

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER – 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE – 2101

SECTION – A ANATOMY (WRITE IN SEPARATE ANSWER BOOK)

I. LONG ESSAY – ANSWER ANY ONE

1 x 10 = 10

1. Describe external and internal features of heart
2. Name the parts of alimentary system. Describe liver in detail

II. Write Short Essay (Any 5)

5 x 5 = 25

3. Hyaline cartilage
4. Pituitary gland
5. Tongue
6. Simple epithelium
7. Urinary bladder
8. Histology of ovary
9. Left lung

III. Write Short Answers

5 x 2 = 10

10. Name 2 differences in skeletal and cardiac muscle
11. Name 4 muscles of upper limb
12. Name 4 bones of lower limb
13. Name 4 parts of brain
14. Name the parts of large intestine

QP CODE – 2102

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

I. Long Essay – Answer any ONE

1 x 10=10

- 1) Define Erythropoiesis. With a neat labeled diagram describe the stages of Erythropoiesis.
- 2) Draw a labeled diagram of Nephron. Describe the functions of the different parts of nephron.

II. Write short notes on any FIVE

5 x 5 =25

- 3) Composition and functions of Gastric Juice.
- 4) Posterior Pituitary hormones.
- 5) Artificial respiration.
- 6) Normal cardiac cycle.
- 7) Refractory errors of Eye.
- 8) Cerebrospinal Fluid.

III. Write short answers

5 x 2=10

- 9) Name any two Adrenal gland hormones.
- 10) Name any two tests of hearing.
- 11) Name any two anticoagulants.
- 12) Name any two functions of skin.
- 13) Write the normal values of a) WBC count b) RBC Count

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER – 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY

TIME 1.1/2 HRS.

MAX. MARKS: 45.

QP CODE – 2121

GENERAL PHYSICS

I LONG ESSAY- ANSWER ANY ONE

1X10=10

- 1) Discuss about Alternating current (AC) and Direct current (DC)?
Difference between Alternating current and Direct current ?
- 2) What is Transformer? Describe about step-up and step-down
Transformer?

II. WRITE SHORT NOTES ON ANY FIVE

5X5=25

- 3) Atomic number
- 4) Inverse square law
- 5) X-ray production
- 6) Capacitors
- 7) Ohm's law
- 8) Multimeter

III. WRITE SHORT ANSWERS

5x2=10

- 9) Electromagnetic Radiation
- 10) Half wave rectifier
- 11) Electricity
- 12) Magnetism
- 13) Energy

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER – 2017

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

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 2131

FUNDAMENTALS OF OT & BASIC CONCEPTS IN SURGERY

I LONG ESSAY- ANSWER ANY TWO

2X10 =20

1. Pre-operative preparation of patient for surgery.
2. Define antisepsis. Discuss Sterile techniques and infection control.
3. Surgical waste disposal

II WRITE SHORT NOTES ON ANY TEN

10 X5 = 50

4. Sterile team members.
5. Post-operative monitoring.
6. Layout of OT.
7. CSSD
8. Mop and instruments count,
9. Electrocautery.
10. Classify suture materials.
11. Types of dressing.
12. Chemical sterilisation.
13. Weekly cleaning after OT.
14. Pre-operative antibiotics,
15. Advantages and disadvantages of disposables.

III WRITE SHORT ANSWERS

10 X2 = 20

16. Povidone iodine.
17. Tetanus toxoid.
18. Airflow in OT
19. Circulating nurse.
20. Surgical gown.
21. Ryles tube.
22. Red rubber catheter
23. Vacuum suction drain.
24. PDS (Polydioxanone Suture)
25. Surgical mop.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER – 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical Records Technology

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE – 2141
MEDICAL RECORD SCIENCE (MRS)

- I. LONG ESSAY – ANSWER ANY TWO. 2 X 10 = 20**
1. Write about the Importance of Out Patient and In Patient Register, Contents, & where it is maintained?
 2. What is Good Medical Records and its Importance?
 3. Write in Detail about the Production of Documents and effect of Non Production of Documents?
 4. Write about the modes of proof and burden of proof?
- II. WRITE SHORT NOTES ON ANY TEN. 10 X 5 = 50**
5. Coding & indexing.
 6. Define Summon & Warrant with contents.
 7. Compoundable and non Compoundable offence.
 8. Legal aspects of Medical Records in Criminal Cases.
 9. Write about the Numbering Systems.
 10. Medical Records Committee.
 11. Duties & Responsibilities of Medical Records Technician.
 12. Patient Alpha Index Card
 13. Location of Misfiles.
 14. Write about the important functions of Medical Records Department.
 15. Judicial Notice.
 16. Relevancy of Facts
 17. What is Estoppel and Promissory Estoppel?
 18. Contents of Parturition Register or Labour Register
- III. WRITE SHORT ANSWERS. 10 X 2 = 20**
19. Patient Master Index.
 20. Special Forms
 21. Medical Certificate
 22. Casualty
 23. Emergency Services
 24. Post Mortem
 25. Arrest & Custody
 26. In Patient Counter
 27. Tracer Card

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER – 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 2151

SECTION - A PHARMACOLOGY (WRITE IN SEPARATE ANSWER BOOK)

- I. LONG ESSAY — ANSWER ANY ONE** **1 x 10 = 10**
1. Enumerate various routes of drug administration with suitable examples. Write FOUR advantages and disadvantages of Intravenous Route.
 2. Classify Penicillins. Write their uses & adverse effects.
- II WRITE SHORT NOTES ON ANY FIVE** **5X5=25**
3. Calculate the amount of ingredients required to prepare 2 litres of 5 % Dextrose solution.
 4. Insulin — Uses and Adverse effects.
 5. Antiseptics.
 6. Fat soluble Vitamins.
 7. Anthelmintics.
 8. Liquid Dosage Forms
- III. WRITE SHORT ANSWERS** **5 X 2 = 10**
9. Mention TWO techniques (TYPES) of Local Anaesthesia.
 10. Name TWO Viral Vaccines.
 11. Name TWO Contraindications for Morphine.
 12. Mention TWO Anti-Coagulants.
 13. Name TWO drugs used in the treatment of Organophosphorous poisoning.

QP CODE — 2152

SECTION - B THEORY OF DIALYSIS (WRITE IN SEPARATE ANSWER BOOK)

- I) LONG ESSAYS-ANSWER ANY ONE** **1X10=10**
- 1) Describe the components of water treatment plant. Describe the steps of purifying water for hemodialysis.
 - 2) Why do you need anticoagulation for hemodialysis? Discuss the common anticoagulation used and their protocols.
- II) SHORT NOTES ON ANY FIVE** **5X5=25**
- 3) What is the composition of standard hemodialysis solution? Write the normal ranges.
 - 4) What are the types of vascular access for hemodialysis?
 - 5) Discuss monthly laboratory tests done in hemodialysis patients & their importance.
 - 6) Monitoring of a patient before, during and after a hemodialysis session.
 - 7) Classify dialyzers based on flux. What is Trans-membrane pressure?
 - 8) Dialysis disequilibrium syndrome-Definition, prevention and treatment.
- III) WRITE SHORT ANSWERS (ANY FIVE)** **5X2=10**
- 9) What is "Wet needle" technique of cannulation?
 - 10) What are different needle sizes used for cannulation?
 - 11) Mention two veins used for Hemodialysis catheter placement.
 - 12) Parts of a dialysis filter.
 - 13) Normal values of Hemoglobin and serum Albumin.
 - 14) Two blood-borne infections in hemodialysis unit.

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN OPHTHALMIC TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

**QP CODE — 2161
PAPER I**

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

I . Long Essay (Answer any two) 2 X 10 = 20

1. Anatomy of cornea with diagrammatic representation.
2. Structures of Eye ball
3. Distant visual acuity chart

II. SHORT ESSAYS . 10 X 5 =50

4. Briefly describe colour vision chart, and how do you interpret it?
5. Cycloplegics in ophthalmology
6. Treatment options available for astigmatism
7. List differences between Bifocal lenses and progressive lenses
8. Types of bifocal spectacles
9. Define glaucoma? How to perform schiot's tonometry
10. Types of myopia
11. What is objective refraction?
12. What are types of spectacle lenses available
13. Pre-op investigations in patient undergoing any eye surgery
14. Types of vision charts
15. Astigmatism

III. WRITE SHORT ANSWERS 10X2=20

16. Two drugs used in treatment of corneal ulcer
17. Types of SRK formulas
18. Types of Tonometers
19. How to test fundus in hazy media
20. Treatment options for hyperopic patients
21. Disadvantages of contact lenses
22. What is simple transposition of lenses for -2.00DS -1.00DC at 90°
23. Write a prescription for young patient 40 years presbyopia with normal distance vision
24. Types of myopia
25. Two uses of contact lenses over spectacles

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ANNUAL EXAMINATION SEPTEMBER - 2017

I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN DENTAL MECHANICS

TIME 1. 1/2 HRS.

MAX. MARKS: 45.

**QP CODE — 2171
PAPER I**

I. LONG ESSAY - ANSWER ANY ONE

1 X 10 =10

- 1) Classify dental cements. Write the composition, setting reaction and uses of Glass ionomer cement.
- 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) Plaster of paris
- 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 phosphate cement
- 12) 18-8 stainless steel
- 13) Electrolysis
- 14) Imbibition and syneresis

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

**I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE**

TIME 1. 1/2 HRS.

MAX. MARKS: 45.

QP CODE — 2181

ANATOMY (WRITE IN SEPARATE ANSWER BOOK)

I Long essays (any 1)

1x9=9

1. Describe temporomandibular joint
2. Describe facial nerve

II Short essays (any 2)

2X5 =10

3. Histology of compact bone
4. Blood supply of face
5. Structure of tooth

III Short answers

3x2=6

6. Nerve supply of muscles of mastication
7. Name the salivary glands
8. Name 4 bones of skull

Q.P.CODE-2182

PHYSIOLOGY (WRITE IN SEPARATE ANSWER BOOK)

I. Write short notes on any five

4 X 4=16

- 1) Composition of bile
- 2) Leucocytes and their functions
- 3) Thyroid gland and its disorders
- 4) Mechanism of urine formation
- 5) Blood groups
- 6) Hemoglobin disorders

II. Write short answers

2 X 2=4

- 7) Peristalsis and anti peristalsis
- 8) Eosinophilia

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN PHYSIOTHERAPY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 2191

I. Long essays (any 2)

2x10=20

1. Name the parts of urinary system. Describe kidney in detail
2. Name the parts of alimentary system. Describe pancreas in detail
3. Name the parts of Central nervous system. Describe spinal cord in detail

II. Short essays (any 10)

10x5=50

4. Hyaline cartilage
5. Transitional epithelium
6. Connective tissue
7. Thyroid gland
8. Right lung
9. Testis
10. Urinary bladder
11. Coronary veins
12. Larynx
13. Cecum
14. Extrahepatic biliary apparatus
15. Trachea

III. Short answers:

10x2=20

16. Name the parts of long bone
17. Name 2 arteries of forearm
18. Name 2 nerves of lower limb
19. Name 4 muscles of upper limb
20. Name the parts of a vertebra
21. Name the parts of eyeball
22. Name the layers of scalp
23. Name the parts of large intestine
24. Name the salivary glands
25. Name the parts of midbrain

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
D.P.T-III – SPORTS SCIENCE AND PHYSIOTHERAPY
QP CODE- 3201
SET-I

Time: 02 Hours

Max Marks: 65

1. Long Essay-Answer any FOUR

4 X 10=40

- (i) Write in detail about Anterior Cruciate Ligament (ACL) tear. Discuss pre and post operative rehabilitation protocol.
- (ii) Discuss the role of physiotherapy in the management of head injury in the sports field.
- (iii) Explain about meniscus tear, its pathophysiology, clinical features and rehabilitation programme.
- (iv) Write in detail about the principles of physical education.
- (v) What is comminuted fracture shaft of femur and its clinical features? Write in detail about its post operative physiotherapy management.

2. Write short note on any FIVE

5 X 5=25

- (i) Golfer's elbow
- (ii) Shoulder impingement Syndrome
- (iii) Differences between sprain and Strain
- (iv) Runner's knee
- (v) De Quervain's Tenosynovitis
- (vi) Mallet finger

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3101
BIOCHEMISTRY

I Long Essay — answer any TWO

2x10=20

- 1) What is Glycogen? Write the reactions and regulation of Glycogen metabolism. (2+5+3=10)
- 2) Describe five liver function tests with their normal values (2+2+2+2+2)
- 3) Write the reactions, importance and metabolic disorders of Urea cycle. (5+2+3=10)

II Write short notes on any TEN

10x5 = 50

- 4) Digestion and absorption of carbohydrates
- 5) Cardiac profile tests
- 6) Renal function tests
- 7) Principle and Application of ELISA
- 8) Quality Control
- 9) Random Access analyzer
- 10) Synthesis of creatinine
- 11) Glycolysis
- 12) Ketosis
- 13) Blood glucose regulation
- 14) Semi Auto analyzer
- 15) Reference range

III Write short answers

10 x 2 = 20

- 16) Name the abnormal constituents of urine
- 17) Name two cardiac markers.
- 18) Reagent racks
- 19) Constituents of gastric juice
- 20) Mention the normal levels of serum cholesterol and triacylglycerols.
- 21) Clinical importance of LDH
- 22) Name different methods of estimation of SERUM CREATININE
- 23) Functions of phospholipids
- 24) Name the bile salts and bile pigments
- 25) Reagent kits in Laboratory

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ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN HEALTH INSPECTOR

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3111
PAPER I

I. Long Essay - Answer any TWO

2 X 10 = 20

1. Define primary health centre. Enumerate the functions of primary health centre.
2. Define HIV/AIDS. Discuss the magnitude, prevention and control.
3. Enumerate the national programmes related to eradication of communicable diseases taken up for eradication.

II. Write short notes on any TEN

10 X 5 = 50

4. Crude Birth Rate.
5. Marriage counselling.
6. Treatment of cholera carriers.
7. Vision 2020.
8. First aid in dog bite.
9. Janani Suraksha Yojana.
10. Define epidemic and endemic with examples.
11. DOTS.
12. Write modes of transmission of HIV.
13. Dimensions of health.
14. Indian classification of Leprosy.
15. Measles Vaccine.

III. Write short answers

10 X 2 = 20

16. Tuberculosis
17. Penicillin.
18. Dead end disease.
19. Mortality rates.
20. Universal precautions.
21. Leprosy.
22. BCG.
23. Mention any four organisms causing diarrhea.
24. Treatment of filariasis.
25. Man Made malaria.

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN MEDICAL X-RAY TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3121

RADIOGRAPHY INCLUDING RADIOLOGY PHYSICS (N.S) R-1

I LONG ESSAY- ANSWER ANY TWO

2X10=20

- 1) Discuss Production of x-ray and type of x-ray tube with a neat diagram
- 2) Explain fluoroscopy and image intensifiers?
- 3) Discuss about x-ray interaction with matter

II. WRITE SHORT NOTES ON ANY TEN

10X5=50

- 4) Intensifying screen
- 5) Dark room Safe light
- 6) X-ray Cassette
- 7) Atomic number
- 8) Ultrasound
- 9) X-ray interaction
- 10) Inverse square law
- 11) Electromagnetic spectrum
- 12) Exposure factors
- 13) High KV technique and use
- 14) Isotopes
- 15) X-ray film

III. WRITE SHORT ANSWERS

10x2=20

- 16) ALARA
- 17) Bucky
- 18) Photo timer
- 19) X-ray Hangers
- 20) Digital radiography
- 21) Computerized radiography
- 22) Fluoroscopy
- 23) Lead shield
- 24) Cathode
- 25) Anode

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN OPERATION THEATER TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3131 ANAESTHESIA & ALLIED TOPICS

I. ANSWER ANY TWO

2X10=20

1. Mention the intraoperative monitoring and write in detail about pulse oximetry.
2. Describe in detail about Cardio-pulmonary resuscitation (BLS Algorithm).
3. Describe about the safety systems in Anaesthesia machine and Medical gas supply.

II. WRITE SHORT NOTES ON ANY TEN

10X5=50

4. Antiarrhythmics Drugs
5. Central venous pressure monitoring.
6. Oropharyngeal Airway.
7. Prone position.
8. Muscle Relaxants.
9. Paediatric Circuit (J R Circuit).
10. Morphine.
11. Precautions in managing HIV cases
12. Capnography
13. Drug interaction.
14. O.T sterilization.
15. Blood transfusion reaction

III. WRITE SHORT ANSWERS

10X2=20

16. Reversal of patient after General Anaesthesia (GA)
17. Spinal needles
18. Soda bicarbonate
19. Record maintenance
20. Noradrenaline.
21. Intercostal drain
22. Magill's forceps.
23. Prevention of radiation hazards
24. Patient safety program
25. Atropine

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN MEDICAL RECORDS TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3141 MEDICAL TERMINOLOGY

I. Write the meaning for the following suffixes

1 x 10 = 10

- | | |
|------------|------------|
| 1 —ptosis | 6 —oma |
| 2 —desis | 7 -tripsy |
| 3 —ectasis | 8 -otomy |
| 4 —lysis | 9 -ostomy |
| 5 —stasis | 10 -ectomy |

II. Write the correct meaning for the following prefixes.

1 x 10 = 10

- | | |
|---------|---------|
| 1 —de | 6 —syn |
| 2 —en | 7 -toxi |
| 3 —ex | 8 -an |
| 4 —meso | 9 -ad |
| 5 —pro | 10 -bin |

III. Write the correct meaning for the following root terms.

1 x 10 = 10

- | | |
|---------|------------|
| 1 aero | 6 myo |
| 2 chole | 7 psycho |
| 3 Dacry | 8 spondylo |
| 4 ile | 9 pyelo |
| 5 litho | 10 procto |

IV. Differentiate the following medical terms.

2 x 5 = 10

1. Cystostomy and Cystotomy
2. Gavage and Lavage
3. Contusion and Concussion
4. Perineal and Peritoneum
5. Endemic and Pandemic

V. Expand the following abbreviations.

1 x 10 = 10

- | | | | |
|---------|--------|--------|-------|
| 1. ABCD | 2.VH | 3.NLDO | 4.RHD |
| 5. RBC | 6.KUB | 7.TVH | 8.AMP |
| 9. PPBS | 10.LMP | | |

VI. Write the Phobias for the following.

1 x 10 = 10

- a) Fear of marriage
- b) Fear of being fat
- c) Fear of lies
- d) Fear of orders
- e) Fear of girls
- f) Fear of surgical operations
- g) Fear of sex
- h) Fear of blood
- i) Fear of becoming thief
- j) Fear of insect bite

PTO

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

Q P CODE 3141 MEDICAL TERMINOLOGY

VII. Write the correct medical term.

1 x 15 = 15

1. Excision of half of the stomach
2. Inflammation of the vein and surrounding the skin
3. Abnormal size of fingers and toes
4. Tissue taken out from the body
5. Permanent flexion of the fingers
6. Person who investigates cases of sudden death
7. Uncontrolled jerking movements twitching's
8. Fluid in the peritoneal sac or abdominal cavity
9. Excess of calcium in the blood
10. Inflammation of the adrenal gland
11. Excessive vomiting during early pregnancy
12. Inflammation of the nerve root
13. Thick tongue
14. Fungus of the nail
15. Rapid loss of hair

VIII. Define the following.

1 x 10 = 10

1. Rhinoplasty
2. Precancerous
3. Dysuria
4. Diarrhoea
5. Endometritis
6. Monophagia
7. Micturition
8. Menarche
9. Lipsotrichia
10. Nulliparus

IX. State True or False

1 x 5 = 5

1. BCG vaccine is administered to prevent cancer.
2. Malignant Tumour of flesh tissue of muscle is known as myosarcoma.
3. There are 21 pairs of cranial nerves.
4. Recanalisation of the Vas is done for infertility in men.
5. Dislike for water is a condition noticed in hydronephrosis.

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

DIALYSIS TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3151

FUNDEMANNTALS OF HEMODIALYSIS AND COMPONENTS

I) LONG ESSAYS (ANY TWO)

2X10=20

1. Define the three main principles of dialysis. Define, write the steps of measurement, the formulae for calculation and the interpretation of urea reduction ratio and Kt/V in the assessment of adequacy of dialysis.
2. List and detail the various anticoagulant protocols and monitoring in Hemodialysis. Write briefly on newer anticoagulants and their use in Hemodialysis.
3. Describe in detail about dialyzer reprocessing techniques. Describe in detail about tests of dialyzer performance

II) WRITE SHORT NOTES (ANY TEN)

10X5=50

4. Draw the diagram and describe dialysis fluid circuit of hemodialysis apparatus
5. Monitors and Alarms in HD apparatus.
6. What is access recirculation? Write about impact of access recirculation on dialysis adequacy.
7. Reverse osmosis plant in Hemodialysis unit.
8. Write about chemical composition of standard hemodialysis solution
9. Write about various complications of Hemodialysis
10. Explain causes of anemia and management of anemia in dialysis patients.
11. Describe artificial kidney.
12. Heparin free hemodialysis.
13. Describe basic principles of hemodialysis.
14. What are the disadvantages of dialyzer reuse?
15. Write about special precautions when initiating hemodialysis for pregnant woman.

III) WRITE SHORT ANSWERS

10X2=20

16. Define ultrapure water
17. Two indications to start dialysis.
18. Deionization
19. What are the values of surface area and priming volume of dialyzer
20. Activated partial thromboplastin time (APTT)
21. Mass transfer area coefficient
22. Name two newer anticoagulants
23. Name three antihypertensive medications
24. Disinfection of dialysis machines.
25. Normal pulse and blood pressure

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

OPHTHALMIC TECHNOLOGY

TIME 3 HRS.

MAX. MARKS: 90.

QP CODE — 3161

PAPER I

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

1. LONG ESSAYS (Answer any two)

2 x 10 = 20

1. Discuss how to set up a trolley for patient undergoing glaucoma surgery.
2. What is sterilization? what are the different methods of sterilization.
3. Post-operative measures to be taken after cataract surgery?

2. SHORT ESSAYS. (Answer any ten)

10 x 5 = 50

4. What is neutralization of lenses?
5. How to check the power of glasses using lensometry?
6. Define chalazion ? how to treat chalazion
7. Lacrimal syringing?
8. Trial set
9. Define ,classify and clinical features of pterygium?
10. How to set a trolley for dressing?
11. Tonometry
12. How to instill drops and ointment into conjunctival sac?
13. Direct ophthalmoscopy
14. How to fit spectacles
15. Advantages and disadvantages of keratometry

3. WRITE SHORT ANSWERS.

10 x 2 = 20

- 16 Mention two indication for subconjunctival injection
- 17 Name contraindication for bandaging of eyes
- 18 Preservation of donor eye
- 19 Uses contact lenses
- 20 Indications for Enucleation
- 21 Two causes of dull fundal glow on retinoscopy
- 22 Types of bifocal lenses
- 23 Name two types of tonometers
- 24 Mention two uses of synaptophore
- 25 What are the causes for against movement of glow at pupillary area when retinoscopy done at 1 meter

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN DENTAL MECHANICS

TIME 1.1/2 HRS.

MAX. MARKS: 45.

**QP CODE — 3171
COMPLETE DENTURES**

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) Immediate dentures
- 4) Beading and Boxing
- 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

ANNUAL EXAMINATION SEPTEMBER - 2017

**II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE**

TIME 1.1/2 HRS.

MAX. MARKS: 45.

QP CODE — 3181

DENTAL HYGIENE & ORAL PROPHYLAXIS

1.LONG ESSAY

1X10=10

1. DEFINE AND CLASSIFY CHRONIC PERIODONTITIS. DESCRIBE
CLINICAL FEATURES OF CHRONIC PERIODONTITIS

II. WRITE SHORT NOTES

5X5=25

2. SUPRA AND SUBGINGIVAL CALCULUS
3. PERIODONTAL POCKET
4. EXTRINSIC AND INTRINSIC STAINS
5. STAGES OF DENTAL PLAQUE FORMATION
6. INTERDENTAL CLEANING AIDS

III. WRITE SHORT ANSWERS

5x 2=10

7. CEMENTO ENAMEL JUNCTION
8. ORAL CANCER
9. GINGIVAL ABSCESS
10. ULTRASONIC SCALERS
11. TOPICAL FLUORIDE APPLICATION

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II DPT

Pathology

Q P Code 3191

I ANSWER ANY THREE

10 X 3 =30

1. Define inflammation. Write the morphological patterns of inflammation, clinical features and factors affecting inflammation and repair.
2. Classify anemia. Write in detail about pathogenesis, clinical features and lab investigations of megaloblastic anemia.
3. Define necrosis. Write about pathogenesis and types of necrosis with examples.
4. What is pulmonary TB- etiology, pathogenesis, clinical features of TB

II ANSWER ANY 12

12X5=60

5. Calcification
6. Bone repair
7. Embolism
8. Hyperplasia
9. Characterisation of benign and malignant disease
10. Vitamin D deficiency
11. Morphology of aneurysms
12. Myasthenia gravis
13. Disseminated Intravascular Coagulation(DIC)
14. Pagets disease
15. TB osteomyelitis
16. Pathogenesis of edema
17. Chronic myeloid leukemia

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

CERTIFICATE COURSE

TIME 1.1/2 HRS.

MAX. MARKS: 45.

**QP CODE — 1101
PHYSICS**

I. LONG ESSAY- ANSWER ANY ONE

10X1=10

- 1) Explain Newton's law of motion.
- 2) What is a Thermometer? Explain different types of Thermometers.

II WRITE SHORT NOTES ON ANY FIVE

5X5=25

- 3) Types of Spherical Mirrors.
- 4) Properties of Nuclear radiations.
- 5) Merits and Demerits of dimensions.
- 6) Laws of reflection.
- 7) PN junction.
- 8) Artificial satellite.
- 9) Semi Conductors.

III. WRITE SHORT ANSWER

5X2=10

- 10) Velocity
- 11) Law of conservation of energy.
- 12) Transistor.
- 13) Uses of X-rays.
- 14) Vectors.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
Medical Laboratory Technology
QP CODE — 3102
Subject: Pathology

Time: 3 Hours

Max. Marks : 90

I. Long Essay : (Answer any two)

2x10=20

1. Name the different types of haematoxylin and eosin. Write the Procedure of haematoxylin and eosin staining and preparation of haematoxylin.(2+4+4)
2. What is the criteria for selecting a donor? What are the screening tests done in blood bank. How is blood stored in blood bank? Write a note on forward grouping.(2+2+2+4)
3. Mention the various methods of Haemoglobin estimation .Explain in brief the principle and procedure of Cyanmeth-Haemoglobin method.(2+2+6)

II. Short Essay : (Answer any ten)

10x5=50

4. Coomb's test
5. Sputum examination
6. Demonstration of Barr body
7. Partial thrombo Plastin time
8. Manual tissue processing
9. Write short note on Biomedical Hospital Waste management
10. Quality control in blood bank
11. Estimation of foetal Haemoglobin
12. Osmotic fragility test
13. Write a note on Periodic Acid Schiff (PAS) stain
14. Ethylene-DiamineTetra Acetic acid (EDTA)
15. Semen analysis

III. Short Answer :

10x2=20

16. Name two blood group systems
17. Name the methods used for crossmatching
18. Normal composition of CSF
19. Write the normal values of Prothrombin Time and mention the condition where it is altered.
20. Name any two blood transfusion reaction
21. What is the normal bleeding time and in which condition is it increased?
22. Name the sites for bone marrow examination and needle used
23. Mounting of slides
24. Name the blood components in blood bank
25. Name any two special stains performed in histopathology.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

HEALTH INSPECTOR
QP CODE — 3112
Subject: Paper II

Time 3 Hrs.

Marks:90

I. Long Essay — Answer any TWO

2x10=20.

1. Define Antenatal care. Write the Objectives of Antenatal care and add a note on Warning signs.
2. Define Family planning. Classify contraceptive methods. Add a note on Intra- uterine devices
3. Define health education. Discuss in detail Principles of health education

II. Write Short notes on any TEN.

10x5=50.

- 4 Safe period (rhythm method)
- 5 Postnatal Complications
- 6 MTP Act
- 7 Juvenile Delinquency
- 8 Uses of Growth chart
- 9 Causes for Infant mortality rate
- 10 Factors affecting fertility
- 11 Demographic cycle
- 12 Child abuse
- 13 Types of communication
- 14 Behavior problems in children
- 15 Female sterilization

III. Write Short Answers.

10x2=20.

- 16 Audio-visual aids
- 17 Domiciliary care
- 18 Target couple
- 19 Geriatric health problem
- 20 Internet usage in Health
- 21 Growth rate
- 22 Low birth weight
- 23 Condom
- 24 Sex ratio
- 25 Malaria

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

Medical X-Ray Technology

QP CODE — 3122

Subject: RADIOGRAPHY INCLUDING MEDICAL RECORDS R — II

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY — ANSWER ANY TWO

2 x 10 = 20

- 1) Discuss about medical records, x-ray and imaging
- 2) Briefly explain the barium examinations
- 3) What is intravenous urography? explain the procedure in detail

II WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

- 4) Picture archiving and communication system
- 5) Dark room and use
- 6) Intensifying screen
- 7) Cassettes
- 8) Grid
- 9) Bucky
- 10) X-ray chest brief
- 11) Medical records
- 12) Medico legal case (MLC)
- 13) Anode
- 14) Consent form.
- 15) Collimators

III. WRITE SHORT ANSWERS ON Any TEN

10 x 2 = 20

- 16 Clinical history
- 17 What is Medical Fitness?
- 18 Abbreviations for HIS & RIS
- 19 PACS
- 20 Mortise view
- 21 HRCT
- 22 Patients Data
- 23 Latent image
- 24 Filament
- 25 X-ray
26. TLD badge?
27. View box

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OT Technology
QP CODE – 3132
OPERATIVE PROCEDURE

Time 3 Hrs.

Max. Marks: 90.

I LONG ESSAY- ANSWER ANY TWO

2x10=20

1. Mention various types of Abdominal Incisions (5marks) with Diagrams (2marks) and discuss about midline Laparotomy Incision (3marks)
2. Define Laparoscopic surgery (2marks) and mention the advantages (3marks) and name five surgeries done by laparoscopic method (5marks)
3. Define shock (2 Marks), Types of shock (4marks) & explain in detail about hypovolemic shock (4marks)

II. WRITE SHORT NOTES ON ANY TEN

10x5=50

4. Sterilization of laparoscopic instruments
5. Burrhole Surgery
6. Plaster of paris (POP) slab & its application
7. Tonsillectomy
8. Modified radical mastectomy
9. Vaginal hysterectomy
10. Intercostal drainage
11. TURP
12. Define organ transplantation and various types of transplantation
13. Skin grafting
14. Circumcision
15. Below knee amputation

III WRITE SHORT ANSWERS

10 X2=20

16. Local Anaesthesia
17. Lipoma
18. Devers retractor
19. Proctoscope
20. Mention different types of Hernias
21. Electric cautery
22. Tracheostomy
23. Hydrocoele
24. Breast abscess
25. Vasectomy

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
Medical Record Technology
Hospital Administration
QP CODE — 3142

Time : 3 Hours.

Max. Marks:90.

I. Long Essays.

2x10=20

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

II. Write briefly on any TEN

10x5=50

4. Functions of House-keeping services.
5. Functions of Tertiary care centers.
6. Health insurance.
7. Write a note on dietary services in Hospitals.
8. Disaster cycle.
9. Management of sharp wastes.
10. Network analysis.
11. Functions of Hospital administrator.
12. Medical audit.
13. Functions of nurse.
14. Fire protection services in hospital.
15. Functions of Radiology department.

III. Write Short Answers

10x2=20

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

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY
Renal Replacement Therapy Other Than Haemodialysis
& Patient Teaching
QP CODE - 3152

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAYS - ANSWER ANY TWO **2 x 10 = 20**

- 1) Discuss the principles of Continuous Ambulatory Peritoneal Dialysis (CAPD). What are the different modalities of peritoneal dialysis and there advantages?
- 2) What are the types of dialysis that can be done in critically ill (ICU) patients? Write a note on sustained low-efficiency dialysis (SLED).
- 3) Discuss the principles of plasmapheresis. Mention the indications and complications of the procedure.

II. WRITE SHORT NOTES ON ANY TEN **10 x 5 = 50**

- 4) What is the composition of peritoneal dialysis solution?
- 5) Write a note on Wearable artificial kidney.
- 6) Write a note on Peritoneal equilibration test (PET) and its clinical significance.
- 7) Write a note on Hemoperfusion and its clinical applications.
- 8) What are the immunizations recommended in dialysis patients?
- 9) What are the components of a typical hemodialysis protocol record, and its importance?
- 10) What is the composition of dialysis team? What are the functions of each member?
- 11) Write a note on Double bag system and Y-connections in peritoneal dialysis.
- 12) Discuss about Hemoperfusion, technique and indications.
- 13) Write about Hemodiafiltration, technique, indications and advantages.
- 14) Care of AV fistula and patient education.
- 15) Discuss about nutritional support and rehabilitation of a hemodialysis patient.

III. WRITE SHORT ANSWERS **10 x 2 = 20**

- 16) Two disinfectants used for dialyzer reprocessing.
- 17) Normal pulse rate and blood pressure ranges.
- 18) How do you estimate plasma volume.
- 19) Two indications for isolation of dialysis patients.
- 20) Two causes of outflow problems in CAPD.
- 21) Two bacteria causing exit-site infection in CAPD patients.
- 22) Benefits of Icodextrin.
- 23) Hand hygiene in CAPD patients.
- 24) Blood pump speeds in sustained low-efficiency dialysis (SLED). and Continuous Renal Replacement Therapy (CRRT).
- 25) Two replacement fluids in plasmapheresis.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

Ophthalmic Technology
PAPER –II
QP CODE-3162

Time: 3hrs

Max.Marks:90

I. Long essay — Answer any Two.

2 x10 = 20

- 1) What is NPCB (National Programme of Control of Blindness) what is the role of PMOA under NPCB?
- 2) Describe School Screening in detail.
- 3) How do you plan for Cataract Camp under NPCB?

II. Write short notes on any TEN.

10 x 5 = 50

- 4) Survey methodology
- 5) ICD - 10
- 6) Minor Records
- 7) Alphabetical Index
- 8) Childhood Blindness
- 9) Use of Mydriatic drugs for Refraction in children
- 10) Health Education in Trachoma Patients
- 11) Discuss Epidemiology
- 12) Vocational training of blind
- 13) Technique of Eye ball preservation
- 14) Transportation of Donor Eyes
- 15) Role of School teacher in school screening

III. Write short answers

10 x2 = 20

- 16) Prisms in Ophthalmology
- 17) Vitamin A Deficiency
- 18) Management of Presbyopia
- 19) Preparation of Eye Pads
- 20) Publicity technique of Eye Donation
- 21) Epilation
- 22) Chemical Injuries - Management
- 23) Corneal FB (Foreign Body) Management
- 24) Indications for Dacrocysto Rhinostomy (DCR)
- 25) Disease Index

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

DENTAL MECHANICS
PARTIAL DENTURES, ORTHODONTIA, MAXIOFACIAL PROSTHESIS
QP CODE - 3172

Time: 1 '1/2 hrs

Max. Marks: 45

I. LONG ESSAY

1 X 10 =10

1) What is an alloy? Mention the various alloys used in prosthodontics.
Write in brief the fabrication procedure of cast partial denture.

II WRITE SHORT NOTES

5 X 5=25

- 2) Principles of wire bending
- 3) Obturator
- 4) Casting defects
- 5) Pindex System
- 6) Mention different retainers used in fixed partial dentures.

III. WRITE SHORT ANSWERS

5 X2 =10

- 7) Pickling
- 8) Gingivally approaching clasp
- 9) Arbitrary blockout
- 10) Mention different die materials used
- 11) Centrifugal casting machine

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE
DENTAL HEALTH EDUCATION, SOCIAL & PUBLIC HEALTH & PREVENTIVE
DENTISTRY
QP CODE - 3182

Time: 1 '1/2 hrs

Max Marks: 45

I. Long essay

1 x10=10

1. DESCRIBE THE HABITS AND THEIR EFFECT ON DENTAL STRUCTURES

II. Write short notes

5x5=25

2. COMMUNITY DENTISTRY EDUCATION
3. AIMS AND OBJECTIVES OF DENTAL HEALTH
4. WATER SUPPLY TO COMMUNITY.
5. PREVALANCE AND PREVENTION OF PERIODONTAL DISEASE
6. BRUSHING TECHNIQUES

III. Write short answers

2x5=10

7. CHLOREXIDINE MOUTH RINSE
8. CHILD COUNSELLING
9. ORAL HEALTH IN HANDICAPPED
10. ENVIRONMENTAL HEALTH
11. ORAL HYGINE INDEX SIMPLIFIED

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II D.P.T- PHARMACOLOGY

QP CODE – 3192

Time: 3 hrs

Max. Marks: 90

I. Long Essay (Answer any FOUR)

4 X 15 = 60

1. Outline the pharmacology of Beta Blockers.
2. Outline the pharmacology of Local Anaesthetics.
3. Outline the pharmacology of Anti-anginal drugs.
4. Outline the pharmacology of Anti Epileptic drugs.
5. Outline the pharmacology of Cephalosporins

II. Write short notes on any FOUR

4 X 5 = 20

6. Treatment of Organophosphorous poisoning.
7. Glucocorticoids — Adverse effects.
8. Insulin preparations.
9. Intravenous Anaesthetics.
10. Vitamin C.

III. Write short answers

5 X 2=10

11. Name TWO Inhaled Glucocorticoids.
12. Name TWO Contraindications for Morphine.
13. Name TWO Mydriatics.
14. Name TWO Centrally acting muscle relaxants.
15. Name TWO Antitussives .

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

CERTIFICATE COURSE

CHEMISTRY

QP CODE 1102

Time: 1. ½ hrs

Max. Marks: 45

I. LONG ESSAY-ANSWER ANY ONE

1 x 10 =10

- 1) Explain the functional properties of proteins.
- 2) Explain the preparation of Nitric acid by Ostwald's Process.

II. WRITE SHORT NOTES ON ANY FIVE

5 x 5=25

- 3) Merits and demerits of Arrhenius theory.
- 4) Preparation of sols.
- 5) Uses of Radioisotopes.
- 6) Importance of Nucleic acids.
- 7) Cottrell's electrical precipitator
- 8) Explain pH and pOH of a solution.
- 9) Carbon dating.

III. WRITE SHORT ANSWERS

5 x 2 = 10

- 10) Polymerization
- 11) Saturated & Unsaturated Hydrocarbons
- 12) Types of RNA.
- 13) Why methane is called as Marsh gas.
- 14) Mention 2 Essential and 2 Nonessential amino acids.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical Laboratory Technology

QP CODE — 2103

Subject: Biochemistry

Time 3 Hrs.

Max. Marks: 90.

I LONG ESSAY- ANSWER ANY TWO

02 x 10 =20

- 1) What are carbohydrates? Classify carbohydrates with suitable examples. Add a note on properties of glucose. (2+5+3=10)
- 2) Define enzymes. Classify with suitable examples. Add a note on enzyme inhibition. (2+5+3=10)
- 3) Explain the principle, components and applications of colorimeter with a neat labeled diagram. (3+4+3=10)

II. WRITE SHORT NOTES ON ANY TEN

10 x 5=50

- 4) Important of glassware in laboratory
- 5) Phospholipids
- 6) Isoenzymes
- 7) Flame photometer
- 8) Centrifuge
- 9) Structure of atom
- 10) Hot air oven
- 11) pH meter
- 12) Glycogen
- 13) Functions of proteins.
- 14) Semi Auto analyzer
- 15) Maltose

III WRITE SHORT ANSWERS

10X2=20

- 16) Full saturation test
- 17) Benedict's test
- 18) Functions of iron
- 19) Define pH
- 20) Name essential fatty acids
- 21) Write the uses of water bath
- 22) Lactose
- 23) Name two indicators
- 24) Name two basic amino acids
- 25) Define buffers and give one example

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR
QP CODE — 2111
Subject: Paper I

Time 3 Hrs.

Max. Marks: 90.

I. Long Essay — Answer any TWO 2x10=20.

1. Define Sociology. Explain social factors related to diseases.
2. Explain human digestive system in detail.
3. Define Statistics and its role in Health Sciences.

II. Write Short notes on any TEN. 10x5=50.

4. Medical social worker.
5. Urban society.
6. Epidemiological triad.
7. Explain different types of families.
8. Explain different food habits related to diseases.
9. Pulse polio.
10. Enlist health indicators.
11. Briefly explain dimensions of health.
12. Explain Community health.
13. Explain mortality rates
14. Social security.
15. Explain Fertility rates

III. Write Short Answers. 10x2=20.

16. Define health
17. List diagrammatic representation of data.
18. Crude death rate
19. Functions of lungs.
20. Define family.
21. Mention four risk factors for hypertension.
22. Infant mortality rate
23. Write two advantages of joint families
24. Crude birth rate.
25. Blood groups

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical X-Ray Technology

QP CODE — 2122

Subject: Anatomy

Time : 1. ½ Hrs

Max marks: 45

I Long Essay – answer any two

2x10=20

1. Name the parts of respiratory system. Describe lung in detail
2. Name the parts of alimentary system. Describe pancreas in detail
3. Name the parts of central nervous system. Describe spinal cord in detail

II Short Notes – answer any three

3x5=15

4. Stomach
5. Kidney
6. Uterus
7. Histology of compact bone

III Short answers

5x2=10

8. Name the parts of brain
9. Name 4 bones of upper limb
10. Name 4 muscles of lower limb
11. Name the parts of femur
12. Name the parts of respiratory system

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I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
OT Technology

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. Write the principle and procedure of any five tests to detect abnormal constituents of urine. (2+2+2+2+2=10)
2. Explain digestion and absorption of carbohydrates(5+5=10)

II. WRITE SHORT NOTES ON ANY TWO **2x5=10**

3. Formation of urea and creatinine
4. Blood sugar and its maintenance.
5. Acid base disorders.

III WRITE SHORT ANSWERS **5X2=10**

6. Clearance tests.
7. Normal values of blood Urea and cholesterol.
8. Normal specific gravity of urine
9. Normal values of serum electrolytes.
10. Define acid, base, salt and buffer.

SECTION – B, PHARMACOLOGY (Write in separate answer book) QP CODE – 2133

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

1. Classify Local Anaesthetics. Write the mechanism of action, therapeutic uses and adverse effects of LIGNOCAINE.
2. Classify Non-opioid analgesics. Write the therapeutic uses, adverse effects and contraindications of Aspirin.

II. WRITE SHORT NOTES OF ANY TWO **2 x 5 =10**

3. Intravenous route of drug administration.
4. Diazepam.
5. Cotrimoxazole.

III. WRITE SHORT ANSWERS **5 x 2 =10**

6. Mention two intravenous Anaesthetics.
7. Name two contraindications for MORPHINE.
8. Name two types of Hypersensitivity reactions.
9. Mention two drugs given by oral route.
10. Name two drugs used for Preanaesthetic medication.

SECTION – C, MICROBIOLOGY (Write in separate answer book) QP CODE – 2134

I. Answer any one **1X10=10**

1. Define and classify sterilization. Discuss in detail about Moist heat sterilisation
2. Describe the morphology of a bacterial cell with a neat labeled diagram Write a note on bacterial spore

II. Write short notes on any two **2X5=10**

3. Hepatitis B virus
4. Passive immunity
5. Contributions of Robert Koch.

III. Write short answers **5X2=10**

6. Name two articles disposed in Red cover
7. Name two pigment forming bacteria
8. Name two gram positive bacteria
9. Sterilization of syringes
10. Name two viral vaccine

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN

Medical Record Technology

SECTION – A Anatomy (Write in separate answer book) QP CODE – 2142

- I. Long Essay – answer any one** **1x10=10**
1. Name the parts of urinary system. Describe kidney in detail
2. Name the parts of alimentary system. Describe liver in detail
- II. Short Notes – answer any two** **2x5=10**
3. Testis
4. Pituitary gland
5. Stomach
- III. Short answers** **5x2=10**
6. Name the parts of brain
7. Draw a labeled diagram of cell
8. Name 4 bones of skull
9. Name 2 bones of upper limb
10. Name the parts of Humerus

Section B —Physiology (Write in separate answer book) Q-P code -2143

- I. Write short notes on any four** **4x5=20**
1) Functions of platelets
2) Formation of urine by the kidneys
3) Types of circulation
4) Pulmonary Function Test
5) Hormone disorders of Thyroid gland
6) Structure and functions of the skin
- II. Write short answers** **5x2=10**
7) Saliva
8) Dyspnoea
9) Types of muscles
10) Special sense organs
11) Pulse

SECTION –C, PATHOLOGY& MICROBIOLOGY (Write in separate answer book) 2144

- I. Long Essay (Answer any one)** **1 x 10= 10**
1. Draw a neat labelled diagram of light microscope. Describe in detail different types of Haemoglobin estimation.
2. How do you maintain medical records in microbiology?
- II. Short Essay on any two** **2x 5 = 10**
3. Note on different investigations conducted in microbiology
4. Tuberculosis
5. Write a note on Maintenance of medical records in pathology
- III. Short Answers** **5x 2 = 10**
6. Name any two bacteria
7. Name two infectious disease in India
8. Why is Mantoux test done?
9. What is a pathology?
10. Name two chemical tests for urine analysis.

PARAMEDICAL BOARD, BANGALORE

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I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN

DIALYSIS TECHNOLOGY

SECTION – A Biochemistry (Write in separate answer book) QP CODE – 2153

I LONG ESSAY- ANSWER ANY ONE

- 1) What is the normal blood glucose level? Describe the factors regulating the blood glucose level in the body.
- 2) Explain the principle, components and applications of colorimeter with a neat labeled diagram.

II. WRITE SHORT NOTES ON ANY FIVE

5x5=25

- 3) Metabolic alkalosis.
- 4) Formation of Creatinine.
- 5) Clearance tests.
- 6) Urea cycle.
- 7) pH meter.
- 8) Serum electrolytes.

III WRITE SHORT ANSWERS

5X2=10

- 9) Rothera's test.
- 10) Anti coagulants.
- 11) Specific urease test,
- 12) Give the normal levels of serum urea and creatinine.
- 13) Theory of ionization.

SECTION – B Microbiology (Write in separate answer book) QP CODE – 2154

I. Long essay

1*10=10

1. Define and classify sterilization. Describe in detail about sterilization of operation theatres
2. Discuss in detail about laboratory diagnosis of Cholera

II. Write short notes on any five

5*5=25

3. Biomedical waste management
4. Passive immunity
5. Bacterial flagella
6. Candida
7. Transmission of HIV infections
8. Louis Pasteur

III. Write short answers

5*2=10

9. Name two commensal bacteria
10. Name two non motile bacteria
11. Name two DNA viruses
- 12 Name two bacteria causing nosocomial infections
13. Name two articles sterilized by hot air oven.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Ophthalmic Technology
Q.P 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) Name the causes of red eye. Describe in detail the causes, clinical features and management of bacterial conjunctivitis.
 - 2) Enumerate the causes of watering in the eye. Discuss the clinical features and management of chronic dacryocystitis.
 - 3) Define acute iridocyclitis. How do you manage a patient with acute iridocyclitis? Write briefly about the side effects of the drops used in the treatment of acute iridocyclitis.
- II. **Short Essay** **10 X 5 = 50**
- 4) Hordeolum internum
 - 5) Cover test
 - 6) Traumatic cataract
 - 7) First aid in chemical injury of the eye
 - 8) Blepharitis
 - 9) Stages of Diabetic retinopathy
 - 10) Schirmer test
 - 11) Spring catarrh
 - 12) Keratoconus
 - 13) Causes of non improvement of Visual Acuity (VA) with pinhole
 - 14) Causes of headache and its management
 - 15) Oral glycerol
- III. **Write Short Answers** **10X2=20**
- 16) Vitamin A prophylaxis
 - 17) Name two antiviral drugs used in ophthalmology
 - 18) Lens induced glaucoma
 - 19) Tropicamide
 - 20) Contraindications for Atropine
 - 21) Signs of acute angle closure glaucoma
 - 22) Conjunctival foreign body
 - 23) Dry eyes
 - 24) Two uses of local anaesthetics
 - 25) Types of cataract surgery

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS

APPLIED ORAL ANATOMY Q.P Code : 2172

Time : 1.1/2 Hrs.

Max. Marks : 45

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

- 1) Describe the Anatomy of Mandibular permanent first molar.
- 2) Mandibular denture- Supporting and limiting structures

II. WRITE SHORT NOTES ON ANY FIVE **5 X 5 = 25**

- 3) Compensating curves
- 4) Muscles of Mastication
- 5) Posterior palatal seal area
- 6) Movements of temporomandibular joint
- 7) Anatomy of maxillary right permanent canine
- 8) Key of occlusion
- 9) Tooth carving

III. WRITE SHORT ANSWERS **5 X 2 = 10**

- 10) Hamular notch
- 11) Bilabial sounds
- 12) Freni and its significance
- 13) Denture relief areas
- 14) Mention different tooth numbering systems

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE

Section- A, GENERAL PATHOLOGY & MICROBIOLOGY

(Write in separate answer book) QP code - 2183

Time : 1.1/2 Hrs.

Max. Marks : 45

I. Long Essay (Answer any one)

1 x 9= 9 Marks

1. What is inflammation? Describe in detail vascular events of acute inflammation.
2. Define Neoplasia. Write the difference between benign and malignant neoplasm

II. Short Essay on any four

4x 5 = 20 Marks

3. Classification of Vitamins
4. Oral leukoplakia
5. Types of immunity
6. Types of necrosis
7. Dental anomalies
8. Process of wound healing

III. Short Answers

3x 2 = 6 Marks

9. Name the methods of sterilization
10. Name two gram positive bacteria
11. What is scurvy

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

QP CODE- 2184

I. Write short answers

5 x 2 = 10

1. Name TWO Analgesics.
2. Name TWO Antiseptics used in Dentistry.
3. Name TWO Styptics (Local Haemostatics).
4. Name TWO Fat soluble Vitamins.
5. Name TWO Antibiotics used in Dentistry.

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

III D.P.T- YOGA & MENTAL HEALTH

QP CODE – 3202

Time: 2 hrs

Max. Marks: 65

I. Long Essay - Answer any FOUR

4 X 10 = 40

1. What are the rules & regulations to be followed during practice of Yogasanas.
2. Explain the principles of Yoga therapy.
3. Discuss about Meditational asanas.
4. How do you practice yoga therapy in relation to physical therapy management?
5. What is normal mental health? Describe the factors contributing towards it.

II. Write short notes on any FIVE

5 X 5 = 25

6. Suryanamskara.
7. Bhujangasana technique.
8. Vakrasana.
9. Physiology of stress.
10. Yama and Niyamas.
11. Matsyasana.

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

I DPT - Section A —PHYSIOLOGY (Write in separate answer book)

Q-P code -2192

I. Long essay (Answer any THREE)

3x10=30

1. Mechanism of hemostasis and mechanisms of coagulation. Add a note on any one of the mechanisms
2. Define cardiac cycle. Add a note on mechanical events of cardiac cycle.
3. What is ventilation? Describe briefly the mechanisms of ventilation.
4. Hormones of thyroid gland and its functions.

II. Write short notes on any five

5x5= 25

5. Hypoxia and types
6. Functions of bile
7. Functions of estrogen
8. Isotonic and isometric contractions
9. Functions of cerebellum
10. Errors of refraction.
11. Saltatory conduction

III. Write short answers

5x2=10

12. Name any two neurotransmitters
13. Two enzymes of pancreas
14. FRC (functional residual capacity)
15. Surfactant
16. Cretinism

Section B —Biochemistry (Write in separate answer book) 2193

I LONG ESSAY- ANSWER ANY ONE

1 x10 =10

- 1) What are enzymes? Describe the factors affecting the enzyme activity
- 2) Define lipids. Classify with suitable examples. Add a note on phospholipids.

II. WRITE SHORT NOTES ON ANY ONE

1x5=5

- 3) Heteropolysaccharides.
- 4) Sources, daily requirement, biochemical functions & deficiency manifestations of Vitamin D.

III WRITE SHORT ANSWERS

5X2=10

- 5) Lactose.
- 6) Beri beri.
- 7) Essential fatty acids.
- 8) Malnutrition.
- 9) Glycogen.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
Medical Laboratory Technology

QP CODE — 3103

Subject: Microbiology

Time: 3 Hours

Max. Marks: 90

I. Long essay-Answer any two

2*10=20

1. Write about pathogenesis and lab diagnosis of Enteric fever
2. Define and classify Hypersensitivity.. Discuss in detail Type 1 hypersensitivity.
3. Discuss in detail about Central Sterile Supply Department (CSSD).

II. Write short notes on any ten

10*5=50

4. Antibiotic sensitivity testing
5. Coagulase test
6. Negative staining
7. Hepatitis C virus
8. Latex agglutination test
9. Lab diagnosis of cholera
- 10 Stool examination for ova and Cyst
11. Lab diagnosis of Pulmonary tuberculosis
12. Complications of malaria
13. Life cycle of *Ascaris lumbricoides*
14. Post exposure prophylaxis
15. Lab diagnosis of urinary tract infection

III. Write short answers

2*10 = 20

16. Name two species of *Aspergillus*
17. Name two capsulated bacteria
18. Name two pigment producing bacteria
19. Name two non-motile bacteria
20. Name two Acid fast bacilli
21. Name two dermatophytes
22. Name two bacteria causing hospital acquired infections
23. Passive immunity
24. Uses of mice in laboratory
25. Name two uses of ELISA.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR

QP CODE — 3113

Subject: Paper III

Time 3 Hrs.

Max. Marks: 90

I. Long Essay — Answer any TWO

2x10=20.

1. Enumerate voluntary health agencies in India. Describe the role of these agencies in the field of health
2. Define pneumoconiosis. Mention different types. Write briefly on silicosis.
3. Enumerate the duties of a female health worker.

II. Write Short notes on any TEN.

10x5=50.

4. Indian factory act.
5. Community participation.
6. WHO day
7. Medico social worker .
8. Mention 5 international health agencies.
9. Role of health workers in malaria control.
10. Planning cycle.
11. Social security.
12. First aid in case of dog bite.
13. Food and agriculture organization.
14. Personal Hygiene
15. Essential Drugs.

III. Write Short Answers.

10x2=20

16. Child delinquency
17. Rural development
18. Social justice
19. Sub centre
20. Genetic counseling
21. ASHA workers
22. MTP act
23. Panchayat Raj
24. Health education
25. Mention school health services

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN

Medical X-Ray Technology

QP CODE — 3123

Subject: RADIOGRAPHY INCLUDING NEWER IMAGING TECHNOLOGY R — III

Time: 3 hrs

Max. Marks: 90

I. LONG ESSAY — ANSWER ANY TWO

2 x 10 = 20

- 1) Explain in Detail about computed radiography and digital radiography
- 2) Write briefly on Multi slice detector CT scan and CT scan room layout in diagram
- 3) Discuss about Micturating Cystourethrography (MCU) with diagram

II. WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

- 4) Density
- 5) T-tube cholangiogram
- 6) Barium enema double contrast
- 7) CT scan Brain
- 8) X-ray chest position
- 9) Hounsfield unit
- 10) Explain CT angiography procedure
- 11) MRI scan
- 12) Dicom software
- 13) CT guided biopsy
- 14) Contrast reactions
- 15) Cath lab

III. WRITE SHORT ANSWERS

10 x 2 = 20

- 16) Apicogram
- 17) Axial view
- 18) Emulsion film
- 19) Digital subtraction angiography (DSA)
- 20) C-arm
- 21) Intravenous urography (IVU)
- 22) Focus film distance (FFD)
- 23) Collimator
- 24) Fine needle aspiration (FNA)
- 25) Atomic Energy Regulatory Board (AERB)

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
Medical Record Technology
Computer Sciences
QP CODE — 3143

Time: 1.30 Hours.

Max. Marks: 40

I. LONG ESSAY - ANSWER ANY ONE

1X10=10

1. What is Computer Virus? What are its prevention and How can it be prevented?
2. Discuss the Role of Computers in the Hospital at Out patient Counter, In patient Counter & Medical Records Department?

II. WRITE SHORT NOTES ANY FOUR

4X5=20

3. Write in Detail about the E-mail & Internet.
4. What is Software of a Computer & Describe the Various types of Software?
5. Write the Different Types of Printers?
6. Compact Disk (CD).
7. Describe the Various Generations of Computers?

III. WRITE SHORT ANSWERS

5X2=10

8. Pen Drive
9. Software
10. RAM & ROM
11. LAN
12. M.S. Office

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

**II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE**

**Operating room Technique, Chair side Assts. & Dental Materials,
Ethics & Jurisprudence
QP CODE - 3183**

Time: 1 '1/2 hrs

Max Marks: 45

I. Long essay

1x10 =10

1. Describe various methods of sterilization and storage of dental instruments

II. Write short notes

5x5 = 25

2. Material maintenance and supply
3. Role of social factors in dental progress
4. Dentist act 1948
5. Specialities in dentistry
6. Objectives and scope of dentistry

III. Write short answers

2x5 =10

7. Appointment and recall system
8. Medicolegal issues in dental practice
9. Maintenance of case records
10. Code of ethics in dentistry
11. Billing and accounting

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

II D.P.T- 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. Classify Diabetes Mellitus. Describe the management and complications of Diabetes Mellitus.
2. Classify Hypertension (HTN). Describe clinical features, complication and management of HTN.
- 3 Describe the etiology clinical features, complications and management of Iron deficiency anaemia.
4. Describe the etiology, clinical features, complications and management of Bronchial Asthma.
5. Classify Jaundice. Describe the clinical features and management of Jaundice.
6. Discuss etiology, clinical features, complications and management of Hypothyroidism.

II. Write short notes on any five

6X5=30

7. Stomatitis
8. Acute Appendicitis
9. Obesity
10. Tetanus
11. Leprosy
13. Congenital Heart Disease

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
CERTIFICATE COURSE
BIOLOGY
QP CODE 1103

Time: 1. ½ hrs

Max. Marks: 45

I. LONG ESSAY- ANSWER ANY ONE

1x10= 10

1. Draw a neat labeled diagram of the nephron and describe the formation of urine.
2. Describe bacterial structure with neat labeled diagram

II. WRITE SHORT NOTES ON ANY FIVE

5X5 = 25

3. Classify Enzymes. Write their actions.
4. Functions of blood.
5. Human Blood group.
6. Structure of Neuron.
7. Types of connective tissues with an example.
8. Placenta and its function.
9. Structure of Sperm.

III. WRITE SHORT ANSWERS

5x2=10

10. Expand AIDS
11. Mention two types of Cell division
12. Name two viruses.
13. What is Fertilization?
14. Mention three parts of brain

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical Laboratory Technology

QP CODE — 2104

Subject: Pathology

Time 3 Hrs.

Max. Marks: 90.

I. LONG ESSAY : ANSWER ANY TWO : (2x10=20)

1. Mention the methods of estimation of Haemoglobin. Write a note on Sahli's Haemoglobin estimation- Principle, procedure, advantages and disadvantages. (2+2+2+2+2)
2. Write the steps of tissue processing. Write a note on embedding. (5+5)
3. Write briefly on methods of urine collection. Write in detail about chemical examination to estimate proteins and sugars. (2+4+4)

II. SHORT ESSAY : ANSWER ANY TEN: (10x5=50)

4. Absolute Eosinophilic Count
5. Write a short note on Anti coagulant used in different tests in the medical laboratory.
6. Write a short note on Quality Control in haematology
7. Blood Indices
8. Packed cell volume
9. Write a short note on various blood components used in blood bank.
10. Reticulocyte count
11. Write a note on various tests done to estimate sugars in urine.
12. Decalcification in histopathology
13. Paraffin embedding in histopathology
14. Clearing agents used in histopathology
15. Rothera's test

III. SHORT Answers (10x2=20)

16. Name two methods to estimate ESR
17. Name two abnormal RBC's
18. Name two stains used in cytology
19. Name two types of microtome knife
20. Draw a neat labelled diagram of eosinophil
21. Name two preservatives used for urine analysis
22. Name two leucocytes
23. Name any two decalcifying agent used in histopathology
24. Name any two fixatives used in cytology
25. Name any two casts found in urine

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN

HEALTH INSPECTOR

QP CODE — 2112

Subject: Paper II

Time 3 Hrs.

Max. Marks: 90.

I. Long Essay — Answer any TWO.

2x10=20

1. What are "Food Toxins". Describe the epidemiology and prevention of lathyrism.
2. List some water borne diseases. Write the steps of water purification by rapid sand Filtration.
3. Mention parasitic diseases in humans. Discuss the lifecycle of malarial parasite.

II. Write short notes on any TEN

10x5=50

4. Preventative measures for protein energy malnutrition (PEM).
5. Comfort zone.
6. Mass drug administration for filariasis.
7. Global warming.
8. Difference between shallow and deep well.
9. Overcrowding.
10. Enumerate mosquito control methods
11. Milk borne diseases
12. Sanitation barrier.
13. Prevention of scabies.
14. Prevention and control of air pollution.
15. Sulabh Souchalaya.

III. Write short answers.

10x2 =20

16. Balanced diet.
17. Define health.
18. Pasteurization.
19. Disease transmitted by sandfly.
20. Superchlorination.
21. Pellagra.
22. Food adulteration.
23. Effects of noise exposure.
24. Food fortification.
25. Diet survey

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN

Medical X-Ray Technology

QP CODE — 2123
Subject: Physiology

Time : 1. ½ Hrs

Max marks: 45

I. Long essay - Answer any one.

1X10=10

- 1) Define cardiac cycle. Describe various events of cardiac cycle with pressure and volume changes. .
- 2) Define Hypoxia. Describe types of hypoxia.

II. Short essay - Answer any five

5X5=25

- 3) Mention the functions cerebellum.
- 4) Write the functions of saliva.
- 5) With neat labeled diagram Nephron. Mention the functions of Kidney.
- 6) Write composition and function of cerebrospinal fluid (CSF).
- 7) Define Anemia. Describe in brief Iron deficiency anemia
- 8) Define Lung volume and Capacities. And give its normal value.
- 9) Write a note on Electrocardiogram (ECG).

III. Short Answers

5X2=10

- 10). Mention two function of hemoglobin.
- 11). Write functions of skeletal muscle.
- 12) Give any two functions of gastric juice.
- 13) Name any two contraceptive measures for females contraception.
- 14) Give two characteristics feature of Acromegaly.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
OT TECHNOLOGY

Time 3 Hrs.

Max. Marks: 90.

SECTION – A Anatomy (Write in separate answer book) QP CODE – 2135

I. LONG ESSAY ANSWER ANY ONE

1 x 10 = 10

1. Name the parts of female reproductive system. Describe uterus in detail
2. Name the parts of alimentary system. Describe pancreas in detail

II. WRITE SHORT NOTES ON ANY FIVE

5 x 5 = 25

3. Synovial joint
4. Urinary bladder
5. Trachea
6. Stomach
7. Stratified epithelium
8. Appendix

III. WRITE SHORT ANSWERS

5 x 2 = 10

9. Name 2 muscles of abdomen
10. Name layers of scalp
11. Name the parts of vertebra
12. Name the parts of urinary system
13. Name the ventricles of brain

SECTION – B, Physiology (Write in separate answer book) QP CODE – 2136

I. LONG ESSAY - ANSWER ANY ONE

1 x 10 = 10

- 1) Name the hormones of pituitary gland. Describe in detail the action of oxytocin hormone.
- 2) Describe the composition and functions of blood.

II. WRITE SHORT NOTES ON ANY FIVE

5 x 5 = 25

- 3) Functions of Parathyroid hormone.
- 4) Functions of all types of Muscles.
- 5) Draw a neat labeled diagram of Nephron. Add a note of Functions kidney.
- 6) Describe in details the events of Cardiac cycle.
- 7) Explain the transport of oxygen and carbon dioxide in blood.
- 8) Give functions of ear. Add a note on maintenance of equilibrium.
- 9) Functions of Bile juice.

III. WRITE SHORT ANSWERS

5 x 2 = 10

- 10) Name any two endocrine glands.
- 11) Name any two functions of Neuron.
- 12) What is polycythemia? Give the normal count of erythrocytes (RBC's).
- 13) Mention the functions of Placenta.
- 14) Name two hormones secreted by Pancreas.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL RECORD TECHNOLOGY
Subject: Hospital Statistics & Biostatistics
QP CODE – 2145

Time 3 Hrs.

Max. Marks: 90.

I. Long Essays.

4x10=40

1. What are the sources of health information? What is census? Write briefly about census.
2. What are the measures of central tendency? explain.
3. Define sampling. Describe the different methods of sampling with examples.
4. What is data .Write briefly about tabulation and presentation of data.

II. Write briefly on any TEN.

10x4=40

5. What are primary hospital data.
6. Uses of computers in medical records department.
7. Organization of medical records department.
8. How do you prepare daily statistics of out patients?
9. Alpha-Index cards.
10. Which are the central admitting and enquiry services.
11. Uses of hospital statistics.
12. Record linkage.
13. Uses of birth and death registration.
14. How to calculate bed turnover ratio.
15. Admission and discharge analysis.

III. Write briefly on any Five.

5x2=10

16. Pie chart.
17. Chi-square test.
18. Regression
19. Define Biostatistics.
20. Name two communicable diseases.
21. Medical audit.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY

Time 3 Hrs.

Max. Marks: 90.

SECTION – A Anatomy (Write in separate answer book) QP CODE – 2155

I. LONG ESSAY— ANSWER ANY ONE 1 x 10 = 10

1. Name the parts of central nervous system. Describe spinal cord in detail
2. Name the parts of alimentary system. Describe stomach in detail.

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

3. Bronchopulmonary segments of lung
4. Synovial joint
5. Histology of compact bone
6. Pancreas
7. Pituitary gland
8. Uterus

III. WRITE SHORT ANSWERS 5 x 2 = 10

9. Name the salivary glands
10. Name the parts of urinary system
11. Name two differences between skeletal and cardiac muscle
12. Name 2 muscles of upper limb
13. Name 2 bones of lower limb

SECTION – B Physiology (Write in separate answer book) QP CODE – 2156

I. Long essay - Answer any one. 1X10 =10

- 1) Define Cardiac cycle. Explain with the help of a diagram the mechanical changes during cardiac cycle (2+8)
- 2) Explain the process of formation of Urine.

II. Short essay - Answer any five 5X5=25

- 3) Haemoglobin.
- 4) Non-excretory functions of kidney.
- 5) E.S.R. (Erythrocyte sedimentation rate).
- 6) E.C.G. (Electro cardiogram)
- 7) Acid base balance
- 8) Heart sounds.
- 9) Conducting system of heart.

III. Short Answers 5X2=10

- 10) Write normal values of a) pulse b) Blood pressure.
- 11) Name any two factors affecting P.C.V. (Packed cell volume)
- 12) Define Glomerular Filtration rate (G.F.R).What is it's normal value?.
- 13) Write normal values of serum a) Sodium b) Pottasium.
- 14) Name any two functions of kidney.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN

DENTAL HYGIENE

Time : 1.1/2 Hrs.

Max. Marks : 45

Section- A, General Biochemistry (Write in separate answer book)

QP code - 2185

I. Long Question - Answer any ONE

1 x 10 = 10

- 1) Describe the effects of malnutrition on oral health
- 2) Describe the general food requirement for growth, maintenance and repair of the body.

II. Write short notes on any THREE

3x5 = 15

- 3) Special diet in maxillofacial injury cases.
- 4) Ascorbic acid
- 5) Rickets
- 6) Functions of calcium

Section- B, Radiology (Write in separate answer book)

QP code - 2186

I. Write short notes:

4x5 = 20

1. Radiation hazards and protection against it
2. Bisecting angle technique.
3. Bite wing radiograph.
4. Structure of an atom

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

I DPT Microbiology

Q.P code -2194

Time 3 Hrs.

Max. Marks: 90.

I. Long assay (answer any two)

2 x 10 = 20

1. Discuss in detail lab diagnosis of Enteric fever
2. Define and classify immunity. Discuss in detail Active immunity.
3. Describe with neat labelled diagram structure of HIV virus. Add a note on the modes of transmission.

II. Write short notes (any ten)

10 x 5 = 50

4. Robert Koch
5. Transmission of Hepatitis B virus.
6. Biomedical waste management
7. Catalase test
8. Lab diagnosis of cholera
9. Lab diagnosis of viral infections
10. Universal precautions
11. Swine flu
12. Lab diagnosis of Entamoeba histolytica
13. Dermatophytes
14. Inclusion bodies
15. Food poisoning.

III. Write short answers

10 x 2 = 20

16. Name two transport media
17. Name two H₂S producing bacteria.
18. Name two differences between gram positive and gram negative bacteria.
19. Mention two uses of blood agar
20. Name two bacterial vaccines
21. Name two DNA viruses
22. Name two parasites causing human infections.
23. Name two routes of HBV Virus transmission.
24. name two acid fast bacilli
25. Name two yeast like fungus.

PARAMEDICAL BOARD, BANGALORE

ANNUAL EXAMINATION SEPTEMBER - 2017

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) Define Orthosis and write its types? Discuss in detail about the spinal orthosis.
- (2) Describe the assessment and management of Cerebellar ataxia.
- (3) Explain the importance of assessment and screening test for neonates.
- (4) Explain in detail the characteristics and types of muscular dystrophies, assessment and physiotherapy management of Duchenne Muscular Dystrophy (DMD).
- (5) Describe the term Prosthesis and Orthosis. Discuss the different types of upper and lower limb prosthesis.

II. Write short notes on any FIVE

5 X 5 = 25

- (6) Physical problems of old age.
- (7) Speech therapy.
- (8) Postnatal physiotherapy.
- (9) Pelvic floor muscle weakness.
- (10) Cubitus valgus.
- (11) Genu recurvatum.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL RECORD TECHNOLOGY
Subject: Medical Surgical Coding
QP CODE – 3144

Time 1 Hrs.

Max. Marks: 20.

I. ANSWER ANY FOUR QUESTIONS

4 x 5 = 20

- 1) Write about Statistical classification of Diseases.
- 2) What is Coding? Why do we need to code?
- 3) Define Diagnosis
- 4) Explain Breifly about the ICD 10th Edition (Voli-1,2,&3)
- 5) Expand the following abbreviations:

A: HIV

B: EEG

C: RHD

D: LFT

E: CSF

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
II DPT GENERAL SURGERY AND ORTHOPAEDICS

Q.P code -3194

Time 3 Hrs.

Max. Marks: 90.

I. Long Essay - Answer any TWO

2 X 15 = 30

- 1) What are tumours? Explain the surgical management of tumours.
- 2) What is intra-cranial aneurysm? Write in detail about its management.
- 3) What is ulcerative colitis? Write in detail about its management.

II. Write short notes on any THREE

3X15=15

- 4) Tendon transfer
- 5) Blood transfusion
- 6) Shock
- 7) Hydrocephalus

III. Answer any TWO

2 X 15 = 30

- 8) Discuss the clinical features and clinical management of Lumber L4-L5 fracture with spinal cord injury.
- 9) Discuss the clinical features and management of Trochantric fracture of Femur.
- 10) Discuss the clinical features and management of Head injury and fracture Mandible.

IV. Write short notes on any THREE

3X5=15

- 11) Greenstick fracture
- 12) Inter costal drainage
- 13) Lobectomy
- 14) Angioplasty

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
Common paper for all First Year Certificate courses
ENGLISH
QP CODE -1104

Time 1.1/2 Hrs.

Max. Marks: 45.

I. WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING 15 X 1=15

- 1) Corruption
- 2) Traffic Jam

II. ANSWER ANY ONE 10 X 1=10

- 3) Write a letter to your father asking him to take you to your native place
- 4) Write a letter to your local councilor about the Swachh Bharat Abhiyan campaign organized by your school.

III. WRITE THE OPPOSITE GENDER OF 5X1=5

- 5) Maid 6) Salesman 7) Actor 8) Father-in-law 9) Dog

IV. WRITE THE OPPOSITE OF THE FOLLOWING 5X1=5

- 10) True 11) Top 12) Back 13) Quick 14) Far

V. MAKE SENTENCES USING THE FOLLOWING 5X1=5

- 15) Although
- 16) While
- 17) As soon as
- 18) Because
- 19) More than

VI. FILL IN THE BLANKS 5X1=5

- 20) The sun sets _____ the west.
- 21) I like volleyball _____ cricket.
- 22) The girl is fond _____ music.
- 23) Honest man speaks _____ truth
- 24) College begins _____ Monday

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical Laboratory Technology

QP CODE — 2105

Subject: Microbiology

Time 3 Hrs.

Max. Marks: 90.

I. Long assay (answer any two)

2 x 10 = 20

1. Mention the different types of microscopes. Write in detail about dark ground microscopy
2. Classify culture media. Write in detail preparation of any one media
3. Draw a neat labeled diagram of bacterial cell and write functions of each organelle.

II. Write short notes (any ten)

10 x 5 = 50

4. Passive immunity
5. Louis Pasteur
6. Pasteurisation
7. Steps of hand wash
8. Antibody
9. Indole test
10. Gram stain
11. Transport media
12. RCM
13. Bacterial growth curve
14. Cold sterilisation
15. Washing of culture plates

III. Write short answers

10 x 2 = 20

16. Name two gram negative cocci
17. Name two selective media
18. Name two gaseous disinfectants
19. Name two uses of tyndallisation
20. Name two motile bacteria
21. Name two uses of negative staining
22. Give two uses of blood agar
23. Name two animals used in microbiology
24. Name two urease negative bacteria
25. Name two bacterial antigens

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN

HEALTH INSPECTOR

QP CODE — 2113

Subject: Paper III

Time 3 Hrs.

Max. Marks: 90.

I. Answer Any TWO.

2x10=20

1. Name the arthropods of medical importance .Discuss in detail about itch mite.
2. Discuss descriptive epidemiology in detail.
3. Define statistics. What are the uses of statistics .Name different branches of statistics?

II. Short Notes on any TEN.

10x5=50.

4. Census.
5. Insecticides.
6. Advice to travelers.
7. Anti-larval measures.
8. Notifiable diseases.
9. What is Vertical transmission? How HIV is transmitted
10. Sampling methods in statistics.
11. Herd immunity
12. Standard deviation.
13. Uses of epidemiology.
14. Cold chain.
15. Write the national immunization schedule.

III. Write Short Answers.

2x10=20.

16. Epidemic curve.
17. Isolation
18. Pie-chart.
19. Personal hygiene.
20. Quarentine.
21. Standard of living
22. Sources of vitamin c
23. Enumerate determinants of health.
24. Primary health care.
25. Crude death rate.

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
Medical X-Ray Technology

QP CODE — 2124
Subject: Pathology

Time : 1. ½ Hrs

Max marks: 45

I. LONG ESSAY: Answer any one:

(1×10=10)

1. Etiology of pneumonia. What are the stages and complications of pneumonia.
(3+4+3)
2. Define inflammation. Mention the signs of inflammation, types with examples.(2+2+6)

II. SHORT ESSAY: Answer any Five:

(5×5=25)

3. Tuberculosis of bone
4. Osteomyelitis- types and examples
5. Kwashiorkor
6. Obesity
7. Emphysema
8. Edema
9. Healing of fracture

III. SHORT NOTES:

(5×2=10)

10. What do you mean by sequestrum?
11. Vitamin A deficiency
12. What are the types of necrosis?
13. Give two examples of hyperplasia
14. Types of gall stones

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
I DPT - PSYCHOLOGY

Q.P code -2195

Time 3 Hrs.

Max. Marks: 90.

I. Answer any THREE

3 X 15 = 45

1. Describe the process of Memory. List the causes of forgetting.
2. List the fundamental principles of learning. Describe classical conditioning and apparent learning. Add a note on the laws of learning.
3. What are Neuro-psychological test? Elaborate their uses.
4. Explain the term "Heredity and Environment". What roles do they play in development of an individual?

II. Answer any THREE

3 X 10 = 30

5. How will you change the negative attitude of a patient into positive?
6. What are remembering and forgetting? How memory can be improved?
7. What is the relevance of intelligence in psychology?
8. Describe the various branches of Psychology & it's use, in Physiotherapy

III. Write short notes on any FIVE

5 X 3 = 15

9. Analytical reasoning
10. Creative thinking
11. Sources of Frustration
12. Hallucination and Illusions
13. Maslow's hierarchy of needs
14. Human relations
15. Delusions

PARAMEDICAL BOARD, BANGALORE
ANNUAL EXAMINATION SEPTEMBER - 2017
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. Explain Ankylosing Spondylitis and discuss the Physiotherapy (PT) management of chronic Ankylosing Spondylitis
2. What is Plantar Fascitis? Write the Physiotherapy (PT) management for Plantar Fascitis.
3. PT management of Myasthenia gravis.
4. Describe the role of Physiotherapist in ICU.
5. Indication for Cardiac rehabilitation, explain Cardiac rehabilitation programme of phase I after Myocardial Infarction (MI).
6. Discuss the physiotherapy assessment and management of 60 yrs old man with Cerebral Ataxia.

II. Write short notes on any FIVE

5 X 6 = 30

7. Reynaud's disease
8. Primitive reflex
9. Diabetic Foot
10. Upper Motor Neuron (UMN) lesion
11. Deep Vein Thrombosis (DVT)
12. BOBATH Technique

PARAMEDICAL BOARD, BANGALORE
Annual Examination, September 2017
FIRST D.P.T-SOCIOLOGY & STATISTICS
QP CODE – 2196

Note: Write Section A & Section B in Separate answer books

Time: 3 hrs

Max. Marks: 90

Section A - Sociology

I. Answer any two

2 x 15 = 30

- 1) Enumerate social group. Role of Socio-economic status on health and sickness.
- 2) Define family. What are the functions of the family. Write a note on the influence of family and disease.
- 3) Enumerate the social problems faced by the disabled.. Cause of population explosion and the measures taken to control it.
- 4) Define culture. Describe the various cultural factors with examples. Role of culture in health and disease.

II. Write essay - any Five

5x 6 = 30

- 5) Socialization
- 6) Social security
- 7) Industrialization
- 8) Advantages and disadvantages of joint family
- 9) Acculturation
- 10) Define social and mention social factors affecting health.
- 11) Poverty and employment.

Section B - Statistics (write in separate answer book)

I. Answer any two

2 x 7 = 14

- 1) Name statistical averages with their merits and demerits. How do you apply the same in the medical field.
- 2) Define statistics. What are the uses of statistics in physiotherapy. Name the sources of health statistics.
- 3) What are vital statistics. Describe in detail about vital statistics.

II. Write in brief any four

4 x 4 = 16

- 4) Census
- 5) Probability
- 6) Chi-square test
- 7) standardized death rate
- 8) Linear regression
- 9) Health survey
