
- 9.Capacitor.

III.WRITE SHORT ANSWER

5x2=10

- 10.Scalar and vectors.
- 11.Viscosity.
- 12.Longitudinal wave.
- 13.Refraction.
- 14..Electric field.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
D.P.T – Sports Science & Physiotherapy
QP CODE – 3201

Time: 2 hrs

Max. Marks: 65

I. Long Essay - Answer any THREE

4 x 10 =40

- 1) Discuss the Principles of immediate First aid and Medical Treatment.
- 2) Explain the importance of Physical education for Preschool children.
- 3) Discuss the Forecasting and planning of development of Physical culture and sports.
- 4) What are the different types of sports injuries? Explain any one in detail.
- 5) Discuss the Physical agents used in Physiotherapy treatment and write the principle of Exercise therapy.

II. Write short notes on Any FIVE

5 x 5 = 25

- 6) Shoulder Injury
- 7) Methods of Physical education
- 8) Fitness testing principles.
- 9) Physical education for Rural students
- 10) Training and conditioning of Sports persons
- 11) Frozen shoulder

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical Laboratory Technology
Subject: Anatomy & Physiology

Time: 3 hrs

Max. Marks: 90

Section A – Anatomy (Write in Separate answer book)

QP CODE – 2101

I. LONG ESSAY- ANSWER ANY ONE

1X10 = 10

- 1) Name the parts of Female reproductive system. Write in detail about Uterus.
- 2) Describe in detail the external and internal features of heart.

II. WRITE SHORT NOTES ON ANY FIVE

5 X 5 = 25

- | | |
|-----------------------------|----------------------------|
| 3) Stomach | 7) Urinary Bladder |
| 4) Histology of Bone | 8) Deltoid muscle |
| 5) Pituitary gland | 9) External carotid artery |
| 6) Bronchopulmonary segment | |

III. WRITE SHORT ANSWERS

5 X 2 = 10

- 10) Name the Carpal bones
- 11) Name four branches of Aorta
- 12) Name four Cranial nerves
- 13) Name four Muscles of leg
- 14) Name three Salivary glands

Section B – PHYSIOLOGY (Write in Separate answer book)

QP CODE - 2102

I. LONG ESSAY - ANSWER ANY ONE

1 x 10 = 10

- 1) Define Erythropoiesis, Explain the factors affecting it.
- 2) Explain the synthesis & functions of Thyroid Hormone.

II. WRITE SHORT NOTES ON ANY FIVE

5 x 5 = 25

- 3) Lung surfactant.
- 4) Draw a neat labeled diagram of ECG in lead II.
- 5) Define Glomerular Filtration Rate (GFR), mention the factors affecting it.
- 6) Functions of Gastric juice.
- 7) Contraceptive methods in females.
- 8) Functions of Cerebellum.

III. WRITE SHORT ANSWERS - ALL FIVE

5 x 2=10

- 9) Functions of Plasma proteins.
- 10) Normal values of Tidal volume & Residual volume.
- 11) Define Cardiac output and write its normal value.
- 12) Draw a neat labeled diagram of Nephron.
- 13) Myopia & its correction.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical X-Ray technology
GENERAL PHYSICS
Q.P. CODE -2121

Time : 1 1/2 hrs.

Max. Marks: 45

I. LONG ESSAY – ANSWER ANY ONE

1X10=10

- 1) Explain principle, construction and functioning of Mammography unit, write two differences between X-ray Unit and Mammography unit
- 2) Write about production of X-rays and properties of X-rays

II. WRITE SHORT NOTES OF ANY FIVE

5X5= 25

- 3) What is law of conservation of energy, explain with one example.
- 4) Full wave rectification and uses
- 5) Ammeter
- 6) Capacitors
- 7) Stationary X-ray tube
- 8) Tube rating charts

III WRITE SHORT ANSWERS

5X2=10

- 10) Isotopes
- 11) Law of Inverse square
- 12) Ohms Law
- 13) Give two examples for Magnetic and non-magnetic substances
- 14) Diode

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
OPERATION THEATER TECHNOLOGY
Subject: FUNDAMENTALS OF OT & BASIC CONCEPT IN SURGERY
QP CODE-2131

Time: 3hrs

max. Marks: 90

I.LONG ESSAY-ANSWER ANY TWO

2 x 10 = 20

- 1) Classify Suture materials. Write in details about any One absorbable natural suture material. Add a note on an ideal suture material.
- 2) Write an essay on concepts of laparoscopic surgery. Briefly describe advantages and disadvantages of laparoscopic surgery.
- 3) Write in detail about concept of Central Sterile Supply Department (CSSD).

II.WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

- 4) Staff nursery personnel team work
- 5) Patient physician relationships
- 6) Harmonic scalpel
- 7) Vacuum suction
- 8) Pros and cons of disposables
- 9) Scrub nurse
- 10) Sterilization methods
- 11) Cardiopulmonary Resuscitation (*CPR*)
- 12) Factors influencing wound healing
- 13) Endoscopy
- 14) Advantages of ambulatory surgery
- 15) Intra and post-operative complications

III.WRITE SHORT ANSWERS

10 x 2 = 20

- 16) Bio burden
- 17) Sterile team members
- 18) Ideal operation theatre
- 19) Povidone-Iodine
- 20) Sponge
- 21) Radiation hazards
- 22) Mention any two types of cautery
- 23) Name any two preservative of specimen sent for histopathology
- 24) Foley's catheter
- 25) Laser surgery

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY
MEDICAL RECORD SCIENCE (MRS)
QP CODE - 2141

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY — ANSWER ANY TWO.

2 X 10 = 20

- 1) Write in Details values of Medical Records?
- 2) What is evidence as per Indian Evidence act 1872 and Explain different types of evidences.
- 3) Define Medical Audit committee and explain the function and why it is important in Medical Record Department.

II. WRITE SHORT NOTES ON ANY TEN.

10 X 5 = 50

- 4) Write the duties and responsibilities of Medical Record Department.
- 5) How Medical Records Used as personal and Impersonal document.
- 6) What are the rights of arrested person?
- 7) Define the characteristics of good medical records.
- 8) Write briefly about the function of Central Admitting Office.
- 9) Cognizable and Non cognizable offences.
- 10) Explain the principle of Estoppels.
- 11) Retention period of Medical records.
- 12) Name the basics and special forms.
- 13) Filing system and retrieval procedure of Medical records.
- 14) Standardization of Printing forms.
- 15) Movable and Non Movable proprieties.
- 16) Rules for Birth and Death registration.

III. WRITE SHORT ANSWERS.

10 X 2 = 20

- 17) High Court
- 18) Patient will
- 19) Public servant
- 20) Alpha Index card
- 21) Plaint
- 22) Daily Census
- 23) Tracer Card
- 24) Still Birth
- 25) Nursing staff
- 26) Misfiling

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY
PHARMACOLOGY & THEORY OF DIALYSIS

Time: 3 hrs

Max.Marks:90

SECTION – A, PHARMACOLOGY (Write in separate answer book.)

QP CODE-2151

I. LONG ESSAY – ANSWER ANY ONE 1X10=10

- 1) Write the different preparations of Insulin. Write the mechanism of action, therapeutic uses and adverse effects of Insulin.
- 2) Classify Nonsteroidal anti-inflammatory drugs. Discuss the pharmacological actions, therapeutic uses and adverse effects of Aspirin.

II. WRITE SHORT NOTES ON ANY FIVE 5X5=25

- 3) Tetanus Toxoid
- 4) Alprazolam
- 5) Gentamicin
- 6) Therapeutic uses of Heparin.
- 7) Advantages and Disadvantages of Intravenous route.
- 8) Omeprazole

III, WRITE SHORT ANSWERS 5X2=10

- 9) Mention the antidotes for Heparin overdose and for Warfarin overdose.
- 10) Name two Anthelmintic drugs.
- 11) Name two contraindications for Morphine.
- 12) Name two Antiemetics.
- 13) Name two Parental Iron preparations.

SECTION-B, THEORY OF DIALYSIS (Write in Separate answer book)

QP CODE – 2152

I. ANSWER ANY ONE 1 x 10 = 10

1. Anatomy and Physiology of Artificial Kidney
2. Anticoagulation Methods in Haemodialysis

II. SHORT NOTES ON ANY FIVE 5 x 5 = 25

3. Universal Precautions
4. Reverse Osmosis (RO) Plant
5. Complications of Central Venous Catheter
6. Monitoring of Patients in Haemodialysis
7. Washing Accessories in Haemodialysis
8. Intradialytic Weight gain

III. WRITE SHORT ANSWERS(ANY FIVE) 5 x 2 = 10

9. Dry Weight
10. Distribution of water in the body
11. Normal Serum Values of Albumin and Creatinine
12. Functions of Erythropoietin
13. Two causes of Hypotension during Haemodialysis
14. Dialysis Efficiency

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
OPHTHALMIC TECHNOLOGY
Subject: Paper-I
Q.P Code : 2161

Time: 3 hrs

Max.Marks:90

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

I . LONG ESSAY (Answer any two)

2 X 10 = 20

1. Describe Tear drainage pathway with schematic diagram .
2. Describe gross anatomy of eye ,How do you instill drops and ointment into eye?
3. Describe Visual acuity charts of distant and near

II . SHORT ESSAY (Answer any ten)

10 X 5 = 50

4. Write a prescription to a patient who is 50years old undergone cataract surgery in both eyes whose distant vision is 6/6 both eyes?
5. Uses of Mydriatics and cycloplegics in ophthalmology
6. Treatment options for presbyopia
7. Advantages and disadvantages of different types of Bifocal lenses
8. Materials used in making spectacles
9. Define glaucoma? How to measure intraocular pressure at camp
10. Types of ametropia
11. What is refraction ,how do you do neutralization of lenses?
12. Disadvantages of using spectacles in aphakic patients
13. Pre-op investigations in patient undergoing cataract surgery
14. Colour vision charts and how to test colour vision
15. Astigmatism

III . Write Short Answers

10X2=20

- 16 Group of drugs used in treatment of glaucoma
- 17 What is Suomen Rauhanyhdistysten Keskusyhdistys (SRK) formula where do you use it?
- 18 Advantages and disadvantages of keratometers
- 19 How to test fundus of eye
- 20 Disadvantages of glasses over contact lenses
- 21 Types of contact lenses (1.),.2- -4..t,
- 22 What are the steps of transposition of lenses
- 23 What are causes of myopia
- 24 Types of images formed in strum's conoid at different positions
- 25 Fresnel prism uses

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DENTAL MECHANIC
Subject : Dental Materials and Metallurgy(N.S)
QP CODE - 2171

Time: 1 1/2 hrs

Max. Marks: 45

I. LONG ESSAY - ANSWER ANY ONE

1 X 10 = 10

- 1) What is addition polymerization. Describe in detail the physical stages of polymerization reaction.
- 2) What is an alloy? Mention the various alloys used in prosthodontics. Write in brief about base metal alloys.

II. WRITE SHORT NOTES ON ANY FIVE

5 X 5 = 25

- 3) Ductility and malleability
- 4) Write the difference between fluxes and antfluxes. Mention their examples
- 5) Steps in compression moulding techniques
- 6) Types of waxes
- 7) Dental stone
- 8) Materials used in fabrication of denture base
- 9) Write composition of impression compound

III. WRITE SHORT ANSWERS

5 X 2 = 10

- 10) Cold mould seal
- 11) Two uses of zinc oxide eugenol cement
- 12) 18-8 stainless steel
- 13) Electrolysis
- 14) Impression compound

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE

Section A – Anatomy (Write in Separate answer book)

QP CODE-2181

I. LONG ESSAY: ANSWER ANY ONE **1 X 9 = 9**

1. Describe the blood supply, nerve supply and lymphatic drainage of face.
2. Describe the course and distribution of trigeminal nerve.

II. WRITE SHORT NOTES ON ANY TWO **2 X 5 = 10**

3. Parotid gland.
4. Temporo -mandibular Joint
5. Mandible bone.

III. WRITE SHORT ANSWERS **3 X 2 = 6**

6. Name muscles of Tongue.
7. Retina.
8. Histology of Tooth.

Section B – Physiology (Write in Separate answer book)

QP CODE-2182

I. WRITE SHORT NOTES ON ANY FOUR **4 X 4 = 16**

1. Composition & functions of pancreatic juice
2. Deglutition & stages
3. Blood transfusion
4. Refractive errors & its correction
5. Functions of kidney
6. Functions of growth hormone

II. WRITE SHORT ANSWERS **2 X 2 = 4**

7. Normal values of (a) RBC's (b) WBC's
8. Leucopenia & Leucocytosis

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II DPT – GENERAL MEDICINE INCLUDING CARDIOLOGY & NEUROLOGY

QP CODE – 3193

Time: 3 hrs

Max. Marks: 90

I. Long Essay (Answer and FIVE)

5 X 12 = 60

1. Describe the etiology, clinical features, complications and management of Gastroenteritis.
2. Describe the etiology, clinical features and management of cirrhosis of liver.
3. Describe the etiology, clinical features and management of acute Poliomyelitis. Write a note on prevention of Poliomyelitis.
4. Discuss etiology, clinical features and management of Urinary tract infection.
5. Describe the etiology, clinical features, complications and management of motorneuron disease (MND).
6. Discuss etiology, clinical features, investigations and management of Typhoid fever.

II. Write short notes on any five

6X5=30

7. Urinary Tract Infection (UTI)
8. Chicken Pox
9. Tetanus
10. Amoebiasis
11. Neurosis
12. Emphysema

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Ophthalmic Technology/ III Year Certificate course in Ophthalmic Technology

PAPER – II

QP CODE - 3162

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY – ANSWER ANY TWO **2X10=20**

- 1) Discuss in detail functioning of an eye bank.
- 2) Discuss emergency management of chemical injuries.
- 3) Aims and objectives of vision 2020.

II. WRITE SHORT NOTES ON ANY TEN **10X5=50**

- 4) Low vision aids.
- 5) Basic epidemiology.
- 6) Management of blepharitis.
- 7) Eyeball preservation methods.
- 8) Prophylaxis of vitamin A deficiency.
- 9) Consent format.
- 10.) Snellens visual acuity chart.
- 11.) Define eyebank ? write a note on preservation of donor cornea.
- 12.) Disease index.

III. Write short answers **10X2=20**

- 13.) Near vision testing.
- 14.) Lens neutralization.
- 15.) Cylindrical lenses.
- 16.) Two causes of childhood blindness.
- 17.) School screening.
- 18.) Define astigmatism.
- 19.) Bitots spot.
- 20.) International Classification of Diseases (ICD) – 10.
- 21.) Name two cause for corneal blindness.
- 22.) Define legal blindness.
- 23.) Indication of enucleation.
- 24.) Maddox rod.
- 25.) Eye bandaging technique.

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Medical Laboratory Technology/ III Year Certificate course
in Medical Laboratory Technology

PATHOLOGY QP CODE - 3102

Time: 3 hrs

Max. Marks: 90

I. Long Essay (Answer any TWO)

2 X 10 = 20

1. Discuss the preparation and staining of Bone marrow smears
2. Name the blood groups. Describe Cross matching of blood
3. Describe the Microwave tissue processing

II. Short Essay (Answer any TEN)

10 X 5 = 50

4. Clot retraction time
5. Fibrinogen Degradation Product (FDP) assay
6. Periodic acid-Schiff (PAS) stain in Histopathology
7. Myeloperoxidase stain in Hematology
8. Fetal Hemoglobin estimation
9. Sputum examination
10. Quality assurance in blood bank
11. Barr body demonstration
12. Cerebro Spinal Fluid (CSF) examination
13. Hematoxylin and Eosin staining
14. Triple blood bag
15. Universal precautions in laboratory

III. Short Answers

10 X 2 = 20

16. Screening of blood donor
17. Blood components in blood bank
18. Reticulin stains
19. Sperm morphology — Normal and abnormal
20. Platelet storage in blood bank
21. Laboratory waste management
22. Cell block preparation
23. Blood cell counting chamber
24. Prothrombin time
25. Methods of bleeding time determination

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Health Inspector/ III Year Certificate course
in Health Inspector

PAPER – II

QP CODE - 3112

Time: 3 hrs

Max. Marks: 90

I Long Essay -- Answer any TWO

2 x 10 = 20

1. Define Infant Mortality Rate. Write its causes and preventive measure.
2. Describe the epidemiology of typhoid. Discuss the magnitude, prevention and control of it.
3. Classify diabetes and discuss the different strategies of control and prevention.

II Write short notes on any TEN

10 x 5 = 50

4. Sub centre
5. Reproductive and Child Health (RCH) programme.
6. Under 5 Clinics.
7. Breast feeding.
8. Two way method of Health Education.
9. Iron Folic Acid (IFA) Tablets..
10. Mental Retardation.
11. Menstrual regulation.
12. Birth weight of an Indian child.
13. Role of Female Health workers in Maternal Child Health (MCH) services.
14. Preventimii on neonatal tetanus.
15. Uses of Vital Statistics.

III Write short answers

10 x 2 = 20

16. Male pill.
17. Dis-infection of HIV virus
18. Health team concept.
19. Television.
20. Seminar
21. Any four elements of primary health care.
22. Target couple
23. Net Reproduction Rate (NRR)
24. Weight for height.
25. Cold Chain.

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Medical X- Ray Technology/ III Year Certificate
course in Medical X- Ray Technology

RADIOGRAPHY INCLUDING MEDICAL RECORDS, (N.S) R-II

QP CODE - 3122

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY ANSWER ANY TWO

2X10=20

- 1) Write in detail about Hysterosalpingogram (HSG) and add a note on contrast reaction.
- 2) Write a note on Image intensifying TV (IITV)
- 3) Write in detail about computed radiography (CR) and digital radiography (DR).

II. WRITE SHORT NOTES ON ANY TEN

10X5=50

- 4) Write a brief notes on Medico Legal Case (MLC) medical record keeping and maintenance.
- 5) PACS —Picture archiving, compression and storing —write brief notes.
- 6) Write about different chest —X-ray radiography positioning (5 position)
- 7) Sky line view
- 8) T2 weighted imaging
- 9) BMFT — Barium meal follow through
- 10) Indications and contra indications of binder
- 11) Schellers view
- 12) write in brief about film processing
- 13) Write in brief about mobile radiography
- 14) Swimmer view
- 15) Doppler

III. WRITE SHORT ANSWERS :

10X2=20

- 16) Name any four special views for PNS (para nasal Sinus)
- 17) Centering in lumbar spine —positioning
- 18) Half value layer
- 19) Write two uses of contrast medium
- 20) Cassette maintenance
- 21) Preparation of patient for Barium swallow
- 22) Uses of bulky
- 23) Carpal Bones
- 24) Mention factors affecting film contrast
- 25) Define Voltage and Ampere

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Medical Records Technology/ III Year Certificate
course in Medical Records Technology

HOSPITAL ADMINISTRATION

QP CODE - 3142

Time: 3 hrs

Max. Marks: 90

1. LONG ESSAY

2X10=20

- 1) Describe the Nursing services in relation to Medical record department of Hospital organization
- 2) Define Hospital. What are the duties and roles of an Hospital administration
- 3) Define planning, Classify plans. Describe advantages and limitations of Plans.

II. Write in brief on any TEN

10X5= 50

- 4) Changing role of Hospitals
- 5) General principles of Management
- 6) Decision making
- 7) Physical medicine department
- 8) Infection control committee
- 9) Clinical laboratory services
- 10) Functions of Hospital
- 11) Objectives of Quality management system
- 12) Outpatient services
- 13) Analysis of Hospital organization
- 14) Dietary department
- 15) Medical record committee

III. Short notes

10X2=20

- 16) Delegation
- 17) Ways of communication
- 18) Steps for monitoring
- 19) Casualty services
- 20) Natural disaster
- 21) Retraining
- 22) Medical ethics
- 23) Staffing
- 24) Tools for Data analysis
- 25) Name laws applicable to Hospitals

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Dental Mechanics/ III Year Certificate course in Dental Mechanics PARTIAL DENTURES, ORTHODONTIA, MAXILLOFACIAL PROSTHESIS (N.S)

QP CODE - 3172

Time: 1 1/2 hrs

Max. Marks: 45

I. LONG ESSAY: -

1X10 =10

1. Describe in detail with neat labelled diagrams, the Kennedy's classification and Applegate's rules.

II. WRITE SHORT NOTES

5X5=25

2. Enumerate the components of Removable Partial Dentures (RPD) with neat labelled diagram.

3. Enumerate the components of dental surveyor with neat labelled diagram.

4. Principles of wire bending.

5. Different die systems.

6. Materials used in maxillofacial prosthesis.

III. WRITE SHORT ANSWERS

5X2=10

7. Components of Fixed Partial Dentures (FPD).

8. Classification of poetics.

9. Labial bow.

10. Casting machines.

11. Arbitrary blockout.

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Dental Hygiene / III Year Certificate course in Dental Hygiene

DENTAL HEALTH EDUCATION, SOCIAL & PUBLIC HEALTH
& PREVENTIVE DENTISTRY (N.S)

QP CODE - 3182

Time: 1 1/2 hrs

Max. Marks: 45

I LONG ESSAY

1 X 10 = 10

1) Enumerate various deleterious Oral Habits. Write in detail about their effects on oral structures.

II SHORT NOTES

5 X 5 = 25

2) Modified Bass technique of tooth brushing.

3) School water fluoridation.

4) Community Dental camps.

5) Various oral hygiene habits.

6) Audio visual aids.

III WRITE SHORT ANSWERS

5 X 2 = 10

7) Parent counseling.

8) Name 2 methods of prevention of dental caries

9) Objectives of Dental Health Education.

10) Name 2 methods of prevention of periodontal diseases.

11) Mouth washes

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in OT Technology/ III Year Certificate course in
OT Technology

OPERATIVE PROCEDURE (N.S)

QP CODE - 3132

Time: 3 hrs

Max. Marks: 90

I.LONG ESSAY-ANSWER ANY TWO

2x10=20

- 1) Write in details about various incisions on abdomen. Write briefly about cholecystectomy.
- 2) Enumerate the grafting and reconstructive techniques in plastic surgery. Add a note on split thickness skin grafting
- 3) Write an essay on "Multidisciplinary team approach on head and neck surgery.

II.WRITE SHORT NOTES ON ANY TEN

10X5=50

- 4) Laparoscopic appendicectomy
- 5) Lower abdominal hysterectomy
- 6) Joint reconstruction and replacement
- 7) Cataract surgery
- 8) Tracheostomy
- 9) Hernia repair in pediatric patients
- 10) Surgeries of varicose veins
- 11) ICD (intercostal drainage)
- 12) TURP (Transurethral resection of prostate)
- 13) Complications of organ transplantation
- 14) Radiotherapy
- 15) EDH (extradural hematoma)

III.WRITE SHORT ANSWERS

10X2=20

- 16) Cast application for fractured bone
- 17) Safe abortion
- 18)Angioplasty
- 19) Cystoscopy
- 20) Prognostic factors in cancer
- 21) Intestinal resections
- 22) Complications of tonsillectomy
- 23) Early management of burns
- 24) Indications for circumcision
- 25) Flexible bronchoscopy

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

II Year Diploma in Dialysis Technology/ III Year Certificate course in Dialysis Technology

RENAL REPLACEMENT THERAPY OTHER THAN HAEMODIALYSIS
& PATIENT TEACHING (N.S)

QP CODE - 3152

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAYS ANSWER ANY TWO

2 x 10 = 20

1. PRINCIPLES, INDICATIONS AND COMPLICATIONS OF PLASMAPHERESIS
2. ANATOMY AND PHYSIOLOGY OF PERITONEUM
3. DISCUSS IN DETAIL ABOUT CONTINUOUS RENAL REPLACEMENT THERAPY (CRRT)

II. WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

4. PET TEST PERITONEAL EQUILIBRATION TEST
5. HEMO-ADSORPTION
6. EXIT SITE INFECTION
7. HEMODIAFILTRATION
8. PSYCHIATRIC COMPLICATIONS OF CHRONIC DIALYSIS
9. PERITONEAL DIALYSIS COMPLICATIONS
10. DIALYSIS IN POISONING PATIENTS
11. IMMUNISATION OF HD PATIENTS
12. RECORDS AND LOG BOOK MAINTAINENCE IN HD UNIT
13. TYPES OF PD CATHETERS
14. NEWER PERITONEAL DIALYSIS SOLUTIONS
15. REPLACEMENT FLUID IN PLASMAPHERESIS

III. WRITE SHORT ANSWERS

10 x 2 = 20

16. SYMPTOMS OF PERITONITIS
17. MENTION TWO ANTIBIOTICS IN PERITONITIS
18. TWO ANTIHYPERTENSIVE DRUGS
19. SLOW CONTINUOUS ULTRAFILTRATION
20. DEFINE CONTINUOUS VENOVENOUS HEMODIALYSIS (CVVHD) AND CONTINUOUS VENOUS TO ATRIAL HEMODIALYSIS (CVAHD)
21. NAME TWO ENDOGENOUS POISONS
22. COMMON ORGANISM IN PERITONITIS
23. NAME TWO ANTIFUNGAL
24. NAME TWO IMMUNOSUPPRESSANTS
25. CAUSES OF HYPOTENSION IN HEMODIALYSIS

PARAMEDICAL BOARD, BANGALORE

SUPPLEMENTARY EXAMINATION MARCH - 2016

Common paper for all I year Certificate Courses

CHEMISTRY QP CODE 1102

Time: 1 ½ hrs

Max. Marks: 45

I. LONG ESSAY ANSWER ANY ONE

10X1=10

- 1). Explain the preparation, properties & uses of Hydrogen peroxide.
- 2). Define half-life period. Write a note on the properties of alpha, beta & gamma rays.

II WRITE SHORT NOTES ON ANY FIVE

5X5=25

- 3). Oxidizing & Reducing agents.
- 4). Properties & uses of Fluorine.
- 5). Function of RNA.
- 6). Uses of Phenol.
- 7). Carbohydrates as a source of energy.
- 8). Buffer solution.
- 9). Properties and uses of ethyl alcohol.

III. WRITE SHORT ANSWERS

5X2=10

- 10). Equivalent and Molecular weight.
- 11). Name two indicators with examples.
- 12). Tyndall effect.
- 13). Uses of Nitric acid.
- 14). Uses of phosphorous-32 radioisotopes.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016
III DPT – YOGA & MENTAL HEALTH
QP CODE - 3202

Time: 2 hrs

Max. Marks: 65

I.

Essay - Answer Answer any FOUR

4X10 = 40

1. Describe the psycho-Physiological concept of Yoga.
2. Effects and uses of Yogasanas.
3. Concept of abhyasa and vairagya.
4. Asanas used for hypertension.
5. Bandhas- importance & types.

II. Write short notes on any FIVE

5X5=25

6. Dhanurasana.
7. Types of Pranayama.
8. Jala neti.
9. Yogic diet.
10. Kriyas.
11. Padmasana.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

I Year Diploma in Medical Laboratory Technology/ II Year Certificate course
in Medical Laboratory Technology
BIOCHEMISTRY

QP CODE - 2103

Time: 3 hrs

Max. Marks: 90

I. Long Essay – answer any TWO

2x10 = 20

1. What are Proteins ? Classify them with suitable examples. Add a note on biomedical importance of protein.
2. Explain the Principle, components and application of Colorimeter with a neat labeled diagram.
3. What are enzymes? Classify them with example for each class.

II. Write short notes on any TEN

10x5=50

4. Phospholipids
5. Homopolysaccharides.
6. Heat coagulation test and its Use.
7. pH meter - principle and applications.
8. Structure of an atom
9. Laboratory hazards and precautions while handling chemicals.
10. Analytical balance
11. Molar Solution and Buffer solution
12. Atomic weight and Equivalent weight
13. Non-reducing sugars
14. Aromatic and Aliphatic compounds with examples.
15. Blood gas analyser

III. Write short answers.

10x2=20

16. Give one example for a) weak acid b) strong acid c) base d) salt
17. Automated pipette
18. Serum Electrolytes
19. Sterilizer.
20. Iodine Test
21. Applications of water bath.
22. Name two indicators , give their color
23. Vacutainers
24. Functions of copper
25. Difference between Glucose and Fructose

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

I Year Diploma in Health Inspector/ II Year Certificate course in Health Inspector
PAPER - I
QP CODE – 2111

Time: 3 hrs

Max. Marks: 90

I Long Essay – Answer any TWO

2 x 10 = 20

1. Draw a neat labeled diagram of Human respiratory system . Name two functions of Nose and Lungs.
2. What are the levels of prevention ? Give two examples for each..
3. Define Family. What are the types of Family ? What are the functions of Family

II Write short notes on any TEN

10 x 5 = 50

4. With a labeled diagram explain the Ice berg phenomenon of disease.
5. Name salivary glands in our body. What is the function of saliva.
6. Life style diseases.
7. What are the risk factors for developing diabetes. Add a note on how to prevent the risk factors.
8. Medico-social worker.
9. Name any two social problems. Add a note on prevention of social problems.
10. Role of Customs in food habits of people.
11. Name five sense organs. What are their functions. .
12. Holistic concept of health.
13. Urban society.
14. Write briefly on Acculturation.
15. Name any three hormones produced by our body. What are its functions?

III Write short answers

10 x 2 = 20

16. Define health
17. Name four risk factors for cancers.
18. Name the different blood groups.
19. Name two functions of white blood cells.
20. Name two diseases spread by contaminated air and water.
21. Name two advantages of Joint families.
22. What is a broken family
23. Infant mortality rate.
24. What is prevalence of disease.
25. Name four risk factors for hypertension.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

**I Year Diploma in Medical X- Ray Technology/ II Year Certificate course in
Medical X- Ray Technology**

ANATOMY
QP CODE – 2122

Time: 1 ½ hrs

Max. Marks: 45

I. LONG EASSAY: ANSWER ANY TWO

2 X 10 = 20

1. Mention the surface and borders of heart. Write in detail about Right atrium.
2. Mention the parts of brain. Write in detail about Cerebellum
3. Mention the parts of Gastrointestinal tract. Write in detail about Liver.

II. WRITE SHORT NOTES ON ANY THREE

5 X 3 = 15

4. Thyroid Gland.
5. Tongue
6. Histology of Lymphnode
7. Urinary Bladder.

III. WRITE SHORT ANSWERS

5 X 2 = 10

8. Name the Paranasal air sinuses.
9. Name four muscles of eyeball
10. Name four muscles of Upper Limb
11. Name three nerves of lower limp
12. Name three types of cartliages.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

I Year Diploma in OT Technology/ II Year Certificate course in OT Technology
BIOCHEMISTRY, PHARMACOLOGY AND MICROBIOLOGY

Time: 3 hrs

Max. Marks: 90

SECTION -A, BIOCHEMISTRY (Write in separate answer book)

QP CODE - 2132

- I. LONG ESSAY - ANSWER ANY ONE** **1x10=10**
1. Name the abnormal constituents of Urine. Write in detail about the qualitative analysis of abnormal urine , giving its clinical significance.
2. Renal Function Tests. Add a Note on Jaffes test.
- II. WRITE SHORT NOTES ON ANY TWO** **2X5=10**
3. Urea Cycle
4. Metabolic acidosis
5. Factors regulating blood glucose level.
- III. WRITE SHORT ANSWERS** **5X2=10**
6. Benedict Test
7. What are salts. Give examples
8. Name ketone bodies
9. Ionization theory
10. Normal Physical Characters of Urine

SECTION - B, PHARMACOLOGY (Write in separate answer book)

QP CODE - 2133

- I. ANSWER ANY ONE:** **1X10=10**
1) Classify Local anaesthetics. . Write the mechanism of action, dosage forms and techniques of administration of Lignocaine.
2) Classify Sedative Hypnotic drugs. Write the mechanism of action, therapeutic uses and adverse effects of Diazepam.
- II. WRITE SHORT NOTES ON ANY TWO:** **2X5=10**
3) Advantages and Disadvantages of Intravenous route.
4) Halothane.
5) d- Tubocurarine.
- III. WRITE SHORT ANSWERS:** **5X2=10**
6) Define Pharmacodynamics.
7) Name two uses of atrophine
8) Name two Antiseptics.
9) Name two Antiemetic drugs.
10) Write the mechanism of action of Penicillins.

SECTION - C, MICROBIOLOGY (Write in separate answer book)

QP CODE - 2134

- I Answer any one** **1x10=10**
1) Define Sterilisation. Describe in detail about moist heat sterilisation.
2) Classify Immunity . Write in detail about Innate immunity.
- II Write short notes on any Two.** **2x5=10**
3) Laboratory diagnosis of Hepatitis B infection
4) Bacterial Spore
5) Robert Koch.
- III Write short answers** **5x2=10**
6) Name two bacteria causing Nosocomial infections.
7) Steps of Hand washing
8) Name two radiation methods used in sterilization.
9) Name two vaccines.
10) Name two modes of transmission of HIV infection.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

**I Year Diploma in Medical Records Technology/ II Year Certificate course in
Medical Records Technology**

ANATOMY, PHYSIOLOGY, PATHOLOGY & MICROBIOLOGY (N.S)

Time: 3 hrs

Max. Marks: 90

Section- A, ANATOMY(Write in separate answer book)

QP CODE - 2142

I. LONG ESSAY- ANSWER ANY ONE

1X10 = 10

- 1) Classify joints. Write in detail about Synovial joint with example.
- 2) Mention the parts of Male reproductive system . Write in detail about testis.

II. WRITE SHORT NOTES ON ANY TWO

2 X 5 = 10

- 3) Liver
- 4) Urinary Bladder
- 5) Histology of skeletal muscle

III. WRITE SHORT ANSWERS

5 X 2 = 10

- 6) Golgi apparatus
- 7) Parts of stomach
- 8) Name the four cartilages of larynx
- 9) Name four muscles of eyeball
- 10) Name three salivary glands

SECTION – B, PHYSIOLOGY (Write in separate answer book)

QP CODE - 2143

I. Write Shory Notes on Any Ten

4X5 = 20

1. Blood and clotting factors
2. Renal function tests
3. Cardiac functional anatomy
4. Transport of Oxygen (O₂) and Carbon Dioxide (CO₂) in blood
5. Hormone of Pituitary gland
6. Structure and functions of eye

II. Write Short Answer

2X5=10

7. Mention family planning methods
8. Cardiac output
9. Hypoxia
10. ESR
11. Bile

SECTION C- PATHOLOGY & MICROBIOLOGY (Write in separate answer book)

QP CODE - 2144

I. Long Essay (answer any one)

1x 10 = 10

1. Methods of blood collection in haematology laboratory. Write a note on various anticoagulants used.
2. What are the methods,of collection of urine. Discuss about urine protein examination.

II. Short Essay on any two

2x 5 = 10

3. Autoclave
4. Acid Fast Bacilli (AFB) stain.
5. Maintenance of medical records in Pathology.

III. Short Answers

5x 2 = 10

6. Name two Haemoparasites
7. Two stains used in cytology lab
8. Name four gram positive organisms
9. Name two organisms` causing Urinary tract infections.
10. Types of necrosis

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

I Year Diploma in Dialysis Technology/ II Year Certificate course in
Dialysis Technology
BIOCHEMISTRY & MICROBIOLOGY

Time: 3 hrs

Max. Marks: 90

SECTION- A, BIOCHEMISTRY (Write in separate answer book)

QP CODE - 2153

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

1. What is photoelectric colorimeter? Give the principle, maintenance and applications of colorimeter.
2. Name the body buffer systems. Mention in detail about the factors maintaining the normal pH of blood.

II WRITE SHORT NOTES ON ANY FIVE **5x5=25**

3. Urea cycle
4. Chromatography — principle and applications
5. Abnormal constituents of urine.
6. Alkalosis
7. Factors regulating blood glucose level
8. Renal function tests.

III. WRITE SHORT ANSWERS **5x2=10**

9. Creatinine clearance test.
10. Tests for detection of protein in urine.
11. Give the normal range of FBS and PPBS
12. Jaffes test
13. Uses of conductivity metre.

SECTION – B, MICROBIOLOGY (Write in separate answer book)

QP CODE - 2154

I ANSWER ANY ONE **1 x 10 = 10**

- 1) Define Sterilisation, Classify sterilization, write in detail about autoclave.
- 2) Define and Classify immunity. Write in detail about acquired immunity.

II WRITE SHORT NOTES ON ANY FIVE **5 x5=25**

- 3) Koch Postulates
- 4) Bacterial flagella
- 5) Pathogenesis of Bacillus anthracis.
- 6) Candida albicans.
- 7) Modes of transmission of Hepatitis B virus infection
- 8) Hospital acquired infections.

III) WRITE SHORT ANSWERS **5 x2 = 10**

- 9) How do you disinfect thermometer.
- 10) Name two bacteria causing diarrhoeal diseases.
- 11) Name two RNA viruses.
- 12) Expand DPT.
- 13) Name the colour code for waste disposal.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

**I Year Diploma in Ophthalmic Technology/ II Year Certificate course in
Ophthalmic Technology**

PAPER – II

QP CODE - 2162

Time: 3 hrs

Max. Marks: 90

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

I. LONG ESSAY (Answer any two)

2 X 10 = 20

1. Pre-operative investigations ,How do you take consent before cataract surgery
2. Anatomy of lacrimal apparatus and briefly write about common lacrimal operations done
3. What are the components of binocular single vision,how do asses for the same

II. SHORT ESSAY

10 X 5 = 50

4. Ocular manifestation of diabetes mellitus
5. Maddox rod
6. Interpretation of lacrimal syringing
7. How to perform schiot's tonometry
8. How to prevent amblyopia in children
9. Uses of synaptophore
10. How to instill drops and Ointments into eye
11. Eye manifestations of Vitamin-A deficiency
12. Fungal corneal ulcer
13. Cover tests
14. How to classify squint
15. Types of anaesthetics used in cataract surgery

III. Write Short Answers

10X2=20

- 16 Natamycin eye drops
- 17 Mention some antiviral drugs used
- 18 Local anaesthetics used in ophthalmology
- 19 Mention some anti-inflammatory analgesics
- 20 Uses of mannitol in opthalmology
- 21 Rich Sources of Vitamin-A
- 22 Types of senile cataract
- 23 Dry eyes
- 24 Types of amblyopia
- 25 What is back vertex distance? Where is it important ocular changes in hypertensive retinopathy

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

**I Year Diploma in Dental Mechanics / II Year Certificate course in
Dental Mechanics**

APPLIED ORAL ANATOMY
PAPER – II (N.S)
QP CODE - 2172

Time: 1 ½ hrs

Max. Marks: 45

I Long essay – Answer any one

1X10=10

1. Name the facial bones explain mandible
2. Name the anatomy maxillary permanent first molar

II. Short essay Answer any five

5X5=25

3. Facial nerve
4. Thyroid gland
5. Histology of teeth
6. Tooth carving
7. Explain human dentition in detail
8. Buccal shelf area

III Short Answer any five

5X2=10

9. Muscles of Phonation
10. Movements of temporomandibular joint
11. Parotid duct
12. Name the muscles of Mastication
13. Name the Layers of eye
14. Name the Sutures of the Skull

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

I Year Diploma in Dental Hygiene / II Year Certificate course in
Dental Hygiene (Preliminary)
GENERAL PATHOLOGY, MICROBIOLOGY & PHARMACOLOGY (N.S)

Time: 1 1/2 hrs

Max. Marks: 45

Section- A, GENERAL PATHOLOGY & MICROBIOLOGY
(write in separate answer book)

QP CODE- 2183

I. Long Essay (Answer any ONE) 1 X 9 = 9

1. What is Necrosis? Write about different types of necrosis with examples.
2. Discuss the types, steps and complications of wound healing.

II. Write short note on any FOUR 4 X 5 = 20

3. Vitamin D deficiency
4. Aphthous ulcer
5. Epulis
6. Oral Thrush
7. Sterilization by autoclaving
8. Spread of Tumors

III. Write short answers 3 X 2 = 6

9. Oral lesions in Scurvy
10. Pyoderma
11. Cardinal signs of inflammation

Section- B, GENERAL PHARMACOLOGY
(write in separate answer book)

QP CODE- 2184

I. WRITE SHORT ANSWERS 5x2=10

- 1) Name two Local anaesthetics.
- 2) Define a Paste.
- 3) Name two water soluble Vitamins.
- 4) Write two Therapeutic uses of Penicillins.
- 5) Name two Antiseptics.

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016**

**II D.P.T- GENERAL SURGERY AND ORTHOPAEDICS
QP CODE – 3194**

Time: 3 hrs

Max. Marks: 90

I. Long Essay - Answer any TWO

2 X 15 = 30

1. What are the Clinical features of Duodenal Ulcer and discuss the management of Chronic Duodenal Ulcer.
2. Classify Hernia and write in detail the management of Inguinal hernia.
3. Classify wounds and write in detail management of Intra abdominal injuries.

II. Write short notes on any THREE

3X15=15

4. Haemorrhage
5. Tendon transfer
6. Hydrocephalus
7. Carcinoma Rectum

III. Answer any TWO

2 X 15 = 30

8. Discuss the Clinical features of Inflammatory disease of joints and how do you manage the same.
9. Discuss the management of fracture of Clavicle.
10. Write a note on Congenital disorders of Musculo-Skeletal system.

IV. Write short notes on any THREE

3X15=15

11. Cervical Rib
12. March Fracture
13. Scaphoid Fracture
14. Pathological Fractures

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

II Year Diploma in Medical Laboratory Technology / III Year Certificate course
in Medical Laboratory Technology

MICROBIOLOGY
QP CODE – 3103

Time: 3 hrs

Max. Marks: 90

I LONG ESSAY -ANSWER ANY TWO

2 x 10 = 20

- 1) Define and classify Immunity. Enumerate the differences between Active and Passive Immunity.
- 2) Enumerate Antigen and antibody reactions. Define Agglutination. Describe the principle and applications of agglutination reactions.
- 3) Describe the morphology, pathogenesis of *Corynebacterium diphtheriae* and laboratory diagnosis of Diphtheria. Add a note on its prophylaxis.

II WRITE SHORT ANSWERS ON ANY TEN

10 x 5 = 50

- 4) Urease test.
- 5) Classify Streptococci.
- 6) Coagulase test.
- 7) V.D.R.L.
- 8) Widal test
- 9) Malignant pustule.
- 10) Enumerate the methods of antibiotic sensitivity testing. Write about any one.
- 11) *Cryptococcus neoformans*
- 12) Hepatitis
- 13 Morphology of Virus.
- 13) Mantoux test.
- 14) Life cycle of Malarial parasite.
- 15) Life cycle and laboratory diagnosis of Round worm.
- 16) Hospital Waste management.

III) WRITE SHORT NOTES

10 x 2=20

- 17) Atopy
- 18) Name two bacteria that are Oxidase positive.
- 19) DPT vaccine.
- 20) Name two bacteria causing meningitis.
- 21) Name two bacteria causing sexually transmitted diseases (STD)
- 22) C-reactive protein.
- 23) Name two RNA virus.
- 24) Name two fungal Opportunistic infections.
- 25) Importance of wet mount and iodine mount preparation for stool
- 26) Name the tape worms infecting man

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

II Year Diploma in Health Inspector/III Year Certificate course in
Health Inspector
PAPER – III
QP CODE - 3113

Time: 3 hrs

Max. Marks: 90

I Long Essay – Answer any TWO

2 x 10 = 20

1. Enumerate various levels of Health care system in India. Describe community health center (CHC) in detail.
2. Define Social security. How social security measures can be provided to various categories of population in India.
3. What is ESI act? Describe briefly about various benefits under this act.

II Write short notes on any TEN

10 x 5 = 50

4. ASHA
5. DANDIA
6. Social Justice
7. First aid services in case of traffic accident.
8. Tenth five year plan.
9. World Health Organization (WHO) day
10. International Labour Organization (ILO)
11. Benefits under Indian factories act.
12. Steps in planning cycle.
13. Pulse polio.
14. Rural development.
15. Major public health problems in India.

III Write short answers

10 x 2 = 20

16. Dowry prohibition.
17. Low birth weight.
18. Vaccine Vial Monitor (VVM)
19. Anganawadi worker
20. Helmet
21. Paris green
22. Breast feeding advantages.
23. Food fortification.
24. Aedes mosquito.
25. First aid in burns.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

II Year Diploma in Medical X- Ray Technology/ III Year Certificate course
in Medical X- Ray Technology
RADIOGRAPHY INCLUDING NEWER IMAGING TECHNOLOGY, (N.S) R-II
QP CODE – 3123

Time: 3 hrs Max.

Marks: 90

I. LONG ESSAY – ANSWER ANY TWO

2 x 10 = 20

1. Describe briefly about fluoroscopy. Add a note on Radiation protection measures that has to be taken during fluoroscopy.
2. Describe briefly principles of image formation in Magnetic Resonance Imaging (MRI). Explain in detail about T1 & T2 weighted images.
3. Explain the different components of Ultrasound machine & its functions. Add a note on ultrasound waves.

II. WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

4. KUB X-ray
5. Foreign body localisation
6. Xeroradiography
7. Urograffin
8. Hounsfield units
9. Uses of Ultrasound
10. Stationary anode
11. Maintenance & cleanliness of intensifying screens
12. Xenon gas ionization chambers
13. Soft tissue radiography
14. Macroradiography
15. Gamma camera

III. WRITE SHORT ANSWERS

10 x 2 = 20

16. Geiger-Muller (G.M). counter
17. High speed X-ray film
18. Cholecystography
19. Expand PET
20. Autoprocessor
21. First aid in contrast reaction
22. Filters
23. Pressure injector
24. Periodic table
25. Orthopantomography (OPG)

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016**

**II Year Diploma in Medical Records Technology/ III Year Certificate course
in Medical Records Technology**

COMPUTER SCIENCE

QP CODE – 3143

Time: 1 ½ hrs

Max. Marks: 40

I. LONG ESSAY ANSWER ANY ONE

1 X 10 = 10

- 1) Discuss the role, advantages and limitations of computer in the department of medical records.
- 2) What is Computer virus, what are its indications and how it is prevented.

II. WRITE SHORT NOTES ON ANY FOUR

4 X 5 = 20

- 3) Input and Output device
- 4) Flow chart
- 5) Data Processing
- 6) Applications of computers
- 7) Types of Printers

III. WRITE SHORT ANSWERS

5 X 2 = 10

- 8) E-mail
- 9) CD
- 10) Monitor
- 11) CPU
- 12) Networking

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016**

**II Year Diploma in Dental Hygiene / III Year Certificate course
in Dental Hygiene
Operating room Technique, Chair side Assts. & Dental Materials,
Ethics & Jurisprudence (N.S)**

PAPER – III

QP CODE – 3183

Time: 1 1/2 hrs

Max. Marks: 45

I LONG ESSAY

1 X 10 = 10

1) Write in detail about the Sterilization methods. Write about the chair side assistance.

II SHORT NOTES

5 X 5 = 25

- 2) Appointments and Recall system in dental office management.
- 3) Dentists Act 1948.
- 4) Dental specialities.
- 5) Care of dental instruments.
- 6) Social factors in dental progress.

III WRITE SHORT ANSWERS

5 X 2 = 10

- 7) Dental auxiliary.
- 8) Name 2 uses of computers in dental office.
- 9) Name 2 uses of maintenance of records in dental office.
- 10) Name various instruments grasps.
- 11) Importance of patient recall

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016**

**Common paper for all I year Certificate Courses
BIOLOGY
QP CODE 1103**

Time: 1 ½ hrs

Max. Marks: 45

I. LONG ESSAY — ANSWER ANY ONE

1x10 = 10

- 1) Explain the structure and function of Digestive system of man with a neat labeled diagram.
- 2) Draw the ultra structure of Nephron and explain the steps in urine formation.

II. Write short notes on any five

5x5 = 25

- 3) Structure of Graffian Follicle
- 4) Nervous tissue
- 5) Human Blood groups
- 6) Structure of typical chromosome
- 7) Explain Watson and Crick model of DNA
- 8) Structure of virus
- 9) Thyroid gland

III. WRITE SHORT ANSWERS

5x2 =10

- 10) Applications of Biotechnology
- 11) Mitochondria
- 12) Hormones
- 13) Diseases caused by Bacteria
- 14) List the different stages in the mitotic cell division

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

III D.P.T – DISABILITY EVALUATION & COMMUNITY PHYSIOTHERAPY
QP CODE – 3203

Time: 2 hrs

Max. Marks: 65

I. Long Essay - Answer any FOUR

4 X 10 = 40

1. What is occupational therapy? Explain parental education on child handling in cerebral palsy.
2. Explain the role of physiotherapy in managing foot drop.
3. Discuss the prevention and management of congenital contractures and deformities.
4. Write the principles of upper limb prosthesis training.
5. Disability evaluation — Role of physiotherapy.

II. Write short notes on any FIVE

5 X 5 = 25

6. Explain group therapy in the community.
7. Hearing aid.
8. Genu valgum.
9. Pelvic floor muscle weakness.
10. Amputation.
11. Vocational rehabilitation for stroke patient with speech disorder.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

I Year Diploma in Medical Laboratory Technology/ II Year Certificate course in
Medical Laboratory Technology
PATHOLOGY
QP CODE – 2104

Time: 3 hrs

Max. Marks : 90

I) LONG ESSAY – (ANSWER ANY TWO)

2 X 10 = 20

1. Preparation and staining of peripheral smear. Mention features of an ideal smear.
2. Define Fixative. Write about different types of fixatives used in Histopathology with their merits and demerits.
3. Describe methods of Urine Collection. Write in detail about physical examination of urine.

II) SHORT ESSAY (ANSWER ANY TEN)

10X05= 50

4. Quality control methods used in haematology.
5. Tests for protein in urine.
6. Erythrocyte Sedimentation Rate (ESR)
7. Tissue embedding methods
8. Maintenance of glassware in haematology.
9. Errors in section cutting.
10. Fixatives used in cytology.
11. Anticoagulants used in haematology.
12. Casts in urine
13. Methods of collection of material for cytology and making of smear.
14. Define decalcification and write about identification of optimum decalcification.
15. Methods of Haemoglobin (Hb) estimation with merits and demerits

III) SHORT ANSWERS

10X02= 20

16. Name four Poikilocytes .
17. Name four haemoparasites.
18. Name two clearing agents.
19. MCHC.
20. Uses of Neubauer counting chamber.
21. Significance Of Buffycoat.
22. Wintrobe's tube.
23. Papanicolaou stain"
24. Composition of Leishman Stain.
25. Benzidine test

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

**I Year Diploma in Health Inspector/ II Year Certificate course in Health
Inspector**

PAPER - II

QP CODE – 2112

Time: 3 hrs

Max. Marks: 90

I Long Essay Answer any TWO

2 X 10 = 20

1. What are the functions of Vitamin A? Name four foods rich in Vitamin A. How will you prevent vitamin A deficiency disorders in the community? (4+2+4)
2. What is food fortification? Give four examples of fortified foods. Name two advantages and disadvantages of food fortification. (2+4+4)
3. What are the characteristics of a pucca house? What are the effects of poor housing on health? (2+3+5)

II Short Essay Answer any TEN

10 X 5 = 50

3. Name four water borne diseases. How will you prevent water borne diseases?
4. Name four causes for water pollution. How will you prevent water pollution?
5. What are the effects of Iodine deficiency on our body? How will you prevent iodine deficiency disorders?
6. What is global warming? What are the effects of global warming on health?
7. With examples explain sanitation barrier.
8. Household methods of purification of water,
9. Give examples for food adulteration. What are the effects of food adulteration?
10. Name four causes of anemia and add a note on its prevention.
11. Food Safety and Standards Authority of India (FSSAI)
12. What diseases spread by contaminated milk? How will you prevent them?
13. What are the causes for protein energy malnutrition (PEM) in children?
14. Explain the various methods of disposal of solid wastes in a village?
15. Nutritional programs in schools.

III Short Answers

10 X 2 = 20

16. Sanitary latrines.
17. Name two foods rich in Vitamin C
18. Name two methods for prevention of hook worm infestation
19. Name two uses of bleaching powder
20. Auditory effects of noise on health
21. Name two foods rich in Vitamin D
22. Advantages of fruits
23. Name two used of dietary fibres
24. Name two advantages of egg as food.
25. Name two disadvantages of saturated fats

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

**I Year Diploma in Medical X- Ray Technology/ II Year Certificate course in
Medical X- Ray Technology**

PHYSIOLOGY
QP CODE - 2123

Time: 1 ½ hrs

Max. Marks: 45

I. LONG ESSAY- ANSWER ANY ONE

1 x 10 = 10

- 1) Structure and function of Nephron and its functions
- 2) Functional anatomy of circulatory system

II. WRITE SHORT NOTES ON ANY FIVE

4 X 5 = 25

- 3) Blood cells
- 4) Plasma proteins
- 5) Liver function test
- 6) Constituents of urine
- 7) Thyroid Hormones
- 8) Structure and functions of tongue
- 9) Refractory errors

III. WRITE SHORT ANSWER

5X 2 = 10

- 10) Pregnancy test
- 11) Structure of skin
- 12) Bile
- 13) Muscle fibre
- 14) Hypoxia

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

**I Year Diploma in Medical Records Technology/ II Year Certificate course in
Medical Records Technology**

HOSPITAL STATISTICS & BIostatISTICS

QP CODE – 2145

Time: 3 Hrs

Max. Marks: 90

I. LONG ESSAY ANY THREE

3X10=30

- 1) Explain Mean(AM), Median and Mode with its merits and demerits
- 2) Define Biostatistics? Write down its uses in medical science
- 3) Define sampling and write briefly on various sampling methods?
- 4) Explain different measures of Mortality?

II. WRITE IN BRIEF ON ANY TEN.

10X5 =50

- 5) Data and its types
- 6) Standard deviation
- 7) Pie Chart
- 8) Classification of data
- 9) Mean deviation
- 10) Population
- 11) Properties of Normal distribution
- 12) Crude birth rate and age specific fertility rate
- 13) Uses of health information system
- 14) Advantages of graphical presentation of data
- 15) Incidence and prevalence

III. WRITE IN BRIEF ON ANY FIVE

5X2=10

- 16) Range
- 17) Bar chart
- 18) Average Length of stay
- 19) Bed occupancy rate
- 20) Probability
- 21) Record linkage

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016**

**I Year Diploma in Dental Hygiene / II Year Certificate course in Dental
Hygiene**

GENERAL BIOCHEMISTRY & RADIOLOGY

Note: Write section A & Section B in separate answer books

Time: 1 1/2 hrs

Max. Marks: 45

Section- A, GENERAL BIOCHEMISTRY (write in separate answer book)

QP CODE – 2185

I. Long Essay-Answer any ONE

1x10=10

- 1) Describe the effects of Malnutrition on Oral health.
- 2) Describe general food required for growth, maintenance and repair of the body

II. Write short notes on any THREE

3x5=15

- 3) Rothera's test
- 4) Urine preservatives.
- 5) Proteinuria
- 6) Carbohydrates and fats in dental health

Section-B, RADIOLOGY (write in separate answer book)

QP CODE - 2186

I. WRITE SHORT NOTES

4x5=20

1. Orthopantomography (OPG)
2. Paralleling angle technique
3. Cone Beam Computed Tomography (CBCT)
4. Structure of an Atom

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

I Year Diploma in O.T Technology/ II Year Certificate course in O.T Technology
ANATOMY AND PHYSIOLOGY

Note: Write Section A & B in separate answer books

Time: 3 hrs

Max. Marks: 90

SECTION –A, ANATOMY (Write in separate answer book)

QP CODE – 2135

I. LONG ESSAY- ANSWER ANY ONE

1X10 = 10

- 1) Name the parts of excretory system. Write in detail about kidney.
- 2) Classify joints. Write in detail about features of synovial joint with example

II. WRITE SHORT NOTES ON ANY FIVE

5X5=25

- 3) Right atrium
- 4) Histology of skin
- 5) Femur
- 6) Testis
- 7) Pancreas
- 8) Appendix

III. WRITE SHORT ANSWERS

5X2 = 10

- 9) Name four endocrine glands
- 10) Name four cartilages of larynx
- 11) Name four extensors of forearm
- 12) Name the parts of uterine tube
- 13) Name the meninges covering brain

SECTION- B, PHYSIOLOGY (Write in separate answer book)

QP CODE – 2136

I. LONG ESSAY - ANSWER ANY ONE

1 x 10 =10

- 1) Explain Intrinsic & Extrinsic mechanism of blood clotting
- 2) Explain oxygen transport in the blood. Add a note on oxygen dissociation curve.

II. WRITE SHORT NOTES ON ANY FIVE

5 x 5=25

- 3) Conducting system of heart.
- 4) Functions of Thyroid Hormones.
- 5) Describe the factors affecting Erythropoiesis.
- 6) What is Glomerular Filtration Rate (G.F.R)? what is its normal value? How is it measured?.
- 7) Transport of Carbon dioxide in blood.
- 8) Gastric Juice

III. WRITE SHORT ANSWERS

5 x 2=10

- 9) Write the normal values of a) Tidal volume b) Vital capacity.
- 10) Name two ascending tracts in CNS.
- 11) Give two characteristic features of Acromegaly
- 12) Name any two functions of ear.
- 13) Name any two hormones secreted by pancreas

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016

**I Year Diploma in Dialysis Technology/ II Year Certificate course in Dialysis
Technology**

ANATOMY AND PHYSIOLOGY

Note: Write Section A & B in separate answer books

Time: 3 hrs

Max. Marks: 90

SECTION –A, ANATOMY (Write in separate answer book)

QP CODE – 2155

I. LONG ESSAY- ANSWER ANY ONE

1X10 . = 10

- 1) Name the parts of Gastrointestinal system. Write in detail about Pancreas.
- 2) Mention the parts of Central nervous system . Write in detail about Spinal Cord with diagram.

II. WRITE SHORT NOTES ON ANY FIVE

5 X 5 = 25

- | | |
|--------------------------------|------------------|
| 3) Appendix | 6) Ovary |
| 4) Histology of Fibrocartilage | 7) Right atrium |
| 5) Suprarenal gland | 8) Sciatic nerve |

III. WRITE SHORT ANSWERS

5 X 2 = 10

- 9) Name four muscles of upper limb
- 10) Name four cranial nerves
- 11) Name the muscles of mastication
- 12) Name four branches of external carotid artery
- 13) Name four endocrine glands

SECTION- B, PHYSIOLOGY (Write in separate answer book)

QP CODE – 2156

I.LONG ESSAY- ANSWER ANY ONE

1 x 10 = 10

- 1) Structure of respiratory system and pulmonary functions
- 2) Functional anatomy nervous system

II.WRITE SHORT NOTES ON ANY FIVE

4 X 5 = 25

- 3) Cardiac cycle
- 4) Blood proteins
- 5) Formation of urine
- 6) Constituents of bile
- 7) Temperature regulation
- 8) Rh incompatibility of pregnancy
- 9) Thyroid function

III.WRITE SHORT ANSWER

5X 2 = 10

- 10) Cardiac output
- 11) Hypoxia
- 12) Erythrocyte sedimentation rate(ESR)
- 13) Anaemias
- 14) Creatinine metabolism

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016**

II D.P.T – THERAPEUTIC EXERCISE

QP CODE – 3196

Time: 3 hrs

Max. Marks: 90

I. Long Essay (Answer Any TWO)

2 x 15= 30 Marks

1. Definition of Exercise therapy. Techniques of Exercise therapy and its aims.
2. Discuss in detail the assessment of the patient and the instruction to a patient before taking up for exercise therapy.
3. Definition of Posture. Types and technique of Re-education.

II. Short Essay on any THREE

3x 10 = 30 Marks

4. Explain in detail about the movement and stability at floor level.
5. Discuss about PNF techniques
6. Pain Gait theory.
7. Types of Muscle work

Write Short Notes on :

6x5= 30 marks

8. Force
9. Levers
10. Fundamental Positions
11. Effects and Uses of Assisted exercises
12. Physiological Relaxation
13. Range of Muscle work.

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016**

**II Year Diploma in Medical Records Technology/ III Year Certificate course in
Medical Records Technology
MEDICAL AND SURGICAL CODING
QP CODE – 3144**

Time: 1 hr

Max. Marks: 20

ANSWER ANY FOUR QUESTIONS

4 x 5 = 20

- 1) Explain design and structure of ICD-10?
- 2) Write in detail about basic rules of coding?
- 3) Define the underlying cause of death?
- 4) Why do we need to code?
- 5) Expand the following abbreviation:

- A. FTND
- B. COPD
- C. IHD
- D. CCF
- E. WBC

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH - 2016**

**Common paper for all I year Certificate Courses
ENGLISH
QP CODE 1104**

Time: 1 ½ hrs

Max. Marks: 45

I. WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING

1 x 15 = 15

- 1) My favourite game
- 2) Population explosion

II. ANSWER ANY ONE

1 x 10 = 10

- 3) Write a letter to your Principal for requesting him to grant five days leave
- 4) Write a letter to your friend inviting him for a function in your house

III. WRITE THE OPPOSITE GENDER OF

5X1=5

- 5) Sister
- 6) Land lord
- 7) Girl
- 8) King
- 9) Wife

IV. WRITE THE OPPOSITE OF THE FOLLOWING

5X1=5

- 10) Difficult
- 11) Hot
- 12) Literate
- 13) Ugly
- 14) Old

V. WRITE THE SENTENCES USING THE FOLLOWING

5X1=5

- 15) Because
- 16) In between
- 17) To look after
- 18) Beyond
- 19) Never

VI. FILL IN THE BLANKS

5X1=5

- 20) Ashwini is taller _____ Netra
- 21) The boy is fond _____ dance.
- 22) The cat _____ sitting under the table.
- 23) Latha is talking _____ her teacher.
- 24) He is _____ brave boy

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016**

**III D.P.T –PHYSIOTHERAPY IN MEDICAL CONDITIONS
QP CODE – 3204**

Time: 3 hrs

Max. Marks: 90

I. Long Essay - Answer any FIVE

5 X 12 = 60

1. What are the difference between chronic bronchitis and emphysema? Broadly outline your treatment for the same.
2. Briefly explain the assessment of a neurological patient.
3. Common deformities seen in anterior poliomyelitis. Explain the Physiotherapy management for a polio patient during the recovery phase.
4. Physiotherapy management for a patient who suffered middle cerebral artery infarct.
5. What are the signs and symptoms of Chronic Bronchitis? Write about the Physiotherapy management including home programme.
6. Physiotherapy management for ankylosing spondylosis.

II. Write short notes on any FIVE

5 X 6 = 30

7. Physiotherapy management of Rheumatoid arthritis.
8. Spirometry
9. Bell's Palsy
10. Pneumothorax.
11. Ulcers.
12. Bio- feed back and its uses

**PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016**

**I Year Diploma in Medical Laboratory Technology/ II Year Certificate course in
Medical Laboratory Technology
MICROBIOLOGY
QP CODE – 2105**

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY – ANSWER ANY TWO

2 X 10 = 20

1. Define sterilization. Describe different methods of moist heat sterilization.
2. Classify Culture media. Write in detail about preparation of Chocolate agar.
3. Define Antibody. Describe in detail IgM antibody with labeled diagram.

II WRITE SHORT NOTES ON ANY TEN

10 X 5 = 50

4. Bacterial Filters.
5. Bacterial Capsule
6. Fluorescent Microscope
7. Hot air woven
8. Acid Fast Stain
9. Robert Koch
10. Cell Mediated Immunity
11. Radiation methods used in sterilization
12. Bacterial growth curve
13. Properties of Antigen
14. Anaerobic Culture media
15. Sterilization of Operation theatre

III. WRITE SHORT ANSWERS

10X2=20

16. Name two motile bacteria
17. Name two disinfectants used in discarding jars for laboratory use.
18. Name two selective media.
19. Name two differences between Gram negative and Gram positive cell wall
20. Name four inoculation techniques.
21. Name two vaccines.
22. Name two sterilization controls used for autoclave.
23. Define magnification.
24. Stab culture.
25. Name two differences between Innate and acquired Immunity.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

I Year Diploma in Health Inspector/ II Year Certificate course in Health Inspector

PAPER – III
QP CODE – 2113

Time: 3 hrs

Max. Marks: 90

I Long Essay - Answer any TWO

2X 10 = 20

1. Name four arthropods of medical importance. Describe the stages in the life cycle of mosquitoes. Name four diseases transmitted by mosquitoes. (4+4+2)
2. What is scabies? What is the organism causing scabies? Briefly explain the various methods for prevention of the disease scabies (2+3+5)
3. What is disinfection? With suitable examples explain different types of Disinfection. (2+4+4)

II Short Essay Answer any TEN

10 X 5 = 50

4. National immunisation Schedule
5. Housefly control measures.
6. What are rodents? Name two diseases spread by them? Name 3 rodent control measures.
7. Mean, median and mode
8. Hospital acquired infections and their control measures.
9. Oral polio vaccine
10. What are the uses of epidemiology?
11. Prevention of Tetanus.
12. Swimming pool sanitation
13. Importance of personal hygiene in prevention of disease
14. Prevention of diarrhoea' diseases in a village
15. Sanitary well

III Short Answers

10 X 2 – 20

16. DDT
17. Vaccine carrier
18. Name two diseases caused by ticks.
19. Two measures in control of cyclops
20. Name two advantages of live vaccines
21. BCG vaccine
22. Define Epidemic
23. Uses of Census
24. Two diseases transmitted by direct contact
25. Name two Zoonotic diseases

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION MARCH 2016

**I Year Diploma in Medical X- Ray Technology/ II Year Certificate course in
Medical X- Ray Technology**

PATHOLOGY
QP CODE – 2124

Time: 1 ½ hrs

Max. Marks: 45

I) LONG ESSAY – ANSWER ANY ONE

1 X 10 = 10

1. Define Thrombosis, its pathogenesis and fate of Thrombus.
2. Write about different types of Renal stones and add a note on Hydronephrosis of Kidney.

II) SHORT ESSAY ON ANY FIVE

5 X 5 = 25

3. Name different types of necrosis with examples.
4. Differences between exudate and transudate.
5. Vitamin D deficiency
6. Ewing's Sarcoma
7. Fibroadenoma Breast.
8. Difference between Benign & Malignant Tumors.
9. Fatty Liver

III) SHORT ANSWERS

5X 2 = 10

10. Gall stone
11. Signs of Inflammation.
12. Types of Emphysema
13. Examples of Hyperplasia
14. Four causes of Edema.

PARAMEDICAL BOARD, BANGALORE
Supplementary Examination, March - 2016
III D.P.T- PHYSIOTHERAPY IN SURGICAL CONDITIONS
QP CODE – 3205

SET-I

Time: 3 hrs

Max. Marks: 90

I. Answer any FIVE

10 X 5 = 50

1. Physiotherapy management of Shoulder dislocation
2. Discuss the role of PT Management in non healing ulcer
3. Plastic surgery in Burns. Discuss the PT Management of Burns case.
4. Physiotherapy management for a patient who suffered fracture of shaft of the femur.
5. Different levels of amputation? PT management of an above knee amputee.
6. PT management for median nerve injury.

II. Write short notes on any EIGHT

5 X 8 = 40

7. Thoracoplasty.
8. Nerve entrapment
9. Myasthenia gravis
10. Surgical emphysema.
11. Hernioplasty
12. Antenatal class.
13. Pulmonary function test
14. Abdominal incision
15. Decortication
16. Ilizarov fixator

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION, MARCH - 2016
III D.P.T- DIET AND NUTRITION
QP CODE – 3206

SET-I

Time: 3 hrs

Max. Marks: 90

I. Long Essay - Answer any FIVE

5 X 12 = 60

1. What are the different preparations for therapeutic diets?
2. What are the principles to be followed while preparing and storing of food?
3. Define Fever Plan a diet for an adult with fever.
4. Explain food processing & preservation in brief.
5. What are the various factors involved in planning meals for the families.
6. Explain in detail the different types of malnutrition.

II. Write short notes on any FIVE

5 X 6 = 30

7. Role of diet in nutritional anaemia.
8. Food and water borne disease.
9. Describe malnutrition.
10. Food preservation.
11. Beri Beri
12. Fluid diet.

PARAMEDICAL BOARD, BANGALORE
SUPPLEMENTARY EXAMINATION, MARCH - 2016
III D.P.T- COMMUNITY BASED REHABILITATION
QP CODE – 3208

SET-I

Time: 3 hrs

Max. Marks: 90

I. Long Essay - Answer any FOUR

5 X 12 = 60

1. What is Community awareness? What are the various community awareness programmes?
2. Institute based rehabilitation and Community based rehabilitation.
3. Common geriatric problems and home exercise programme.
4. Plan of rural rehabilitation through primary health centre.
5. Discuss the role of social education in prevention of diseases.
6. What are the objectives of a CBR programme? Explain.

II. Write short notes on any FIVE

5 X 6 = 30

7. Hurdles in CBR.
8. Vocational training of disabled.
9. Importance of communication skills in CBR.
10. Poliomyelitis.
11. Extension services.
12. Home programme.
