

**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, DECEMBER 2014**

**II Year D.P.T**

**PATHOLOGY**

**QP CODE - 3191**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essays – Answer any THREE**

**3 x 10 =30**

- 1) Define Thrombosis. Write the causes, mechanism of formation of THROMBUS. Add a note on fate of thrombus.
- 2) What are fat soluble vitamins? Write in detail the manifestations of vitamin A deficiency.
- 3) Define Anemia. Classify anemia and write briefly on iron deficiency anemia
- 4) What is Osteomyelitis? Write causes and pathology of Pyogenic Osteomyelitis

**II. Write short notes on any TWELVE**

**12 x 5 =60**

- 5) Meningitis
- 6) Varicose veins
- 7) Causes and complications of Myocardial infarction.
- 8) Healing by Primary intention.
- 9) Classify leukemias
- 10) Rheumatoid arthritis
- 11) Atrophy
- 12) Coagulative necrosis
- 13) Diabetic complications
- 14) Causes of Emphysema and types of emphysema
- 15) Morphology of Osteoclastoma
- 16) Pulmonary Tuberculosis
- 17) Cirrhosis of Liver

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Ophthalmic Technology/ III Year Certificate course in**  
**Ophthalmic Technology**  
**PAPER – I**  
**QP CODE – 3161**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any TWO**

**2 x 10 = 20**

- 1) Describe the preparation of trolley for Cataract Surgery.
- 2) Describe the steps of chalazion surgery
- 3) Describe OT sterilization

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Method of Sub Conjunctival injection in a post Cataract Surgery Patient.
- 5) Method of Lachrymal syringing
- 6) Method of cleaning Schiotz Tonometer
- 7) How do you prepare cotton swab sticks
- 8) Setting up for I/V mannitol drip
- 9) What is entropion and its causes
- 10) Laying of a trolley for post-operative dressing
- 11) Maintenance of Keratometer
- 12) Neutralization of Lenses
- 13) Transposition of lenses
- 14) Minor procedure of removal of corneal FB
- 15) Drugs used for mydriasis in Refraction

**III. Write short answers**

**10 x 2 = 20**

- 16) Various routes of drug delivery in eye
- 17) Maintenance of Synaptophore
- 18) Methods of slit Lamp Examination
- 19) Epilation
- 20) Use of B-Scan
- 21) Maintenance of Gonio Lens
- 22) 2 causes of Childhood Blindness
- 23) 2 Causes of adult Blindness
- 24) Use of Atropine Eye Drops
- 25) Uses of Natamycin

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Medical Laboratory Technology/III Year Certificate course**  
**in Medical Laboratory Technology**  
**BIOCHEMISTRY**  
**QP CODE- 3101**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY – ANSWER ANY TWO**

**2 x 10=20**

- 1) Describe the principles, applications and different types of auto analyzer.
- 2) Outline TCA cycle and give its energetics?
- 3) Describe quality control both internal and external.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 =50**

- 4) Semi-Autoanalyser.
- 5) ELISA.
- 6) LFT.
- 7) Digestion and absorption of lipids.
- 8) GTT.
- 9) Precautions and Safety measures.
- 10) Formation of Urea.
- 11) Reference range.
- 12) What is electrophoresis? Write its application.
- 13) Constituents of gastric juice.
- 14) Abnormal constituents of urine.
- 15) Ketogenesis.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Formation of uric acid.
- 17) Hay's test.
- 18) Normal range of sodium and potassium.
- 19) Vandenburg test.
- 20) Clearance test.
- 21) What is normal serum uric acid level? In which disease it is increased?
- 22) Two enzymes in protein digestion.
- 23) Recording of patient data.
- 24) Test for reducing sugar in urine.
- 25) What is normal serum protein? Mention A:G ratio.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Health Inspector/ III Year Certificate course in Health**  
**Inspector**  
**PAPER – I**  
**QP CODE – 3111**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any two**

**2 x 10 = 20**

- 1) Enumerate mosquito borne diseases. Describe epidemiology and control of malaria.
- 2) Enumerate National Health Programmes. Add a note on vitamin A prophylaxis programme.
- 3) Enumerate the risk factors for Coronary Heart Disease. Explain in brief the prevention and control of Coronary Heart Disease.

**II. Write short notes on any ten**

**10 x 5 = 50**

- 4) Etiological factors of various cancers
- 5) Describe levels of prevention with examples.
- 6) National Immunization schedule
- 7) Define Primary Health Care. Write elements of Primary Health care
- 8) First aid Burns
- 9) Define Blindness. Write the causes of blindness.
- 10) Anganwadi centre
- 11) Epidemiology of tuberculosis
- 12) Road Traffic Accidents
- 13) Pulse polio Immunization
- 14) Obesity
- 15) Sub centre.

**III. Write short answers**

**10 x 2 = 20**

- 16) Self care
- 17) Blanket treatment
- 18) Integrated Counselling and Testing Centre (ICTC)
- 19) DOTS
- 20) Iron Folic Acid Tablets
- 21) Disease transmitted by faeco-oral route
- 22) Rule of halves in hypertension
- 23) ASHA
- 24) Health for all
- 25) Mass drug administration in Filariasis

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Medical X- Ray Technology/ III Year Certificate course**  
**in Medical X- Ray Technology**  
**RADIOGRAPHY INCLUDING RADIOLOGY PHYSICS , (O.S) R-I**

**QP CODE – 1001**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Film screen radiography
- 2) Classify grids
- 3) Barium swallow, meal and follow through

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Shoulder joint
- 5) T-tube cholangiogram
- 6) Fluoroscopy
- 7) Cassette
- 8) Replenishers
- 9) Lead apron
- 10) Ankle joint
- 11) Transformers
- 12) CR and DR
- 13) Half value layer
- 14) Uses of Ultrasonography
- 15) Bed side radiography

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) First line treatment in contrast reaction
- 17) Hangers
- 18) Views for C2 vertebra
- 19) Grid ratio
- 20) Safe light
- 21) Line focus principle
- 22) Constituents of developer
- 23) Indications of HSG
- 24) Cathode and anode
- 25) Classify CT generation

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Medical X- Ray Technology/ III Year Certificate course**  
**in Medical X- Ray Technology**  
**RADIOGRAPHY INCLUDING RADIOLOGY PHYSICS, (N.S) R-I**  
**QP CODE – 3121**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Mention the different components of a conventional x-ray machine and enumerate the functions of each component
- 2) What is electromagnetic radiation? Mention the different types of rays on the electromagnetic spectrum; add a note on the properties of x-rays.
- 3) Elaborate the steps involved in x-ray production

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Fluorescence
- 5) PACS
- 6) Types of grids
- 7) Half life
- 8) X-ray developers
- 9) Compton effect
- 10) Fixers
- 11) Dark room
- 12) X-ray collimators
- 13) Ionizing and non-ionizing radiation.
- 14) Radiation protection devices
- 15) Structure of atom

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Care of intensifying screens
- 17) High mA technique
- 18) Use of cones
- 19) Film artefacts
- 20) Silver halide crystals
- 21) Potter bucky diaphragm
- 22) Single emulsion film
- 23) Film badge
- 24) Radiation sickness
- 25) Film hangers

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Medical Records Technology/ III Year Certificate**  
**course in Medical Records Technology**  
**MEDICAL TERMINOLOGY**  
**QP CODE – 3141**  
**MEDICAL TERMINOLOGY**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER THE FOLLOWING**

**1 x 10 =10**

- 1) Explain about the importance and objectives and sources of Medical Terminology.

**II. WRITE THE PHOBIAS FOR THE ANY TEN**

**10 x 1 = 10**

- |            |           |
|------------|-----------|
| 1) Conio   | 7) Mytho  |
| 2) Thanato | 8) Sito   |
| 3) Osmo    | 9) Algo   |
| 4) Pyro    | 10) Gamo  |
| 5) Latro   | 11) Aleno |
| 6) Hydro   | 12) Poly  |

**III. DIFFERENTIATE THE FOLLOWING TERMS**

**5 x 2 =10**

- 1) Hypertension and Hypotension
- 2) Tuberculosis and Tubercular
- 3) Suppuration and Suppression
- 4) Palpitation and palpation
- 5) Mucous and Mucus

**IV. DEFINE THE FOLLOWING**

**15 x 1 = 15**

- |                   |                |
|-------------------|----------------|
| 1) Apnea          | 9) Leukoderma  |
| 2) Cancer         | 10) Obesity    |
| 3) Otomycosis     | 11) Trauma     |
| 4) Pruritis       | 12) Ulcer      |
| 5) Neonatal       | 13) Virus      |
| 6) Hyper hydrosis | 14) Pyometrium |
| 7) Insomnia       | 15) Varix      |
| 8) Macrocoria     |                |

**V. GIVE THE MEANING OF FOLLOWING**

**20 x 1 =20**

- |          |            |           |           |
|----------|------------|-----------|-----------|
| 1) Myo   | 6) Nephro  | 11) Epi   | 16) Inter |
| 2) Cysto | 7) Procto  | 12) Dia   | 17) Hyper |
| 3) Crani | 8) Spondyl | 13) Trans | 18) Anti  |
| 4) Lip   | 9) Ophthal | 14) Retro | 19) Chole |
| 5) Litho | 10) Osteo  | 15) Para  | 20) Hepat |

**PTO...**

**VI. GIVE THE MEDICAL TERMS FOR THE FOLLOWING**

**15 x 1 = 15**

- |                                 |   |
|---------------------------------|---|
| 1) Stone in Kidney              | 9) Loss of sensation                      |
| 2) Head Ache                    | 10) Increased blood pressure              |
| 3) Spinal Paralysis             | 11) Excision of Tongue                    |
| 4) A benign neoplasm of bone    | 12) Difficulty in swallowing              |
| 5) Inflammation of the vertebra | 13) Hardening of kidney                   |
| 6) Sugar in Blood               | 14) Excessive vomiting in early pregnancy |
| 7) Rupture of the Uterus        | 15) Pain in Lumbar Region                 |
| 8) Deficiency of WBC            |   |

**VII. EXPAND THE FOLLOWING ABBREVIATION**

**10 x 1 = 10**

- |        |         |
|--------|---------|
| 1) PID | 6) ASOM |
| 2) USP | 7) RA   |
| 3) SSG | 8) HIV  |
| 4) URI | 9) ORIF |
| 5) BAT | 10) LBW |

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dental Mechanics / III Year Certificate course in Dental**  
**Mechanics**  
**(FINAL) (O.S) PAPER – I**  
**QP CODE – 1016**

**Time: 3 hrs**

**Max. Marks: 75**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Write in detail about casting defects/failures, its causes and management
- 2) What is Dental Surveyor? Discuss the uses and importance of dental Surveyor
- 3) Write in detail about principles of teeth arrangement.

**II. WRITE SHORT NOTES ON ANY EIGHT**

**8 x 5 = 40**

- 4) Major connectors
- 5) Dental ceramics classification and its two uses
- 6) Lab remount
- 7) Oral Screen
- 8) Denture repair.
- 9) Adams clasp
- 10) Hawley's appliance
- 11) Pontic
- 12) Tripoding
- 13) Gingivally approaching clasp

**III. WRITE SHORT ANSWERS**

**5 x 3=15**

- 14) Partial crown
- 15) Occlusal crest
- 16) Refractory cast
- 17) Sprue
- 18) Duplicating materials

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dental Mechanics / III Year Certificate course in**  
**Dental Mechanics**  
**COMPLETE DENTURES (N.S)**  
**QP CODE – 3171**

**Time: 1 1/2 hrs**

**Max. Marks: 45**

**I. LONG ESSAY**

**1 x 10 = 10**

- 1) Write about Mean value articulator and its uses?

**II. WRITE SHORT NOTES**

**5 x 5 = 25**

- 2) Write a note on different cast poring techniques
- 3) Principles of teeth arrangement
- 4) Write about preparation of special trays
- 5) Uses of Occlusal Rims
- 6) Overjet and Overbite

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 7) Keys of occlusion
- 8) Types of teeth
- 9) SPA factor
- 10) Finishing and polishing of dentures
- 11) Curve of Spee

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dental Hygiene / III Year Certificate course in**  
**Dental Hygiene**  
**Paper -I (O.S)**  
**QP CODE – 1020**

**Time: 3 hrs**

**Max. Marks: 75**

**I. Answer the following**

**4x 10=40**

- 1) Describe in detail principles of periodontal instrumentation.
- 2) Define and classify dental plaque; describe the various stages of dental plaque formation
- 3) Define and classify calculus; describe theories of mineralization of calculus.
- 4) Describe the aetiology, clinical features, histopathological changes in chronic gingivitis

**II. Write short notes on ANY SEVEN:**

**7 x 5 =35**

- 5) Extrinsic stains
- 6) Periapical cyst
- 7) Brushing techniques
- 8) Acute pericoronitis
- 9) Home care instructions and their importance
- 10) Aphthous ulcers
- 11) Ultrasonics Scalers

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dental Hygiene / III Year Certificate course in**  
**Dental Hygiene**  
**DENTAL HYGIENE & ORAL PROPHYLAXIS (N.S)**  
**QP CODE – 3181**

**Time: 1 1/2 hrs**

**Max. Marks: 45**

**I. Long essay**

**1x 10=10**

- 1) Define and classify calculus. Describe various theories of calculus formation.

**II. Write short notes**

**5 x 5 =25**

- 2) Peridontal abscess
- 3) Extrinsic and intrinsic stains
- 4) Clinical features of Gingivitis
- 5) Stages of dental plaque formation
- 6) Chronic peridontitis

**III. Write short answers**

**2 x 5 = 10**

- 7) Gingival abscess
- 8) Periodontal pocket
- 9) Interdental cleaning aids
- 10) Oral cancer
- 11) Tropical fluoride application

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in OT Technology/ III Year Certificate course in OT**  
**Technology**  
**GENERAL ANAESTHESIA & OPERATIVE PROCEDURE (O.S)**  
**QP CODE – 1005**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe preparation and procedure of spinal anaesthesia.
- 2) Describe the preparation of a patient posted for laparoscopic cholecystectomy.
- 3) Describe the steps of CPR.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Blood grouping and typing
- 5) Fumigation
- 6) Halothane
- 7) Appendicectomy
- 8) Suture materials
- 9) Propofol
- 10) Nasopharyngeal airway
- 11) Trendelburg position
- 12) Vicarious liability
- 13) Pulse oxymeter
- 14) Ropivacaine
- 15) Ephedrine

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Proctoscope
- 17) Venesection
- 18) Suction apparatus
- 19) Foleys Catheter
- 20) Scoline
- 21) Tonsillectomy
- 22) Cystoscopy
- 23) Aspiration
- 24) Epidural needle
- 25) Varicose vein stripping

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in OT Technology/ III Year Certificate course in**  
**OT Technology**  
**ANAESTHESIA & ALLIED TOPICS (N.S)**  
**QP CODE – 3131**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Write in detail about preanaesthetic evaluation and various drugs used as premedication.
- 2) Write in detail about CPR
- 3) Classify muscle relaxants and write in detail about each one.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Problems in Paediatric patients
- 5) Non-steroidal anti-inflammatory drugs
- 6) Induced hypotension
- 7) Complications of Spinal anaesthesia.
- 8) Brachial Plexus Block
- 9) Complications after extubation of GA patient
- 10) Sevoflurane
- 11) Propofol
- 12) Safety features in Anaesthesia Machine
- 13) Electrical injuries during anaesthesia
- 14) Care of Anaesthesia Equipment
- 15) Complications of Blood Transfusion

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Fentanyl
- 17) Hydrocortisone
- 18) Accupuncture
- 19) Balanced anaesthesia
- 20) Laryngoscope
- 21) Spinal Needles
- 22) Informed consent
- 23) Entonox
- 24) Dopamine
- 25) Drug Interactions

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dialysis Technology/ III Year Certificate course in**  
**Dialysis Technology**  
**FUNDAMENTALS OF DIALYSIS TECHNOLOGY (FINAL) (O.S)**  
**QP CODE – 1012**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe the complications of dialysis in a patient on long term dialysis.
- 2) Discuss the etiology, clinical features, and management of acute nephritis
- 3) How do you monitor a patient on haemodialysis.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Evaluation of patient before haemodialysis
- 5) Ultrafiltration
- 6) Renin Angiotensin system
- 7) Predialysis for operation of equipment
- 8) A.V. Fistula.
- 9) Pseudogout
- 10) Modes of heparinisation
- 11) Reuse of dialysers
- 12) Hypotension during analysis
- 13) Hemoperfusion
- 14) Protamine sulphate
- 15) Reverse osmosis.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Name two complications of hemodialysis.
- 17) Name two plasma proteins
- 18) Name two causes for acute chest pain in dialysis patient.
- 19) Name two functions of proximal convoluted tubules of kidney
- 20) Write two complications of acute tubular necrosis.
- 21) Name two members of dialysis team
- 22) What is deionization
- 23) Name two psychiatric problems associated with haemodialysis
- 24) Name two poisonings treated by dialysis.
- 25) Name two immune suppressant drugs.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dialysis Technology/ III Year Certificate course in**  
**Dialysis Technology**  
**FUNDAMENTALS OF HAEMODIALYSIS & COMPONENTS (N.S)**

**QP CODE - 3151**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe the principles of Hemodialysis and add a note on Kt/V
- 2) Discuss the problems associated with initiation and performance of Haemodialysis, in a patient with diabetic kidney disease.
- 3) Describe various permanent accesses used for Haemodialysis , their advantages and disadvantages. Add a note on permacath.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Hemo study
- 5) Classification of dialyzers
- 6) Long term complications of haemodialysis
- 7) Protamine sulphate
- 8) Single use dialyzers
- 9) Complications of venous catheters at various sites
- 10) Access recirculation and its minimization
- 11) Softener regeneration
- 12) Infection control measures in Hemodialysis unit.
- 13) Management of convulsions during dialysis
- 14) Ethylene oxide sterilization.
- 15) Proportioning dialysate delivery system.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Low molecular weight heparin
- 17) Alarms during dialysis
- 18) Storage of dialysers
- 19) Activated charcoal
- 20) Functioning of dialysis unit
- 21) Sevelamer carbonate
- 22) Endotoxin
- 23) Hardness of water
- 24) Blood Sampling during dialysis
- 25) Fresh frozen plasma

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**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**Common paper for all I year Certificate Courses**  
**PHYSICS**  
**(OLD & NEW SCHEME)**  
**QP CODE - 1101**

**Time: 1 ½ hrs**

**Max. Marks: 45 New Scheme**  
**40 Old Scheme**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) What is electromagnetic induction? State Lenz's law and Faraday's law of electromagnetic induction. List the applications of electromagnetic induction
- 2) Define radioactive isotopes. Explain the properties of Alpha, Beta, Gamma rays and mention their uses.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Explain nuclear reactor.
- 4) Voltmeter
- 5) Surface tension
- 6) Thermal radiation
- 7) Capacitor
- 8) Friction
- 9) Ohm's Law

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Newton's Laws of gravitation
- 11) Types and uses of thermometer
- 12) Calorimeter
- 13) Law of conservation of momentum
- 14) Difference between nuclear fission and fusion.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**FIRST DPT – ANATOMY**  
**QP CODE – 2191**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Name the parts of reproductive system. Write briefly on uterus.
- 2) Name the parts of respiratory system. Write briefly on broncho-pulmonary segments
- 3) Name the parts of gastrointestinal system. Write briefly on stomach.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Pituitary gland
- 5) Temporo-mandibular joint
- 6) Histology of hyaline cartilage.
- 7) Chambers of heart
- 8) Tympanic membrane
- 9) Cisterna chyli
- 10) Venous sinuses of brain
- 11) Spleen
- 12) Biceps brachii
- 13) Pancreas
- 14) Right kidney
- 15) Lateral wall of nose

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Mention the parts of urinary tract
- 17) Name carpal bones
- 18) Name 4 muscles of lower limb
- 19) Name 4 cranial nerves
- 20) Name 4 facial muscles
- 21) Name endocrine glands
- 22) Name 4 bones of upper limb
- 23) Name 4 branches of external carotid artery
- 24) Coracoid process
- 25) Name 4 skull bones.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**III DPT – SPORTS SCIENCE & PHYSIOTHERAPY**  
**QP CODE – 3201**

**Time: 2 hrs**

**Max. Marks: 65**

**I. Long Essay - Answer any FOUR**

**4 x 10 =40**

- 1) Write in detail about the training and rehabilitation concept of a sports person
- 2) Write down common sports injuries as per anatomical distribution. Explain in detail about any two sports injuries
- 3) Define sprain and strain. Write the pathology of healing of ligaments, its clinical features and treatment.
- 4) Define golfers elbow. Write some of the problems arising from wrist and hand tendons and the management.
- 5) Write anatomy, pathology, clinical features and physiotherapy treatment of ilio-tibial tract syndrome.

**II. Write short notes on any FIVE**

**5 x 5 = 25**

- 6) Coxa vara
- 7) Bursitis
- 8) First aid
- 9) Priced treatment
- 10) Physical education
- 11) Ulcers.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**  
**II Year Certificate course/ I Year Diploma in Ophthalmic Technology**

**PAPER – I**  
**QP CODE 2161**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY – ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Discuss the different modalities of management of aphakia.
- 2) Discuss physiologic optics of presbyopia and its management
- 3) Discuss types of myopia and its management.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Discuss the various components of vision
- 5) Discuss principles of testing for visual acuity
- 6) What is centering? Discuss
- 7) Transposition of lenses
- 8) Bifocal -types
- 9) Laws of reflection
- 10) Layers of cornea
- 11) Types of astigmatism
- 12) Pinhole testing
- 13) Colour vision testing
- 14) Name the mydriatics used in refraction of child
- 15) Maddox rod.

**III. Write short answers**

**10 x 2 = 20**

- 16) Name the coats of eye ball
- 17) Name 2 contraindications for contact lens wear
- 18) Name 2 laws of reflection
- 19) Name material used in spectacle lenses
- 20) Total internal reflection
- 21) Use of prisms
- 22) IPD measurements
- 23) Asthenopia
- 24) Accommodation
- 25) Name 2 instruments used in recording IOP.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**

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

**Time: 3 hrs**

**Max. Marks: 90**

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

**Section- A, ANATOMY: QP CODE – 2101**

**I. Long Essay – Answer any ONE**

**1 x 10=10**

- 1) Draw a neat labeled diagram of excretory system. Briefly mention the gross anatomy of right and left kidney.
- 2) Mention the parts of gastro intestinal tract. Give brief description of gross anatomy of small intestine.

**II. Write short notes on any FIVE**

**5 x 5 =25**

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| 3) Histology of medium sized artery | 7) Histology of skeletal muscle |
| 4) Uterus                           | 8) Nasal septum                 |
| 5) Deltoid muscle                   | 9) Elbow joint                  |
| 6) Thyroid gland                    |                                 |

**III. Write short answers**

**5 x 2=10**

- |                                    |  |
|------------------------------------|--|
| 10) Name the tarsal bones          | 13) Name 2 branches of common carotid artery |
| 11) Name 2 muscles of arm.         | 14) Name 2 branches of sciatic nerve.        |
| 12) Name the Paranasal air sinuses |  |

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

**QP CODE – 2102**

**I. Long Essay – Answer any ONE**

**1 x 10=10**

- 1) Define blood, compositions and functions of blood.
- 2) Draw a neat labeled diagram of a nephron. Add a note on functions of kidney and renal function tests.

**II. Write short notes on any FIVE**

**5 x 5 =25**

- 3) Composition and functions of bile
- 4) Family planning methods in female
- 5) Draw a neat labeled diagram of neuromuscular junction
- 6) Myxedema
- 7) Functions of growth hormone
- 8) Hypoxia

**III. Write short answers**

**5 x 2=10**

- |                              |                              |
|------------------------------|------------------------------|
| 9) Anemia and polycythemia   | 12) PCV in males and females |
| 10) Menarche and menopause   | 13) Errors of refraction     |
| 11) Normal BP and heart rate |                              |

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**  
**I Year Diploma in Medical X- Ray Technology / II Year Certificate course**  
**GENERAL PHYSICS**  
**QP CODE- 2121**

**Time: 1 ½ hrs**

**Max. Marks: 45**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Explain step up and step down transformers. Add a note on autotransformers
- 2) Describe the production of X-rays. Add a note on rotating a node tube.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Full wave rectifiers
- 4) Neil Bohr's atomic model
- 5) Law of conservation of energy
- 6) Ohm's law
- 7) Characteristic radiation
- 8) Inverse square law

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Electric potential
- 10) Ammeter
- 11) Half value layer
- 12) Magnetic materials and properties
- 13) Radioactivity

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I Year Diploma in Medical Records Technology/II Year Certificate course**  
**MRS & MLA (O.S)**  
**QP CODE – 1007**

**Note: Write section A & Section B in separate answer books**  
**Time: 3 Hrs Max.**

**Marks: 90**

**Section- A. Medical Records Science (Write in separate answer book)**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Discuss about the organization and management of medical record department
- 2) Name the different type of indexes with importance of maintaining with one example

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Numbering system
- 4) Duties and responsibilities of MRT
- 5) Important functions of medical record department
- 6) Functions of central admitting office
- 7) Preparing case sheets for summons
- 8) Benefits of printed forms
- 9) Medical audit committee

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Retrieval    11) Misfiling    12) Diagnostics index card    13) Statistics    14) In-patient register

**Section- B. Medico Legal Aspects (Write in separate answer book)**

**QP CODE – 1007(O.S)**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Explain the types of cases using evidence from medical records in LIC and Malpractice cases.
- 2) Discuss the legal aspects of medical records

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Who are the persons exempted from personal appearance from the court?
- 4) Explain the difference between discharge and acquittal as per the code of criminal procedures
- 5) Write the rules and regulation release of information to government and other agencies
- 6) Under Indian penal code 1860 under general exemption which are the acts that are exempted from criminal liability?
- 7) What are the duties of public servant according to IPC?
- 8) Legal aspects of medical records in criminal cases
- 9) Wound certificate

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Warrant    11) FIR    12) Plaintiff    13) Evidence  
14) Proclamation

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I Year Diploma in Medical Records Technology /II Year Certificate course**  
**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 about the Numbering system and its merit and demerit
- 2) Define medical records and explain in detail about the contents component of medical record
- 3) Define summon. Explain the procedure followed in service of summons where defendant resides in another states and other countries?

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Write about the benefit of getting printed medical record forms?
- 5) Explain about various type of indexes maintained in medical record department?
- 6) Qualitative and quantitative analysis
- 7) Write in detail about the procedure followed for preparing summon record of court
- 8) Who is public servant according to Indian penal code
- 9) Which are the exceptional circumstances in which police officer can arrest without warrant?
- 10) Name the registers maintained in medical records with its importance
- 11) What is Estoppels and promissory estoppels?
- 12) Types of cases using evidence from medical records?
- 13) Write about the duties and responsibilities of medical record technician
- 14) What are the important functions of medical record department?
- 15) Explain the effect of non production of documents.

**III. WRITE SHORT ANSWERS**

**10 x 2=20**

- 16) High court
- 17) Patient will
- 18) Personal document
- 19) Wound certificate
- 20) Judgment
- 21) Legal representative
- 22) Accession register
- 23) Discharge analysis
- 24) OPD
- 25) Permanent filling

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I Year Diploma/II Certificate Course in Dental Mechanics**  
**Applied Physics, Chemistry and Mechanics (O.S)**

**PAPER – I (O.S)**  
**QP CODE - 1014**

**Time: 3 hrs**

**Max. Marks: 75**

**I. LONG ESSAY**

**4 x 10 =40**

- 1) Define element, compound and mixture. Write in detail difference between compound and mixture
- 2) What is solute solvent and solution? Differentiate between acid, base and salts
- 3) What is center of gravity? Write about specific gravity and Archimedes principle.
- 4) Discuss the various methods of heat transmission

**II. WRITE SHORT NOTES ON ANY SEVEN**

**7x 5 = 35**

- 5) Adhesion and cohesion
- 6) Surface hardness
- 7) Ductility and malleability
- 8) Electroplating
- 9) Co-efficient of thermal expansion
- 10) Soldering
- 11) Stress and strain
- 12) Viscosity
- 13) Boyle's law

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**  
**I Year Diploma/II Certificate Course in DENTAL MATERIAL AND**  
**METALLURGY (N.S)**  
**QP CODE – 2171**

**Time: 1 ½ hrs**

**Max. Marks: 45**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Mention the composition of Heat cure acrylic resin. Compare and contrast heat cure acrylic resin and self cure acrylic resin.
- 2) Write the composition, properties and uses of dental inlay waxes

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Gold alloys
- 4) Uses of gypsum products
- 5) Metallic denture base.
- 6) Soldering and welding
- 7) Corrosion
- 8) Separating media
- 9) Stainless steel

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Green strength
- 11) Type of investment material
- 12) Terra alba
- 13) Setting expansion
- 14) Karat fineness.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**  
**I Year Diploma/II Certificate Course in Dental Hygiene**  
**Note: Write section A & Section B in separate answer books**  
**PAPER – I (O.S)**

**QP CODE – 1018**

**Time: 3 hrs**

**Max. Marks: 75**

**Section – A, ANATOMY (write in separate answer book)**

**I. Long Question – Answer any TWO**

**2 x 10=20**

- 1) Name the salivary glands. Describe the structure of parotid gland
- 2) Describe the course, branches, and supply of the mandibular division of trigeminal nerve
- 3) Describe the structure of Temporomandibular joint. Add a note on various muscles acting on it.

**II. Write short notes on any FIVE**

**5 x 5 =25**

- |                           |                               |
|---------------------------|-------------------------------|
| 4) Nerve supply to tongue | 7) Palatine tonsil            |
| 5) Muscles of mastication | 8) Maxillary artery           |
| 6) Dental formula         | 9) Submandibular lymph nodes. |

**Section- B, PHYSIOLOGY (write in separate answer book)**

**QP CODE – 1018**

**I. Long Essay**

**1 x 10=10**

- 1) Describe with neat diagram the structure of human cell

**II. Write short notes on any FIVE**

**5 x 4 =20**

- 2) Red blood cells
- 3) Clotting factors
- 4) Thyroid hormones
- 5) Carrier mediated transport
- 6) Blood transfusion
- 7) Phases of deglutition.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**  
**I Year Diploma/II Certificate Course in Dental Hygiene**  
**GENERAL ANATOMY, HISTOLOGY AND GENERAL PHYSIOLOGY**

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

**Time: 1 1/2 hrs**

**Max. Marks: 45**

**Section- A, GENERAL ANATOMY & HISTOLOGY (write in separate answer book)**

**QP CODE – 2181**

**I. Long Essay – Answer any ONE**

**1x 9=9**

- 1) Describe muscles of mastication
- 2) Describe the course and distribution of Facial nerve

**II. Write short notes on any TWO**

**2x 5 =10**

- 3) Temporomandibular joint
- 4) Histology of serous salivary gland
- 5) Orbicularis oculi.

**III. Write short answers**

**3 x2 =6**

- 6) Name 4 bones of face
- 7) Name parts of hyoid bone
- 8) Name ear ossicles

**Section – B, GENERAL PHYSIOLOGY (write in separate answer book)**

**QP CODE – 2182**

**I. Write short notes on any FOUR**

**4 x 4 =16**

- 1) Composition and Functions of saliva
- 2) Cardiac out put
- 3) Errors of refraction
- 4) Functions of parathormone
- 5) Stages of deglutition
- 6) Functions of plasma proteins.

**II. Write short answers**

**2 x2 = 4**

- 7) Functions of platelets
- 8) Normal bleeding time and clotting time values.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December-2014**  
**I Year Diploma in OT Technology /II Year Certificate course**  
**FUNDAMENTALS OF OT TECHNOLOGY (O.S)**  
**QP CODE - 1004**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe in detail role of circulatory nurse in operation theatre.
- 2) Describe in detail the gowning and gloving in operation theatre(steps of wearing gown, code for sterile gown, steps of wearing gloves, code of sterile gloves, steps of removing gowns and gloves)
- 3) What is surgical scrub? Describe in detail the surgical scrub problem.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) History of surgery in pre Christian era
- 5) Antiseptic surgery
- 6) Types of energy sources
- 7) Fumigation
- 8) Steam sterilization
- 9) Tracheostomy set
- 10) Handling of patients psychological needs
- 11) What is pre-operative preparation on previous day of the operation.
- 12) Nursing management in post operative phase
- 13) Stage of excitement anaesthesia
- 14) Care of Drugs, Fluids and Blood in operation theatre

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 15) Patient's reaction to illness.
- 16) Care of Operation Theatre after surgery.
- 17) Local Anaesthesia.
- 18) What are surgeries done in prone position.
- 19) Arm Board.
- 20) Tissue Forceps.
- 21) Trocar and Cannula.
- 22) Suction Nozzle.
- 23) Rutherford incision.
- 24) Abrasion.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I Year Diploma in OT Technology /II Year Certificate course**  
**FUNDAMENTALS OF OT TECHNOLOGY & BASIC CONCEPTS IN SURGERY**  
**(N.S)**

**QP CODE - 2131**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe types of wound healing. Describe the factors influencing wound healing.
- 2) Define Sterilization. Describe different sterilization methods.
- 3) Discuss the role of OT technician in Daycare surgery.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Suction Devices.
- 5) Sepsis and Antisepsis.
- 6) Position in surgery.
- 7) Concept of CSSD.
- 8) Endoscopy.
- 9) Instrument Count.
- 10) Histopathological Examination of Specimen.
- 11) Precaution in Cautery.
- 12) Skin Stapler.
- 13) Exchange Area.
- 14) Minor OT.
- 15) Fumigation.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Absorbable suture materials.
- 17) Airway
- 18) Vicryl
- 19) Ryle's tube.
- 20) Pulse-oximeter.
- 21) Professional Nursing.
- 22) Gowning.
- 23) AMBU bag.
- 24) Discharge and Follow-up.
- 25) Prevention of infection.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I Year Diploma in Dialysis Technology /II Year Certificate course**  
**FUNDAMENTALS OF DIALYSIS TECHNOLOGY (O.S)**  
**QP CODE - 1011**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) What are Anticoagulants? Add a note on different types of anticoagulants used in dialysis and their complications.
- 2) Describe the circuits and monitors in hemodialysis machines. Add a note on its maintenance.
- 3) What is reverse osmosis? Describe its role in Dialysis.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Functions of nephron.
- 5) AV fistula.
- 6) Heparin.
- 7) Artificial kidney.
- 8) Causes and clinical features of Acute Renal Failure.
- 9) Dialysis team.
- 10) Deionization.
- 11) Common infections associated with dialysis.
- 12) Acetate based dialysate / bicarbonate dialysate.
- 13) Proportioning systems.
- 14) Saline dialysis.
- 15) Chronic Renal Failure- Causes and Clinical Features.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Give the normal values of a) Blood urea b) Serum Creatinine.
- 17) Mention 2 contraindications of peritoneal dialysis.
- 18) Endocrine functions of kidney
- 19) Name 2 Serum electrolytes.
- 20) Name 2 methods of water purification.
- 21) Predialysis education of the patient.
- 22) Name 2 types of Dialysis.
- 23) Indications for emergency dialysis.
- 24) What is Proteinuria.
- 25) Name 2 common complications of dialysis.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I Year Diploma in Dialysis Technology /II Year Certificate course**  
**PHARMACOLOGY AND THEORY OF DIALYSIS (NS)**

**Note: Write Section A and B in separate answer books**

**Time: 3 hrs**

**Max. Marks: 90**

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

**QP CODE- 2151**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Classify Diuretics. Write the mechanism of action, uses and adverse effects of Furosemide.
- 2) Enumerate the route of Drug Administration with examples. Write the merits and demerits of intravenous route.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- |                 |   |
|-----------------|---|
| 3) Insulin.     | 6) Intra venous fluids.                             |
| 4) Amoxicillin. | 7) Heparin.   |
| 5) Paracetamol  | 8) Angiotensin Converting Enzyme Inhibitors (ACEI). |

**III. WRITE SHORT ANSWERS**

**5 x 2 =10**

- 9) Name two proton pump inhibitors.
- 10) Write two Iron preparations used in Anemia.
- 11) Mention two indications of Morphine.
- 12) Name 2 Antitubercular drugs.
- 13) Name two drugs used in Cardiogenic shock.

**SECTION – B, THEORY OF DIALYSIS (Write in separate answer book)**

**QP CODE - 2152**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) How is raw water converted to processed water in a water treatment plant? Add a note on AAMI standards.
- 2) How do you monitor a patient of haemodialysis before, during and after the procedure?

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
| 3) Nephron.                           | 6) Muscle Cramps during dialysis. |
| 4) Transmembrane pressure monitoring. | 7) Isolated ultra filtration      |
| 5) Uremic Toxins.                     | 8) Endotoxins.                    |

**III. WRITE SHORT ANSWERS ON ANY FIVE**

**5 x 2 =10**

- 9) Name 2 Anions and 2 Cations.
- 10) Equivalent weight.
- 11) Use of AV fistula Needle.
- 12) Monitoring Conductivity during Dialysis.
- 13) Dialysate temperature.
- 14) Two Oral Anticoagulants.



# **PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, DECEMBER 2014**

## **II DPT – PHARMACOLOGY**

**QP CODE – 3192**

**Time: 3 hrs**

**Max. Marks: 90**

### **I. Long Essays – (Answer any FOUR)**

**4 x 15=60**

- 1) Classify anti-epileptic drugs? Write the mechanism of action, uses and adverse effects of Sodium valproate.
- 2) Classify corticosteroids. Write the mechanism of action, uses and adverse effects of corticosteroids.
- 3) Classify antihypertensive drugs? Write the mechanism of action, uses and adverse effects of Angiotensin Converting Enzyme Inhibitors (ACEIs)
- 4) Classify the drugs used in peptic ulcer disease. Write the mechanism of action, uses and adverse effects of Omeprazole
- 5) Classify drugs used in tuberculosis. Write the uses and adverse effects of Rifampicin

### **II. Write short notes on any FOUR**

**4 x 5= 20**

- 6) Teratogenicity
- 7) Treatment of Organo phosphorous poisoning
- 8) Succinyl Choline
- 9) Pharmacotherapy of Amoebiasis
- 10) Salbutamol

### **III. Write short answers**

**5 x 2 =10**

- 11) Name two drugs used in Cardiogenic shock
- 12) Name two drugs used in Pre anaesthetic medication
- 13) Name two drugs used as Oral anti diabetic agents
- 14) Name two vaccines
- 15) Name two drugs used in Angina

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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. Answer any two**

**2 x 10 = 20**

- 1) Discuss emergency management of Acute Congestive Glaucoma
- 2) Discuss emergency management of Chemical Injuries
- 3) Discuss emergency management of Lens Induced Glaucoma

**II. Write short notes on any ten**

**10 x 5 = 50**

- 4) NPCB program
- 5) Vision 2020
- 6) Major surgical records
- 7) Basic Epidemiology
- 8) Written Informed consent forms
- 9) Disease Index
- 10) Health Education to diabetics
- 11) Eye ball preservation methods
- 12) Basics of survey methodology
- 13) Neutralization of lens
- 14) Management of Blepharitis
- 15) Rehabilitation of Blind

**III. Write short answers**

**10 x 2 = 20**

- 16) 2 methods of vocational training for the Blind
- 17) 2 methods of publicity regarding Eye Donation
- 18) 2 causes of Childhood Blindness
- 19) Vision Testing
- 20) Management of Stye - Hordeolum Externum
- 21) School screening
- 22) Cylindrical Lenses – Its uses
- 23) Maddox rod
- 24) Eye bandaging technique
- 25) Pre-operative clinic testing

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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 Essays (Answer any two)**

**2 x 10=20**

- 1) Describe the normal coagulation cascade and name different tests used in coagulation disorders. Add a note on activated partial thromboplastin time and its significance
- 2) Describe the requirements to start a blood bank in terms of space, staff, equipment for whole blood and components and records.
- 3) What are body fluids? Write physical chemical and microscopic examination of ascetic fluid.

**II. Write short notes on any TEN**

**10 x 5 =50**

- 4) Composition of different specimen mounting Museum Fluids
- 5) Name decalcifying fluids. How do you assess the End point of decalcification
- 6) How do you do quality control on hematology samples
- 7) What are microwaves? Mention the uses of Microwaves in Pathology
- 8) Periodic Acid Schiff Stain (PAS)
- 9) Transfusion reactions
- 10) Direct Coomb's Test
- 11) Selection Criteria for donor
- 12) Write note on anticoagulants used in Blood Bank
- 13) Microscopy of CSF (Cerebrospinal fluid)
- 14) Morphology of Sperm with Diagram
- 15) Automated Haematology Cell Counter

**III. Write short answers**

**10 x 2 = 20**

- 16) Name the cells of cervical cytology
- 17) Two indications for bone marrow aspiration
- 18) Progressive haematoxylin Stains
- 19) Uses of Cryostat
- 20) Methods of blood grouping
- 21) Hemoglobin estimation in blood donation camps
- 22) Which are the two authorities who control blood bank
- 23) Name four immune markers
- 24) What is differentiation and Blueing
- 25) Osmotic fragility solution and its uses

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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 Essays – (Answer any TWO)**

**2 x 10 = 20**

- 1) Enumerate family planning methods. Describe various temporary methods with their advantages and disadvantages
- 2) Define Health education. Describe in detail various types of communication.
- 3) Define Infant mortality rate. Write causes of infant mortality rate and add a note on its prevention.

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Growth chart
- 5) Advantages of breast feeding
- 6) Demographic cycle
- 7) School Health appraisal
- 8) Baby Friendly Hospital initiatives
- 9) Behavioral problems in Children
- 10) Child Guidance Clinic
- 11) Antenatal advice
- 12) Principles of health education
- 13) Barriers of communication
- 14) MTP act
- 15) Health problems of the aged people

**III. Write short answer**

**10 x 2 = 20**

- 16) Weaning
- 17) Growth rate
- 18) Danger signals in intranatal care
- 19) Low Birth Weight
- 20) Audio visual aids
- 21) Eligible couples
- 22) Copper T
- 23) Sex ratio
- 24) Street children
- 25) Abortion

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Medical X- Ray Technology/ III Year Certificate**  
**course in Medical X- Ray Technology**  
**RADIOGRAPHY INCLUDING RADIOTHERAPY, (O.S) R-II**  
**QP CODE - 1002**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Discuss in detail about radiotherapy in breast cancer
- 2) Write about third generation CT scanners. Add a note on Ionic contrast agents.
- 3) Write briefly about exposure factors and effect of mA and kV on x-ray quality

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Nuclear reactors
- 5) Cobalt therapy
- 6) Half value layer
- 7) TLD
- 8) Dark room techniques
- 9) T tube cholangiogram
- 10) Stationary anode tube
- 11) Fluoroscopy
- 12) Water phantom
- 13) Stenver's view
- 14) Tube rating
- 15) Lead barrier

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Hangers
- 17) Anode and cathode
- 18) Diffraction
- 19) First line treatment for contrast reactions
- 20) Grid ratio
- 21) Line focus principles
- 22) Urograffin
- 23) Constituents of fixer
- 24) Views for chest x-ray
- 25) Machines used in radiotherapy

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# **PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, DECEMBER 2014**  
**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**

**2 x 10 = 20**

- 1) Describe the procedures and indications for micturating cystourethrogram
- 2) Write in detail about fluoroscopy
- 3) Explain in detail the procedure and indications for HSG.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) General radiography views
- 5) Barium swallow
- 6) Central admitting and enquiry services
- 7) Medico legal records
- 8) Water's view
- 9) Micturating cystourethrogram
- 10) Use of Bucky
- 11) CR cassette
- 12) PACS
- 13) X-ray tube
- 14) IVP
- 15) Loopogram

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Central ray
- 17) Types of grids
- 18) Compton Effect
- 19) Resistors
- 20) Photographic emulsion
- 21) Properties of gamma rays
- 22) Safe light
- 23) Knee x-ray
- 24) Inverse square law
- 25) Abdominal binder

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Define Hospital waste. Classify hospital waste in detail. Functions of district Hospital
- 2) Organization of Nursing Staffs. Write in detail the duties and responsibilities of a nurse
- 3) Write the aims and objectives of ambulance services. Add a note on design, staff pattern and equipments in an ambulance

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Management of Infectious Wastes.
- 5) Qualities of Hospital administrator
- 6) Ancillary services of outpatient department
- 7) Types of rehabilitation
- 8) Inventory control
- 9) Functions of dietary department
- 10) Importance and functions of Mortuary Services
- 11) Disaster mitigation
- 12) Ward design
- 13) What are essential drugs? Add a note on need of essential drugs
- 14) Functions of primary health centres
- 15) Casualty services

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Paramedical medical worker
- 17) Functions of medical records department
- 18) Critical path method
- 19) Functions of laboratory services
- 20) Medical audit
- 21) Functions of Out-Patient department
- 22) Functions of housekeeping.
- 23) Cost benefit analysis
- 24) Two bin system
- 25) Universal precaution

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dental Mechanics/ III Year Certificate course in**  
**Dental Mechanics (FINAL)**  
**Dental Materials and Metallurgy (O.S) PAPER – II**  
**QP CODE – 1017**

**Time: 3 hrs**

**Max. Marks: 75**

**I. LONG ESSAYS - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Mention the types of Plaster of Paris. Describe the methods of manufacturing and its uses.
- 2) Classify base metal alloys. Give the composition and uses of cobalt chromium alloys.
- 3) Describe the composition, properties, and methods of manipulation of self-cure acrylic resins.

**II. WRITE SHORT NOTES ON ANY EIGHT**

**8 x 5 = 40**

- 4) Base metal alloys
- 5) Stages in setting reaction of acrylic resins
- 6) Casting defects
- 7) Dental stone
- 8) Soldering and welding
- 9) Composition, setting reaction and uses of alginate.
- 10) Investment materials
- 11) Composition and uses of Glass ionomer cement
- 12) Inlay wax

**III. WRITE SHORT ANSWERS**

**5 x 3 = 15**

- 13) Define Tarnish
- 14) Crazeing
- 15) Comb Plaster

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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**

**1 x 10 = 10**

- 1) Define fixed partial denture and describe the various types of pontics.

**II. WRITE SHORT NOTES**

**5 x 5 = 25**

- 2) Mandibular major connectors
- 3) Casting defects
- 4) Labial bow
- 5) Surveying and types of block out
- 6) Principles of wire bending

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 7) Hawley's appliance.
- 8) Occlusal rest
- 9) Kennedy's class I
- 10) Tripoding
- 11) Sprue

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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) Describe the prevalence and prevention of dental caries

**II. Write short notes**

**5 x 5 =25**

- 2) Water supply to community  
3) Aims and objectives of dental health education  
4) Oral health in Handicapped  
5) Prevention of peridontal diseases  
6) Dental camps.

**III. Write short answers**

**5 x 2 = 10**

- 7) Bass method of tooth brushing  
8) Thumb sucking habit  
9) Powered toothbrushes  
10) Child counselling  
11) Chlorhexidine mouth rinse

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in OT Technology/ III Year Certificate course in**  
**OT Technology**  
**BASIC CONCEPTS IN SURGERY (O.S)**  
**QP CODE - 1006**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) What are the types of suture materials? Describe their uses in various surgeries
- 2) Describe the various types of regional anaesthesia. What is hypothermia? How it's done? Where it is used?
- 3) Describe the various causes for cardiac arrest. What is the initial resuscitation?

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Hypotension anaesthesia
- 5) Technique of scrubbing
- 6) Technique of Downing Gown
- 7) Technique of wearing gown
- 8) Advantages of using disposable materials
- 9) What are radiation sources for industrial radiation
- 10) Types of Refractors
- 11) Brief operation of vasectomy
- 12) Brief operation of Tubectomy
- 13) Instruments for rectal examination
- 14) Sets of instruments for Circumcision

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 15) Types of needles
- 16) Define Hernia
- 17) Define hydrocele
- 18) Drugs for induction of anaesthesia
- 19) Hypotension in surgery
- 20) What is asepsis?
- 21) Bio Hazard
- 22) Instruments for General anaesthesia
- 23) Monitoring of post-operative patient
- 24) Circulatory Nurse

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe day care surgery. What are its benefits?
- 2) What are the different positions used in surgery? Describe surgical procedures done in lithotomy position.
- 3) What is orthopedic surgery? Discuss types of fractures and their management.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Haemorrhoidectomy
- 5) Management of burns
- 6) Tracheostomy
- 7) Catheterization
- 8) External Fixators
- 9) Intercostal drainage
- 10) Burr Hole
- 11) Cholecystectomy
- 12) Electrolyte imbalance
- 13) Use of C Arm in orthopedics
- 14) Above Knee amputation
- 15) Intestinal anastomosis

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Ryle's tube
- 17) Sitz bath
- 18) Radiotherapy
- 19) Foreign body in ear
- 20) Cystoscopy
- 21) Incision and drainage
- 22) Organ transplantation
- 23) Diabetic foot
- 24) Tendon Repair
- 25) Electrolyte imbalance

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**II Year Diploma in Dialysis Technology/ III Year**  
**Certificate course in Dialysis Technology**  
**PATIENT TEACHING, PERITONEAL DIALYSIS & RENAL**  
**TRANSPLANTATION (O.S)**  
**QP CODE - 1013**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAYS - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Discuss the management of hypertension in a patient undergoing hemodialysis
- 2) Discuss indications and precautions for acute dialysis in ICU. Add a note on monitoring of the procedure.
- 3) Describe how do you educate a new patient for dialysis.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Bicarbonate dialysate
- 5) Anticoagulants
- 6) Continuous ambulatory peritoneal dialysis
- 7) Proteinuria
- 8) A.V. fistula
- 9) Non-surgical renal replacement therapy
- 10) Complications of acute renal failure
- 11) Hyperkalemia- signs and its immediate management
- 12) Immunosuppressant drugs
- 13) Mismatched blood transfusion
- 14) Complications of renal transplant
- 15) Antihypertensive therapy in dialysis

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Normal values of blood urea and serum creatinine
- 17) Dialysis disequilibrium
- 18) Name two replacement fluids in plasmapheresis
- 19) Merits and demerits of femoral catheterization
- 20) Name two vaccines used in renal failure patients
- 21) Name two indications for renal failure patients
- 22) Write normal values of serum bilirubin and serum albumin
- 23) Peritonitis
- 24) What is protein leakage?
- 25) Micro albuminuria

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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) Describe principles, procedure and indications of plasmapheresis
- 2) Describe complications of peritoneal dialysis and their management
- 3) Discuss use of anti-coagulants in dialysis. Add a note on use of thrombolytic agents in peritoneal dialysis

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Solutions used in peritoneal dialysis
- 5) Hemoperfusion
- 6) Rehabilitation of patients in hemodialysis
- 7) CCPD
- 8) Arterial blood gas study report
- 9) Precautions while dialyzing patients with transplant prospects
- 10) Record book of peritoneal dialysis
- 11) Electronic storage of Hemodialysis records
- 12) Anxieties of patients about hemodialysis
- 13) High efficiency dialyzer
- 14) Gluteraldehyde
- 15) Dietitian

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Two contraindications of peritoneal dialysis
- 17) Normal pulse rate and blood pressure values
- 18) Essential fatty acids
- 19) Vaccines given to dialysis patients
- 20) Two oral hypoglycemic drugs
- 21) Air leak during dialysis
- 22) Two causes of hematuria
- 23) Neurological complications in dialysis patients
- 24) High flux dialyzer
- 25) Dialyzer reuse

**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**Common paper for all I year Certificate Courses**  
**CHEMISTRY**  
**(OLD & NEW SCHEME)**  
**QP CODE 1102**

**Time: 1 ½ hrs**

**Max. Marks: 45 (New Scheme)**

**40 (Old Scheme)**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Define radio activity. Write a brief note on the properties of alpha, beta and gamma rays
- 2) Explain the methods of manufacture of rectified spirit from molasses

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25(NS)**

**5 x 4 = 20(OS)**

- 3) Electrolytes and non-electrolytes
- 4) Oxidizing and reducing agents
- 5) Ethane- properties and uses
- 6) Difference between DNA and RNA
- 7) X-ray production and applications
- 8) Carbohydrate as a source of energy
- 9) Classify hydrocarbons with examples and one use for each

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Enzymes
- 11) Name two reducing sugars
- 12) Uses of Chlorine
- 13) Atomic weight
- 14) Uses of Sulphuric acid

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL Examination, DECEMBER 2014**  
**FIRST DPT – PHYSIOLOGY AND BIOCHEMISTRY**

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

**Time: 3 hrs**

**Max. Marks: 90**

**Section- A PHYSIOLOGY (Write in separate answer book)**

**QP CODE - 2192**

**I. Answer any THREE**

**3 x 10=30**

- 1) Describe the structure of a neuromuscular junction and explain the mechanism of transmission of nerve impulse.
- 2) What is Erythropoiesis? Describe the stages and factors influencing it.
- 3) Define blood pressure. Give its normal values .Explain short term mechanism of regulation of blood pressure.
- 4) Describe mechanism of urine formation

**II. Write short notes on any five**

**5x 5 =25**

- |  |                            |
|--|----------------------------|
| 5) Strength duration curve                 | 9) Functions of cerebellum |
| 6) Function of leucocytes                  | 10) Errors of refraction   |
| 7) Functions of thyroid hormones           | 11) Spermatogenesis        |
| 8) Hormonal changes during menstrual cycle |                            |

**III. Write short answers**

**5 x 2=10**

- 12) Name any two neurotransmitters
- 13) Name the hormones of pancreas
- 14) Vital capacity
- 15) Name any two pregnancy tests
- 16) Rickets

**Section – B, BIOCHEMISTRY (Write in separate answer book)**

**QP CODE - 2193**

**I. Answer any one**

**1 x 10=10**

- 1) List out various fluid buffers in body. Explain any one buffer system in regulation of blood pH
- 2) Describe the principle and parts of photometry with diagram and write its applications

**II. Write short notes on any one**

**1 x 5 = 5**

- 3) Balanced diet
- 4) RFT

**III. Write short answers**

**5 x 2=10**

- 5) Phospholipids.
- 6) Nitrogen balance
- 7) Isoelectric precipitation
- 8) Normal values of HDL and LDL
- 9) Sucrose.



# **PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**III DPT – YOGA & MENTAL HEALTH**

**QP CODE - 3202**

**Time: 2 hrs**

**Max. Marks: 65**

**I. Long Essay - Answer any FOUR**

**4 x 10 =40**

- 1) How does yoga help the school student in developing a good health
- 2) Concepts of abhyasa and vairagya
- 3) Asanas performed pregnancy and its benefits
- 4) How did you correlate pranayamas and breathing techniques
- 5) Discuss the psycho-physiological concepts of yoga

**II. Write short notes on any FIVE**

**5 x 5 = 25**

- 6) Effects of yogasanas in parkinsonism
- 7) Suryanamaskara
- 8) Process of jalanethi and its benefits
- 9) Normal mental health

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# **PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

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

**QP CODE - 2162**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any TWO**

**2 x 10 = 20**

- 1) Name the types of conjunctivitis and its management
- 2) How do you manage a cause of chemical injury? Discuss.
- 3) How do you manage a case of corneal ulcer

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Cover test and its significance
- 5) Maddox rod and Maddox wing
- 6) What is amblyopia? How can it be prevented?
- 7) How do you assess binocular vision
- 8) How do you diagnose a case of glaucoma?
- 9) What are the ocular changes in diabetes?
- 10) What are the fundal changes in hypertension?
- 11) Vitamin A deficiency
- 12) Lab examination of urine-its components
- 13) Discuss various methods of administration of drug in ophthalmic diseases
- 14) Drugs used in acute angle closure glaucoma
- 15) Discuss difference between mydriatic and cycloplegics

**III. Write short answers**

**10 x 2 = 20**

- 16) Use of Pilocarpine eye drops
- 17) Name 2 antiviral drugs used in ophthalmology
- 18) Name 2 antifungal drugs used in ophthalmology
- 19) Name 2 anti-inflammatory drugs used in ophthalmology
- 20) Name 2 drugs used in open angle glaucoma
- 21) Name 2 mydriatic drugs
- 22) Name 2 instruments used to record IOP
- 23) Contraindications for I/V mannitol
- 24) Side effects of acetazolamide
- 25) Vitamin A prophylaxis

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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**

**2 x 10 = 20**

- 1) Give the principle and uses of spectrophotometer
- 2) Give an account of the sources, RDA, biochemical functions and deficiency manifestations of calcium
- 3) Define carbohydrates. Name the heteropolysaccharides and their uses

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Define molecular weight, atomic weight, equivalent weight
- 5) Analytic balance
- 6) Write about precautions to be taken while handling chemicals in laboratory and laboratory hazards
- 7) Disaccharides
- 8) Phospholipids
- 9) Diagnostic enzyme. Define enzyme
- 10) Functions of iron
- 11) Acid -base titration
- 12) Seliwanoff's test
- 13) Hot air oven
- 14) Epimerism and anomerism
- 15) What are the indicators? Give 2 examples and its uses

**III. Write short answers**

**10 x 2 = 20**

- 16) Isoelectric pH
- 17) Glycogen
- 18) Essential amino acids
- 19) Conjugated proteins
- 20) Derived lipids
- 21) Define isoenzymes and give 2 examples
- 22) Four uses of water bath
- 23) Full saturation
- 24) Optical density
- 25) Aldehyde test

# **PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**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) Mention different types of family. Write briefly about role of family in health and disease
- 2) Define health. Add a note on determinants of health
- 3) Describe the anatomy of kidney and its functions

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Epidemiological triad
- 5) Risk factors
- 6) Primary prevention
- 7) Hormones
- 8) Holistic concept of health
- 9) Thyroid gland
- 10) Vitamin A
- 11) Anthropology
- 12) Morbidity indicators
- 13) Social security
- 14) Effects of alcohol abuse on family
- 15) Technique of interview

**III. Write short answers**

**10 x 2 = 20**

- 16) PQLI
- 17) Diseases eradication
- 18) Social institutions
- 19) WBC
- 20) Dowry system
- 21) Drug abuse
- 22) Positive health
- 23) Disease surveillance
- 24) Juvenile delinquency
- 25) Acculturation

**\*\*\*\*\***

**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**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 ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Name the parts of male reproductive system; write briefly on testis
- 2) Name the parts of the urinary system; write briefly on kidneys
- 3) Name the parts of central nervous system; write briefly on brain

**II. WRITE SHORT NOTES ON ANY THREE**

**5 x 3 = 15**

- 4) Pharynx
- 5) Classification of bone with example
- 6) Uterus
- 7) Lymph node

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 8) Name 4 bones of lower limb
- 9) Name 4 muscles of upper limb
- 10) Name 4 arterial branches of abdominal aorta
- 11) Name types of vertebrae
- 12) Name 4 eye muscles

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# PARAMEDICAL BOARD, BANGALORE

Annual Examination, December 2014

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

**ANATOMY, PATHOLOGY & MICROBIOLOGY**

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

Section-A ANATOMY (O.S) (write in separate answer book)

**QP CODE - 1008**

**Time: 3 hrs**

**Max. Marks: 90**

## **I. LONG ESSAY – ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Name the parts of the gastrointestinal system; describe briefly on liver
- 2) Name the parts of the urinary system and write briefly on kidney

## **II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- |                              |                          |
|------------------------------|--------------------------|
| 3) Bronchopulmonary segments | 7) Testis                |
| 4) Right atrium              | 8) Thyroid gland         |
| 5) Duodenum                  | 9) Lymph node- histology |
| 6) Pons                      |                          |

## **II. WRITE SHORT ANSWER**

**5 x 2 = 10**

- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| 10) Name the cells in testis          | 13) Name 2 branches of arch of aorta |
| 11) Name the parts of fallopian tubes | 14) Name 4 carpal bones              |
| 12) Name 4 muscles of lower limb      |                                      |

**SECTION B – PATHOLOGY & MICROBIOLOGY (O.S) (write in separate answer book)**

**QP CODE - 1009**

## **I. LONG ESSAY – ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Discuss physical and chemical examination of urine
- 2) Mention any 10 routine investigations done in hematology laboratory. Describe the procedure blood grouping and cross matching

## **II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- |                   |                                  |
|-------------------|----------------------------------|
| 3) Semen analysis | 6) Bleeding time & clotting time |
| 4) ZN stain       | 7) Culture and sensitivity       |
| 5) Disinfectant   | 8) Differential count            |

## **III. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 9) Ketone bodies
- 10) Benzidine test
- 11) Name 4 vaccines
- 12) Name 4 preservatives used to preserve urine
- 13) Name 4 gram negative organisms

# **PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

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

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

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

**Time: 3 hrs**

**Max. Marks: 90**

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

**QP CODE - 2142**

**I. LONG ESSAY – ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Draw a neat labeled diagram of respiratory system; describe in brief about bronchopulmonary segments
- 2) What is a synovial joint; classify joints with examples

**II. WRITE SHORT NOTES ON ANY TWO**

**2 x 5 = 10**

- 3) Spermatocord
- 4) Right kidney
- 5) Ovary

**III. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 6) Name the parts of large intestine
- 9) upper end of femur
- 7) White fibro cartilage
- 10) Ear ossicles
- 8) Name 2 muscles of upper limb

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

**QP CODE - 2143**

**I. WRITE SHORT NOTES ON ANY FOUR**

**4 x 5 = 20**

- 1) Functions of plasma proteins
- 5) Functions of cerebellum
- 2) Define hypoxia and types of hypoxia
- 6) Draw a neat labeled diagram of neuromuscular junction
- 3) Functions of kidney
- 4) Functions of Growth hormone

**II. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 7) Systolic and diastolic blood pressure
- 8) Name 2 bile pigments
- 9) Any 2 functions skin
- 10) Name any 2 intra uterine devices
- 11) Name any 2 errors of refraction

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

**QP CODE – 2144**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) What is hematology? What are the investigations done in hematology; Write briefly on functions of blood)
- 2) Mention the organism causing tuberculosis; write briefly procedure of Ziehl-Neilsen stain and its interpretation

**II. WRITE SHORT NOTES ON ANY TWO**

**2 x 5 = 10**

- 3) Asthma
- 4) Haemoglobin and its normal values
- 5) Draw a neat diagram of bacteria and label

**III. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 6) Anticoagulants used in blood collection
- 7) How do you grow bacteria in microbiology laboratory
- 8) Expand ESR
- 9) Terminology used in sperm count
- 10) What is fungus

**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

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

**(Preliminary APPLIED)**

**PAPER – II (O.S)**

**QP CODE - 1015**

**Time: 3 hrs**

**Max. Marks: 75**

**I. LONG ESSAY**

**4 x 10 =40**

1) Discuss limiting and supporting structures of maxillary dentures. Discuss their prosthodontic significance

2) Write about principles of arrangement of teeth

3) Define and classify impression trays. Write in detail about custom made trays

4) Anatomy of maxillary central incisor

**II. WRITE SHORT NOTES ANY SEVEN**

**7x 5 = 35**

5) Rebracing

6) Mental foramen

7) Occlusion rims

8) Retromolar pad

9) Denture relining

10) Overjet and Overbite

11) Cast duplication

12) Modelling wax

13) Curve of spee

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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**

**1 x 10 = 10**

- 1) Write in detail about the anatomy of right maxillary first molar?
- 2) What are different types of masticatory muscles and describe in detail about one

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Maxillary canine
- 4) Mental foramen
- 5) Retromolar pad
- 6) Maxillary supporting areas
- 7) Orbicularis oris muscle
- 8) Buccinator muscle
- 9) Importance of incisive papilla

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Buccal shelf area
- 11) Fovea palantine
- 12) Keys of occlusion
- 13) Teeth numbering system
- 14) Posterior palatal seal area

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**I Year Diploma in Dental Hygiene / II Year Certificate course in  
Dental Hygiene (Preliminary)**

**PAPER – II (O.S)**

**QP CODE - 1019**

**Time: 3 hrs**

**Max. Marks: 75**

**I. Answer the following**

**5x 10=50**

- 1) Define and Classify Cementum. Write in detail composition and its functions
- 2) Define periodontal ligament. Describe the microscopic feature of periodontal ligament
- 3) Describe the structure of alveolar bone
- 4) What is inflammation? Describe in detail stages of inflammation
- 5) Describe in detail various antiseptics used in dentistry

**II. Write short notes on any FIVE**

**5x 5 =25**

- 6) Microscopic features of Gingiva
- 7) Causes of dental Fluorosis
- 8) Chlorhexidine mouth rinse
- 9) Desensitizing tooth paste
- 10) Functions of periodontal ligament
- 11) Analgesics

**\*\*\*\*\***

**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**I Year Diploma in Dental Hygiene / II Year Certificate course in  
Dental Hygiene (Preliminary)**

**GENERAL PATHOLOGY, MICROBIOLOGY & PHARMACOLOGY (N.S)**

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

**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)**

**1x 9=9**

- 1) Define inflammation. What are the types of inflammation? Write briefly cellular events of inflammation
- 2) Mention the different types of vitamins; Write in detail manifestations of vitamin A deficiency

**II. Write short notes on any FOUR**

**4x 5 =20**

- 3) Histology of teeth
- 4) Oral manifestation of anaemia
- 5) Pyogenic granuloma
- 6) Healing
- 7) Benign tumors of oral cavity
- 8) Gingivitis

**III. Write short answers**

**3 x2 =6**

- 9) How do you recognize candida
- 10) What is sterilization method for dental equipments
- 11) Name 2 dental cyst

**Section- B, GENERAL PHARMACOLOGY**

**(write in separate answer book)**

**QP CODE- 2184**

**I. Write short answers**

**5 x 2 =10**

- 1) Mention 2 drugs used as local haemostatics
- 2) Mention 2 uses of potassium permanganate
- 3) Name 2 oral vaccines
- 4) Mention 2 uses of penicillins
- 5) Name 2 non steroidal anti inflammatory drugs (NSAIDS)

**\*\*\*\*\***

# PARAMEDICAL BOARD, BANGALORE

Annual Examination, December 2014

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

**BIOCHEMISTRY, PHARMACOLOGY AND MICROBIOLOGY**

Note: Write Section A, B & C in separate answer books

Time: 3 hrs

Max. Marks: 90

## SECTION –A, BIOCHEMISTRY (Write in separate answer book)

**QP CODE - 2132**

### **I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) What are normal constituents of urine? How are they detected in laboratory? Add a note on specific gravity of urine
- 2) Discuss in detail renal function tests

### **II. WRITE SHORT NOTES ON ANY TWO**

**2 x 5 = 10**

- 3) Henderson-Hasselbach equation
- 4) Formation of urea
- 5) Factors regulating blood glucose

### **III. WRITE SHORT ANSWERS**

**5 x 2 =10**

- 6) Metabolic acidosis. Define and causes
- 8) Tests for detection of creatinine levels
- 7) Normal value of total cholesterol and HDL
- 9) What is hyponatremia. Write 2 causes
- 10) Name enzymes required for digestion of carbohydrates

## SECTION – B, PHARMACOLOGY (Write in separate answer book)

**QP CODE - 2133**

### **I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Mention the different stages of general anaesthesia. Add a note on preanaesthetic medication
- 2) Enumerate the various routes of drug administration with suitable examples. Write the advantages and disadvantage of oral route

### **II. WRITE SHORT NOTES ON ANY TWO**

**2 x 5 = 10**

- 3) Lignocaine
- 4) H<sub>2</sub> blockers
- 5) Aminoglycosides

### **III. WRITE SHORT ANSWERS**

**5 x 2 =10**

- 6) Mention 2 uses of potassium permanganate
- 8) Write 2 antiemetic drugs
- 7) Write 1 use and 1 adverse effect of furosemide
- 9) Write two uses of benzodiazepines
- 10) Mention 1 use and 1 adverse effect of morphine

## SECTION – C, MICROBIOLOGY (Write in separate answer book)

**QP CODE - 2134**

### **I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Define and classify hypersensitivity; add a note on type 1 hypersensitivity
- 2) Classify clostridium. Describe in detail about tetanus

### **II. WRITE SHORT NOTES ON ANY TWO**

**2 x 5 = 10**

- 3) Diseases caused by staphylococcus
- 4) Bacterial growth curve
- 5) Hot air oven

### **III. WRITE SHORT ANSWERS**

**5 x 2 =10**

- 6) Expand IMVic reaction
- 7) Pasteurization
- 8) Applications of light microscopy
- 9) Define hospital infection
- 10) Give 2 examples for ionizing radiation

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**I Year Diploma in Dialysis Technology/ II Year Certificate course in**  
**Dialysis Technology**  
**BIOCHEMISTRY & MICROBIOLOGY**

**Note: Write Section A and B in separate answer books**

**Time: 3 hrs**

**Max. Marks: 90**

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

**QP CODE - 2153**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Define chromatography. Write its principle, types and application in dialysis
- 2) Describe in detail digestion and absorption of carbohydrate

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Principle of conductivity meter
- 4) Analysis of normal urine
- 5) Formation of urea
- 6) Tests for detection of sugar in blood and urine
- 7) Renal regulation of acid base balance
- 8) Creatinine clearance test

**III. WRITE SHORT ANSWERS**

**5x 2 =10**

- 9) Normal levels of urea and creatinine
- 10) Abnormal constituents of Urine
- 11) Difference between acid and base
- 12) Buffer solution
- 13) Benzidine test

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

**QP CODE - 2154**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Classify hypersensitivity. Write in detail about anaphylaxis
- 2) Define nosocomial infection. Describe the methods of cross infection in the hospital. Add a note on its prevention

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Normal bacterial flora
- 4) Anaerobic culture methods
- 5) Sterilization of OT
- 6) Bacterial toxins
- 7) Tetanus
- 8) Sources of infection

**III. WRITE SHORT ANSWERS**

**5x 2 =10**

- 9) Name 2 moist heat method of sterilization
- 10) Sterilization control
- 11) Name 2 antiviral agents
- 12) Name 2 acid-fast organisms
- 13) Name 2 anaerobic media

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**II D.P.T – GENERAL MEDICINE INCLUDING CARDIOLOGY & NEUROLOGY**  
**QP CODE – 3193**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any FIVE**

**5 x 12=60**

- 1) What is Atherosclerosis? Explain its clinical features and management.
- 2) Definition, etiology, clinical features and management of Hypertension.
- 3) Define Chronic Bronchitis. Write its etiology, signs and symptoms, prognosis and clinical features.
- 4) Explain in detail about Stroke, etiology, clinical features, examination of conscious patient and conservative management.
- 5) Write in detail about poliomyelitis, its etiology, clinical features and management.
- 6) Write in detail about Congenital Heart Disease.

**II. Write short note on any SIX**

**6 x 5= 30**

- 7) Jaundice.
- 8) Obesity.
- 9) Thrombosis and Embolism.
- 10) Bronchial Asthma
- 11) Industrial Pulmonary Diseases.
- 12) RHD.
- 13) Epilepsy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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 types of hypersensitivity reactions; Explain in detail type 1 hypersensitivity.
- 2) Describe morphology, pathogenesis and lab diagnosis of *E. histolytica*.
- 3) Classify spirochetes. Describe the serological test of syphilis.

**II. Write short notes on any TEN**

**10 x 5 =50**

- 4) Opportunistic Fungi.
- 5) Life cycle of *Strongyloides stercoralis*.
- 6) HBV vaccines.
- 7) ELISA.
- 8) Anaerobic methods of cultivation.
- 9) Prophylaxis of Tetanus.
- 10) Laboratory diagnosis of Typhoid Fever.
- 11) Difference between streptococci and pneumococci.
- 12) Antibiotic Sensitivity Testing.
- 13) Laboratory diagnosis of *Staphylococcus*.
- 14) ASLO test.
- 15) Oxidase test.

**III. Write short answers**

**10 x 2 = 20**

- 16) Draw a neat labeled diagram of the egg of *Trichuris trichuræ*.
- 17) Name 2 RNA vaccines.
- 18) BCG vaccine.
- 19) Name two bacteria causing zoonotic diseases.
- 20) Name two bile stained eggs.
- 21) Name four bacteria causing diarrhea.
- 22) Draw a labeled diagram of HIV.
- 23) Name two media used to cultivate fungi.
- 24) Name 4 species of Malaria.
- 25) Sabouroud's dextrose agar.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) Enlist international health agencies. Describe the services of UNICEF.
- 2) Define epidemic. Describe the steps in investigation of an epidemic.
- 3) What is Pneumoconiosis? Write briefly on silicosis.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Occupational cancers.
- 5) Works of WHO.
- 6) ESI Act.
- 7) First Aid in Dog Bite.
- 8) Social Security.
- 9) Bhore Committee.
- 10) ICDS.
- 11) Occupational hazards of agricultural workers.
- 12) Functions of PHC.
- 13) ASHA.
- 14) Sources of Health Information System.
- 15) AYUSH.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Local dais.
- 17) Helmet.
- 18) Record Linkage.
- 19) FAO.
- 20) What are the Notifiable diseases.
- 21) Levels of Health care.
- 22) Sub centre.
- 23) Referral System.
- 24) Sickness Absenteeism.
- 25) Contents in Health Education.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**II Year Diploma in Medical X- Ray Technology/ III Year Certificate course**  
**in Medical X- Ray Technology**  
**RADIOGRAPHY INCLUDING MEDICAL RECORDS (O.S) R-III**  
**QP CODE – 1003**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Radiation Protection.
- 2) What is a medico-legal case? How do you maintain and procure medico legal records in radiology department?
- 3) Mammography procedure and standard views

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Dacrocystography.
- 5) What is scattered radiation?
- 6) Portable X-Ray Equipment.
- 7) Interaction of X-ray with matter.
- 8) Court Summons.
- 9) Spot Film Camera.
- 10) Draw X-Ray Tube.
- 11) Artefacts.
- 12) Skin Source Distance.
- 13) Piezoelectric crystals.
- 14) Dark room Techniques.
- 15) ERCP.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Doppler Study.
- 17) Types of X-Ray Films.
- 18) Step Wedge.
- 19) Urograffin.
- 20) Filters.
- 21) Generators.
- 22) Radiographic Views of the skull.
- 23) Indications of IVP.
- 24) Risks in DSA.
- 25) Name the effects of radiation.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) What is computerized radiography? Discuss how it is different from conventional radiography.
- 2) What is the principle of CT scan? Discuss the different generations CT scanners.
- 3) MRI scan- Principles and sequences.

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) General radiography views.
- 5) Xero radiography.
- 6) Ammeter.
- 7) Contrast media.
- 8) Water's view.
- 9) Use of bucky.
- 10) Subtraction Angiography.
- 11) Geiger Muller Counter.
- 12) PACS.
- 13) Fluoroscopy.
- 14) Teleradiology.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 15) Lateral view of neck
- 16) Timer Mechanism.
- 17) Intensifying Screen.
- 18) Skin Source distance.
- 19) Thimble chamber.
- 20) Uses of Doppler.
- 21) Rectifier.
- 22) Safe light.
- 23) Skyline view of Patella.
- 24) Infantogram.
- 25) Centering.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) Describe the role of a computer in hospital management.
- 2) Write in detail about the functional units of a computer.

**II. WRITE SHORT NOTES ON ANY FOUR**

**4 x 5 = 20**

- 3) Advantages and limitations of computer.
- 4) Types of printers.
- 5) Data Processing.
- 6) Floppy Disk.
- 7) Storage devices.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 8) PPT.
- 9) E-Mail.
- 10) Networking.
- 11) Keyboard.
- 12) Memory.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**

**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**

**1x 10=10**

1) Describe in detail the various specialties in dentistry.

**II. Write short notes**

**5 x 5 =25**

- 2) Dentist Act 1948.
- 3) Role of social factors in Dental progress.
- 4) Sterilization of Dental instruments.
- 5) Material maintenance and supply.
- 6) Objectives and scope of Dentistry.

**III. Write short answers**

**5 x 2= 10**

- 7) Instrument grasps.
- 8) Medico-legal issues in dental practice.
- 9) Billing and accounting.
- 10) Case record maintenance.
- 11) Appointment and Recall System.

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**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, December 2014**  
**Common paper for all I year Certificate Courses**  
**BIOLOGY**  
**(OLD & NEW SCHEME)**  
**QP CODE 1103**

**Time: 1 ½ hrs**

**Max. Marks: 45 New Scheme**

**40 Old Scheme**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Draw a neat labeled diagram of a nephron and write briefly on the steps involved in the formation of urine.
- 2) What are Nucleic acids? With a neat, labeled diagram, explain the structure of DNA.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25 (N.S)**

**5 x 4 = 20 (O.S)**

- 3) Structure of a cell.
- 4) Digestion of Carbohydrates.
- 5) Enzymes.
- 6) Function of Nucleus.
- 7) Structure of Sperm.
- 8) Plasma Proteins.
- 9) What is AIDS? Write symptoms and preventive measures against the disease.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Name 2 diseases caused by viruses.
- 11) Name the parts of the brain.
- 12) Name 2 types of cell division
- 13) Name 2 hormones of the adrenal gland.
- 14) Name 2 nitrogenous wastes.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**I D.P.T – MICROBIOLOGY**  
**QP CODE – 2194**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any two**

**2 x 10 = 20**

- 1) Describe the pathogenesis and laboratory diagnosis of Cholera.
- 2) Enumerate Herpes Viruses. Describe the pathogenesis and laboratory diagnosis of Herpes Simplex virus.
- 3) Classify antigen- antibody reactions. Discuss in detail agglutination reactions with examples.

**II. Write short notes on any ten**

**10 x 5 = 50**

- 4) Tyndallization.
- 5) Anaerobic culture methods.
- 6) Oxidase test.
- 7) Lab Diagnosis of Syphilis.
- 8) Cultivation of Viruses.
- 9) ELISA.
- 10) Malignant Pustule.
- 11) Lab Diagnosis of UTI.
- 12) Coagulase test.
- 13) Delayed Hypersensitivity Reaction.
- 14) Standard precautions.
- 15) Describe the virulence factor of bacteria.

**III. Write short answers**

**10 x 2 =20**

- 16) Name 4 bacterial zoonosis.
- 17) Prozone phenomenon.
- 18) Castenda's medium.
- 19) Methods to demonstrate Capsule.
- 20) Inclusion Bodies.
- 21) Name two RNA viruses.
- 22) Complications of Plasmodium falciparum.
- 23) OPV.
- 24) Draw a diagram of the egg of Ascaris lumbricoides.
- 25) Name two opportunistic fungi.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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 Occupational Therapy. Write its aims, scope and principle of management of treatment.
- 2) Define Gerontology. What are its aims and objectives? Describe the principle of management of a patient with OA knee.
- 3) Discuss in detail about the role of physiotherapist in disability evaluation.
- 4) Write the complete physiotherapy and rehabilitation programme of Hemiplegic patient.
- 5) Name few complications during childbirth. Explain Antenatal and Postnatal exercises in detail.

**II. Write short notes on any five**

**5 x 5 = 25**

- 6) ADL training.
- 7) Cardio-respiratory testing.
- 8) Magnetic therapy.
- 9) Prolapsed Uterus.
- 10) Upper limb Prosthesis.
- 11) Neonatal Disorders.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) What is Tissue Processing? Describe the steps involved in tissue processing. Add a note on embedding medias.
- 2) Define Anaemia. Mention the methods of estimation of hemoglobin. Discuss in detail the procedure of estimation of hemoglobin by Cyan meth- hemoglobin method.
- 3) Describe the method of collection of Urine, the preservatives used, physical examination and microscopy of urine.

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Anticoagulants and their mechanism of action.
- 5) Errors during Phlebotomy.
- 6) Abnormal Differential Count and its importance.
- 7) Parts of Microtome Knife and Methods of sharpening.
- 8) What are reticulocytes? How do you recognize them?
- 9) Parts of Embedding centre and process of making a Paraffin Block.
- 10) Red cell counting and its importance.
- 11) Cytoplasmic Stains and their principle of staining.
- 12) Define Decalcification. Mention different methods of Decalcification.
- 13) Blood indices and significance.
- 14) How do you prepare Leishmann stain?
- 15) What is fixation in Cytopathology? Name Cytological Fixatives.

**III. Write short answers**

**10 x 2 =20**

- 16) Two uses of Wintrobe tube.
- 17) Orange- G
- 18) Name 4 types of Microtomes.
- 19) Expand DPX and write its use.
- 20) Name 3 clearing agents.
- 21) Draw a diagram of a basophil.
- 22) Use of Hemocytometer.
- 23) Vacutainer blood collection tubes colour codes.
- 24) Parts of a Peripheral Smear and mention one error in making a peripheral smear.
- 25) Differences between Plasma and Serum.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) Classify Water- borne diseases. Discuss the Purification of Water on a large scale.
- 2) Discuss Protein- Energy Malnutrition.
- 3) Discuss Time and Place Distribution under Descriptive Epidemiology.

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Anganwadi Worker.
- 5) Sulabh Shauchalaya.
- 6) Management of Head Louse.
- 7) Rickets.
- 8) Types of Ventilation.
- 9) Pasteurization of milk.
- 10) Manifestation of Iodine Deficiency Disorders.
- 11) Measures of Dispersion.
- 12) Incidence and Prevalence.
- 13) Mid-day Meal
- 14) Management of Ankylostomiasis.
- 15) Conservation of Water.

**III. Write short answers**

**10 x 2 =20**

- 16) Three function of a Medico- social worker.
- 17) Primary Immunization.
- 18) Modes of Intervention under Primary Prevention.
- 19) Types of Family.
- 20) Social Problems.
- 21) Purification of water at the house-hold level.
- 22) Three sources of Iron.
- 23) Lifestyle diseases.
- 24) Child rearing.
- 25) Sullage.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) Describe the composition and functions of Blood. Describe briefly about hemoglobin, its normal values and significance.
- 2) Draw a neat labeled diagram of a neuro-muscular junction and describe the events of conduction of a nerve impulse.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Glomerular filtration rate.
- 4) Effects of Irradiation.
- 5) Gastric Juice, its constituents and functions.
- 6) Draw a neat labeled diagram of a neuron.
- 7) Functions of Estrogen.
- 8) Spermatogenesis.
- 9) Draw a neat labeled diagram of the conducting system of the heart.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) Name the Pancreatic hormones.
- 11) Normal BP and Pulse rate.
- 12) Hypoxia and Anemia.
- 13) Myxoedema and cretinism.
- 14) Fast and post prandial blood glucose levels.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**I Year Diploma in Medical Records Technology/ II Year Certificate course in**  
**Medical Records Technology**  
**HOSPITAL STATISTICS & BIOSTATISTICS**  
**QP CODE – 2145**

**Max. Marks: 90**

**I. LONG ESSAY**

**4 x 10 = 40**

- 1) Define Health Information Systems. Add a note on Registration of Vital Events.
- 2) List various notifiable diseases. Add a note on Limitations
- 3) Uses of Computers in Medical Records section.
- 4) Define Biostatistics and its uses.

**II. WRITE IN BRIEF ON ANY TEN**

**10 x 4 = 40**

- 5) Quantitative Data.
- 6) Principles of presenting tables.
- 7) Sample Registration Systems.
- 8) Uses of Standard Deviation.
- 9) Properties of Standard Normal Curve.
- 10) Simple Random Sampling.
- 11) Unnecessary Surgery Rates.
- 12) Net infection Rate.
- 13) Maternal Mortality rate.
- 14) Incidence and its uses.
- 15) Disease register.

**IV) WRITE BRIEFLY ON ANY FIVE**

**5 x 2=10**

- 16) Growth Rate.
- 17) Record Linkage.
- 18) Pictogram.
- 19) Sampling Error.
- 20) Mode.
- 21) Chi square Test.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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**

**1x 10=10**

- 1) Define Carbohydrate and classify with examples. Add a note on Mucopolysaccharides.
- 2) Sources, RDA, Biochemical function and deficiency manifestation of calcium.

**II. Write short notes on any THREE**

**3 x 5 =15**

- 3) Tests for detection of ketone bodies.
- 4) Essential Fatty Acids.
- 5) Scurvy
- 6) Food requirement for maintenance and repair of body.

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

**QP CODE - 2186**

**I. Write short notes**

**4 x 5 =20**

- 1) Hazards of Radiation and Protection against them.
- 2) Developing Solution.
- 3) Intra-oral Periapical X-Ray.
- 4) Bite wing X-Ray.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**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**

**1 x 10 = 10**

- 1) Name the parts of Female Reproductive System. Write briefly on Uterus.
- 2) Name the parts of Respiratory System. Write briefly on bronchopulmonary segments.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- |                              |                     |
|------------------------------|---------------------|
| 3) Pituitary gland           | 6) Thymus.          |
| 4) Lateral Wall of the Nose. | 7) Small Intestine. |
| 5) Left Kidney.              | 8) Cardiac Muscle.  |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name 4 Cranial nerves.
- 10) Name 4 Muscles of the eyeball.
- 11) Name 4 Paranasal Air Sinuses.
- 12) Name the Ear Ossicles.
- 13) Name 4 Carpal Bones.

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

**QP CODE – 2136**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Hormones of Adrenal Cortex. Describe the functions of Mineralocorticoids.
- 2) Composition of Blood, types of WBC and functions of Leucocytes.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Functions of Ear.
- 4) Functions of Bile.
- 5) Draw a neat labeled diagram of Nephron.
- 6) Composition of Body Fluids.
- 7) Hormonal changes during menstrual cycles.
- 8) Hypoxia and types of Hypoxia.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Diabetes Mellitus and Diabetes Insipidus.
- 10) Name 2 pancreatic enzymes.
- 11) Cardiac Output and Stroke Volume.
- 12) Anatomical and Physiological dead space
- 13) Name the Muscle Proteins.

**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, December 2014**

**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**

**1 x 10 = 10**

- 1) Name the parts of the Male Reproductive System. Write briefly on testis.
- 2) Name the parts of the Gastrointestinal System. Write briefly on duodenum.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- |                       |                               |
|-----------------------|-------------------------------|
| 3) Uterus.            | 6) Bronchopulmonary segments. |
| 4) Pituitary gland.   | 7) Spleen.                    |
| 5) Elastic Cartilage. | 8) Histology of Compact Bone. |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name 4 muscles of the face.
- 10) Name 4 Cranial Nerves.
- 11) Name the salivary glands.
- 12) Name 4 muscles of the upper limb.
- 13) Name the cartilages of the larynx.

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

**QP CODE – 2156**

**I. LONG ESSAY - ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Classify Body Fluid compartments and give their normal values. Methods of measurement of compartments.
- 2) Discuss the composition of blood and add a note on functions of Plasma Proteins.

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Non excretory functions of kidney.
- 4) Draw a neat labeled diagram of conducting system of the heart.
- 5) What is GFR? What is its normal value and significance?
- 6) Normal Blood Pressure. Short term regulation of BP.
- 7) Landsteiner's law.
- 8) What is ESR? Give its values in Males and Females.
- 9) Role of Kidneys in Acid-Base balance.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) Polycythemia and anemia.
- 11) Erythropoietin.
- 12) ECG
- 13) Normal Creatinine and Urea Values.
- 14) Systolic and Diastolic Blood Pressure.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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 is Ulcerative Colitis? Write in detail about its management.
- 2) What is intra-cranial aneurysm? Write in detail about its management.
- 3) What are tumours? Explain the surgical management of tumours.

**II. Write short notes any THREE**

**3 x 5= 15**

- 4) Gall Bladder Stones.
- 5) Burns.
- 6) Shock.
- 7) Blood transfusion.

**III. Answer any TWO**

**2 x 15= 30**

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

**IV. Write short notes on any THREE**

**3 x 5= 15**

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

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) What are the points that coder should remember while coding?
- 2) Define underlying cause of death.
- 3) Why do we need to code?
- 4) Explain the design and structures of ICD -10 Volume 1.
- 5) Explain the following:

A: Square Brackets.  
B: Colon.  
C: NOS.  
D: NEC.  
E: Parentheses.

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**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, December 2014**  
**Common paper for all I year Certificate Courses**  
**ENGLISH**  
**(OLD & NEW SCHEME)**  
**QP CODE 1104**

**Time: 1 ½ hrs**

**Max. Marks: 45 (New Scheme)**  
**40 (Old Scheme)**

**I. WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING 1x15=15(NS); 1x10=10(OS)**

- 1) Newspapers.
- 2) First Aid.

**II. ANSWER ANY ONE**

**1 x 10 = 10**

- 3) Write a letter to your Principle requesting him to issue Transfer Certificate.
- 4) Write a letter to your brother advising him to pay more attention to studies.

**III. WRITE THE OPPOSITE GENDER OF THE FOLLOWING**

**5 x 1 =5**

- 5) Man          6) Lion    7) Hero    8) King          9) Wife

**IV. WRITE THE OPPOSITE OF**

**5 x 1 =5**

- 10) Big          11) Legal    12) Thin    13) Fast    14) Junior

**V. MAKE SENTENCES USING THE FOLLOWING**

**5 x1 = 5**

- 15) Afraid of
- 16) Because
- 17) Besides
- 18) Neither- nor
- 19) To and fro

**VI. FILL IN THE BLANKS**

**5 x 1 =5**

- 20) The sun rises \_\_\_\_\_ the east.
- 21) The boy is fond \_\_\_\_\_ dance.
- 22) Latha is talking \_\_\_\_\_ her teacher.
- 23) Raju and Ravi \_\_\_\_\_ good friends.
- 24) The clock is \_\_\_\_\_ the wall.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**I D.P.T – PSYCHOLOGY**  
**QP CODE – 2195**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any THREE**

**3 x 15 = 45**

- 1) Heredity and environment influences on individual development, enumerate this with special emphasis on adolescence?
- 2) Place of psychology in the family of social and behavioral science and enumerate the field of psychology?
- 3) Describe perception, explain perceptual organization with diagrams
- 4) What are neuropsychological tests, elaborate its uses.

**II. Answer any THREE**

**3 x 10 = 30**

- 5) Explain theories of remembering, what causes forgetting; methods to measure memory?
- 6) Explain Problem solving and concept formation as different types of thinking; explain in detail the thinking process
- 7) What psychological methods would you use as a physiotherapist to minimize your patient's pain?
- 8) Explain attitudes, how do they develop and methods of attitude change.

**III. Answer any FIVE**

**5 x 3 = 15**

- 9) Conscious, unconscious and preconscious
- 10) Motivational analysis
- 11) Prejudice
- 12) Creativity
- 13) Spontaneous recovery
- 14) Positive transfer
- 15) Token economy

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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 sensory motor integrations in management approaches
- 2) Describe the assessment and PT management of Parkinson's diseases
- 3) Discuss the assessment and PT management of TB spine
- 4) Discuss the assessment and PT management of pneumonia
- 5) Discuss the assessment and PT management of adhesive capsulitis of right shoulder
- 6) Different therapeutic exercise and PNF technique for different neuro muscular disorders

**II. Write short notes on any five**

**5 x 6 = 30**

- 7) Cardiopulmonary testing
- 8) Median Claw hand
- 9) Cerebral palsy
- 10) Erb's palsy
- 11) Nerve conduction testing
- 12) Bio feedback

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**I Year Diploma in Medical Records Technology/ II Year Certificate course in**  
**Medical Records Technology**  
**PHYSIOLOGY (O.S)**  
**QP CODE – 1010**

**Time: 3 hrs**

**Max. Marks: 90**

**I. LONG ESSAY - ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe the composition and functions of blood
- 2) Name the hormones of endocrine pancreas and describe the action of insulin
- 3) Describe the composition and function of bile juice

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Erythropoiesis
- 5) Complications of blood transfusion
- 6) Artificial respiration
- 7) Pancreatic juice
- 8) Renal function test
- 9) Oxytocin
- 10) Functions of testosterone
- 11) Family planning methods
- 12) Classification and functions of muscles
- 13) Compositions and functions of CSF
- 14) Lung volumes and capacities
- 15) Blood groups

**III. WRITE SHORT ANSWERS**

**10 x 2=20**

- 16) Name two pathological constituents of urine
- 17) Name two types of anaemia
- 18) Name two functions of kidney
- 19) Name 2 functions of liver
- 20) Name any two female sex hormones
- 21) Name two functions of skin
- 22) Write normal values of (1) RBC count (2) WBC count
- 23) Name 2 hormones of anterior pituitary
- 24) Name any 2 anti coagulants
- 25) Write normal values of (1) Tidal volume (2) Residual volume

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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) Discuss the different source of infection
- 2) Classify culture media. Add a note on preparation of chocolate agar
- 3) Write in detail about washing and packing of materials in microbiology lab

**II. WRITE SHORT NOTES ON ANY TEN**

**10 x 5 = 50**

- 4) Bacterial spores
- 5) Contribution of Louis Pasteur
- 6) ELISA test
- 7) Exotoxins
- 8) Innate immunity
- 9) Oxidase test
- 10) Robertson's cooked meat media
- 11) Light Microscopy
- 12) Agar-agar
- 13) Pasteurization
- 14) Composition of Albert's stain
- 15) Antibiotic sensitivity testing

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Expand IMVIC
- 17) Name 2 transport media
- 18) Classify levels of disinfection
- 19) Give 2 examples of gram positive and gram negative organism
- 20) Name 2 methods of capsule demonstration
- 21) Simple stain
- 22) Tyndallization
- 23) Give 2 examples of slide agglutination test
- 24) Name 3 acid fast organism
- 25) Name 2 catalase positive organism

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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**

**2 x 10 = 20**

- 1) Enumerate the methods of excreta disposal. Discuss septic tank in detail
- 2) Enumerate the arthropods of medical importance. Discuss in detail on itch mite
- 3) Discuss descriptive epidemiology in detail

**II. Write short notes on any TEN**

**10 x 5 = 50**

- 4) Chandlers index in Ancylostomiasis
- 5) Bias
- 6) Enumerate the water soluble vitamins. Discuss vitamin D in detail
- 7) Measles vaccine
- 8) Lifestyle diseases
- 9) Cardiopulmonary resuscitation (CPR)
- 10) Advantages and disadvantages of case control studies
- 11) Swimming pool sanitation
- 12) Integrated vector control
- 13) Water borne diseases
- 14) Types of disinfection

**III. Write short answers**

**10 x 2 = 20**

- 15) Reservoir of infection
- 16) Diseases transmitted by sand fly
- 17) Albendazole
- 18) Treatment for dog bite
- 19) Sources of Vitamin C
- 20) Functions of medico social worker
- 21) Paris green
- 22) Food fortification
- 23) Enumerate the determinants of health
- 24) Overcrowding

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**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 necrosis; What are the types of necrosis: write briefly on coagulation necrosis
- 2) What is myocardial infarction? What are the risk factors ,morphology and complications of myocardial infarction

**II. WRITE SHORT NOTES ON ANY FIVE**

**5 x 5 = 25**

- 3) Kwashiorkor
- 4) Edema and its causes
- 5) Hydronephrosis
- 6) Difference between benign and malignant tumors
- 7) Gall stones
- 8) Carcinoma breast
- 9) Chronic osteomyelitis

**III. WRITE SHORT ANSWERS**

**5 x 2 =10**

- 10) 2 causes of cardiomegaly
- 11) 2 causes of epistaxis
- 12) Cardinal signs of inflammation
- 13) Signs of vitamin B12 deficiency
- 14) Morphology of Goiter

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December 2014**  
**II D.P.T – Preventive and Social Medicine**  
**QP CODE – 3195**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any TWO**

**15 x 2= 30**

- 1) Describe the epidemiology of poliomyelitis. What is the role of physiotherapist in prevention of disability due to poliomyelitis?
- 2) Describe the functions of primary health centre. Add a note on staff position of PHC.
- 3) Enumerate Non-communicable diseases. Describe the risk factors related to coronary artery disease. How do you manage them?

**II. Answer any THREE**

**10 x 3= 30**

- 4) Enumerate family planning methods. Describe the various temporary methods with their advantages and disadvantages.
- 5) Enumerate National Nutritional Programmes that are implemented in India at present. Describe in detail Vitamin A Prophylaxis.
- 6) Define Growth Rate. What are the causes of high fertility? Add a note on population explosion.
- 7) Enumerate various occupational diseases. Describe general measures of prevention of occupational diseases.

**III. Write short notes on Any Six**

**5 x 6= 30**

- 8) Functions of WHO.
- 9) National Immunization Schedule.
- 10) Epidemiological Triad.
- 11) Oral Rehydration Solution.
- 12) Water borne diseases.
- 13) Health problems of old age.
- 14) Integrated vector control.
- 15) Oral Rehydration.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**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 three**

**3 x 10 = 30**

- 1) Define culture. Illustrate with examples.
- 2) Describe in detail the concept of community. Add a note on rural and urban communities in public health
- 3) Define sociology. Describe the social factors related to health and diseases.
- 4) Who are social workers? Write the role of medical social worker in society.

**II. Write essay - any six**

**6 x 5 = 30**

- 5) Role of family in health and diseases.
- 6) Health problems due to industrialization.
- 7) Drug abuse
- 8) Population explosion
- 9) Poverty and unemployment
- 10) Alcoholism
- 11) Ill effects of customs on health in India

**Section B - Statistics (write in separate answer book)**

**I. Answer any two**

**2 x 7 = 14**

- 1) Enumerate sampling methods. Describe in detail any one method with example
- 2) Define standard deviation. Calculate SD for the following  
32, 38, 29, 36, 30, 27, 18, 42, 39 and 21
- 3) Define vital statistics. Enumerate vital events. How this vital events are registered in urban and rural area.

**II. Write in brief any four**

**4 x 4 = 16**

- 4) Registration of birth and deaths
- 5) Sources of health information
- 6) Measures of dispersion
- 7) Chi-Square test
- 8) Pictogram
- 9) Probability

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, DECEMBER 2014**  
**III D.P.T –PHYSIOTHERAPY IN SURGICAL CONDITIONS**  
**QP CODE – 3205**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any FIVE**

**10 x 5 =50**

- 1) Write in detail about the general clinical features of diseases and disorders of the respiratory system.
- 2) What is emphysema? Write in details about the etiology, types, clinical features, complications, principles of physiotherapy treatment.
- 3) Define Asthma. Write in details about types, etiology, clinical features, and prevention of onset
- 4) What do you mean by respiratory failure? Write its causes, clinical features and treatment.
- 5) Define thoracotomy. Write the position of incision, indications of surgery, types of operation and complications of pulmonary surgery.
- 6) ACL injury – etiology, clinical features, treatment and post-operative physiotherapy management

**II. Write short notes on any eight**

**5 x 8 = 40**

- 7) Colles fracture
- 8) Ulcers
- 9) Stump management
- 10) Buerger's disease
- 11) Lobectomy
- 12) PT management in ICU
- 13) Prevention of bed sores
- 14) Sprain and strain management
- 15) Volkmann's ischaemic contracture
- 16) Tendon grafting

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**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**

- 1) Discuss the early and late musculo skeletal disorders Re-education techniques
- 2) Explain exercise therapy for stroke management
- 3) What are different relaxation position and its importance in exercise therapy

**II. Write short notes of any THREE**

**3 x 10= 30**

- 4) Walking aids
- 5) Co-ordination exercise
- 6) Different exercise therapy equipments and its use
- 7) Indication and contraindication of massage

**III. Write short answers**

**6 X 5 =30**

- 8) Different types of levers
- 9) Different gadgets used in suspension therapy
- 10) Irradiation
- 11) Ergonomics correction for postural defect
- 12) Muscles responsible for running
- 13) Movements of hip and muscles acting on it

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, DECEMBER 2014**  
**I D.P.T – Therapeutic Physics**  
**QP CODE – 2197**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any TWO**

**2 x 15=30**

- 1) State the Newton's laws of motion. Explain the laws with a particular reference to the mechanics of Human motion.
- 2) Discuss about quantum theory of radiation.
- 3) What are the methods by which heat is transmitted in a substance? Describe the terms latent heat of fusion and latent heat of vaporization.

**II. Answer any THREE**

**3 x 10= 15**

- 4) Capacitors
- 5) What do you mean by Ionization and Excitation?
- 6) Describe Bohr's atomic model with a neat labeled diagram.
- 7) Characteristics and types of magnet.

**III. Write a short notes on any Five**

**5 x 6= 30**

- 8) Eddy currents
- 9) Range of muscle work
- 10) Electric shock
- 11) Equilibrium
- 12) Electromagnetic spectrum
- 13) Auto transformer
- 14) Electrical energy

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# **PARAMEDICAL BOARD, BANGALORE**

**Annual examination, DECEMBER 2014**

## **III D.P.T – Diet & Nutrition**

**QP CODE – 3206**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any Five**

**5 x 12=60**

- 1) What is BMI? Suggest a balanced diet for a geriatric condition
- 2) Define Hypertension. Plan a diet for a patient suffering from hypertension
- 3) Suggest a diet plan for malnutrition.
- 4) What is poisoning? What are the causes for that and write a diet chart for the above
- 5) Suggest a diet plan for chronic renal failure.
- 6) Mechanism of action of vitamin D, sources and functions.

**II. Write short notes any Five**

**5 x 6= 30**

- 7) Vitamin A
- 8) Classification of food in detail
- 9) Role of diet in Diabetic mellitus
- 10) PEM
- 11) Food sources of vitamin E, chemical name and functions.
- 12) Food adulteration.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**I D.P.T – Applied Kinesiology & Applied Physiology**  
**QP CODE – 2198**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any Three**

**3 x 10=30**

- 1) Describe the movement analysis of the activity "SIT TO STAND" from a chair
- 2) Define Newton's laws of motions giving examples in relation to the human body
- 3) Identify the various types of muscle contraction and discuss its role in static and dynamic work
- 4) Describe the biomechanics of respiration.

**II. Answer any three of the following**

**3 x 10= 30**

- 5) Describe the precision grip
- 6) Mention various anthropometric measures in human body
- 7) Write about extensor mechanism of hand
- 8) Discuss in detail about Lumbo - pelvic rhythm

**III. Write short notes on any Six**

**6x 5= 30**

- 9) Knee stability
- 10) Range of movement
- 11) Movement of rib cage
- 12) Define elasticity
- 13) Linear and angular velocity
- 14) Angle of pull
- 15) Ballistic movement

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**III D.P.T – Management Concept in Physiotherapy & Research**  
**Methods**  
**QP CODE – 3207**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any Four**

**4 x 15=60**

- 1) What is material management system? Explain in detail.
- 2) What is the role of physiotherapist in hospital management?
- 3) Explain the basic principles of Job Description & Specification in an organization or hospital.
- 4) What are Labour Laws? Explain the concept of Insurance in Health sector.
- 5) Explain the hospital record maintenance fundamentals. How do they help in hospital management?

**II. Write short notes any Five**

**5 x 6= 30**

- 6) Staff development.
- 7) Motivation in an organization.
- 8) Stock Control and Records.
- 9) Principles of Banking.
- 10) Leadership.
- 11) Basic principles of management

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, December -2014**  
**II D.P.T – Electro Diagnosis & Electrotherapy**  
**QP CODE – 3197**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any TWO**

**2 x 15=30**

- 1) Describe the production, indications and contraindications of short wave diathermy?
- 2) Describe physiological, effects , precaution, uses and dangers of cryotherapy
- 3) Explain different electro therapeutics for heat and cold and its physiological effects.

**II. Write short notes of any THREE**

**3 x 10= 30**

- 4) Describe techniques of treatment, indication physiological effects of interferential current
- 5) Discuss the microwave diathermy production and therapeutic effect
- 6) Discuss the various bio feedback used in physiotherapy
- 7) What is laser, describe the therapeutic uses and dangers of laser

**III. Write short notes**

**6 x 5= 30**

- 8) Ultraviolet radiation
- 9) Hydro therapy and electrotherapy
- 10) Contraindication for TENS
- 11) Electromyography
- 12) Luminous generation in infrared
- 13) Isokinetic

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, DECEMBER 2014**  
**III D.P.T – Community Based Rehabilitation**  
**QP CODE – 3208**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Long Essay - Answer any Five**

**5 x 12=60**

- 1) Rehabilitation for Mentally retarded patient in CBR
- 2) Differentiate the urban and rural CBR objective and its scope in physiotherapy
- 3) Explain budgeting and funding of organization in CBR
- 4) What are geriatrics difficulties and its rehabilitation in CBR
- 5) What are social education and vocational training for disability in CBR
- 6) Explain role of physiotherapy for loco motor diseases in CBR

**II. Write short notes on any Five**

**5 x 6= 30**

- 7) Home exercise
- 8) Administration concept in organization.
- 9) Camp and specialist approach
- 10) Occupational and Speech therapy
- 11) Orthotics for CBR patient
- 12) Comprehensive rehabilitation

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