

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Discuss etiology, pathogenesis and complications of Bronchiectasis.
- 2) Classify bone tumours and discuss osteosarcoma in detail.
- 3) Define characteristics of benign and malignant tumour.
- 4) Define inflammation. Discuss cellular events of acute inflammation.

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

**12 x 5 =60**

- 5) Leprosy.
- 6) Nephrotic syndrome.
- 7) Alcoholic cirrhosis.
- 8) Congenital heart diseases.
- 9) Classification of leukemias.
- 10) Sequestrum.
- 11) Primary complex.
- 12) Osteoarthritis..
- 13) Viral carcinogens.
- 14) Pott's spine.
- 15) Lobar pneumonia.
- 16) Edema
- 17) Blood picture and bone marrow findings in CML.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 briefly the principle, procedure and types of retinoscopy.
- 2) What is Lensometer and describe the method of neutralization of lense.
- 3) Explain Synoptophore and its uses.

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

**10 x 5 = 50**

- 4) Enucleation.
- 5) Instruments used in chalazion incision and curettage.
- 6) Neutralisation of lenses.
- 7) Cycloplegic refraction.
- 8) Preparation of sterile ocular bandage.
- 9) Tonometer.
- 10) Types of Squint.
- 11) Pterigium.
- 12) Eye banking.
- 13) Refraction and correction.
- 14) Diabetic retinopathy.
- 15) Asepsis.

**III. Write short answers**

**10 x 2 =20**

- 16) Two uses of Fosimeter.
- 17) Indications for epilation.
- 18) Uses of slit lamp.
- 19) Types of cataract surgery.
- 20) Name two dilating eye drop.
- 21) Stye.
- 22) Blunt Trauma.
- 23) Homatropin eye drops.
- 24) Cover test.
- 25) Exophthalmos.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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. Write name of ketone bodies and add note on ketogenesis.
2. Describe in details about citric acid cycle.
3. What is Quality control? Explain internal & external quality control.

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

**10 x 5 =50**

4. NPN Substances.
5. Abnormal constituents of urine.
6. Spectrophotometer.
7. Glycosaminoglycans.
8. Synthesis of Uric acid.
9. Lipoproteins.
10. Diagnostic importance on Enzymes.
11. Liver function tests.
12. Glycogenesis.
13. Liver function tests.
14. Specific gravity of Urine.
15. Renal function test.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

16. Creatinine.
17. Micropipettes.
18. Name PUFA.
19. Two uses of Blood gas Analyzer.
20. Clinical importance of Amylase.
21. Two glycogen storage disorders.
22. Name gastric function test.
23. Name bile salts and bile pigments.
24. Glycosuria.
25. Biuret Test.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define HIV/AIDS. Discuss the magnitude, prevention and control.
- 2) Enumerate National health programmes. Describe national programme on poliomyelitis.
- 3) Describe the steps in an investigation of food poisoning in an hostel. How do you prevent the recurrence in future.

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

**10 x 5 = 50**

- 4) Elements of primary health care.
- 5) Blindness control programme.
- 6) First aid in dog bite.
- 7) Screening for diabetes.
- 8) Lead time in screening.
- 9) Dimensions of health.
- 10) Flaccid paralysis surveillance in polio.
- 11) Pneumoconiosis.
- 12) High risk pregnancy.
- 13) Health information system.
- 14) Investigation of an Epidemic.
- 15) Manmade Malaria.

**III. Write short answers**

**10 x 2 = 20**

- 16) Super ORS.
- 17) Spot Map.
- 18) Food adulteration.
- 19) Anganwadi.
- 20) Chlorine tablets.
- 21) Oral polio.
- 22) Warning signals in ANC.
- 23) Vitamin A Prophylaxis.
- 24) Scabies.
- 25) Carriers in typhoid.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe the different interactions of radiations with matter.
- 2) Write in detail about the production of X-rays.
- 3) Write in detail about Photoelectric effect.

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

**10 x 5 = 50**

- 4) Personnel monitoring devices.
- 5) Testing and care of cassettes.
- 6) Mammography X-ray tube.
- 7) Thyristor.
- 8) Properties of X-rays.
- 9) Filtration.
- 10) Tungsten.
- 11) KVP.
- 12) TLD badge.
- 13) Inherent filtration.
- 14) HSG.
- 15) High MA technique.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Bacterial action of film.
- 17) Indications for barium meal.
- 18) Rectifier.
- 19) Indications for MCV.
- 20) Rotating anode.
- 21) Collimator.
- 22) Thermostat.
- 23) Teleradiography.
- 24) Film hopper.
- 25) Indications for Bronchography.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Draw a neat diagram of step up transformer in a conventional X-ray machine.
- 2) Write in detail about intensifying screens and how do you maintain them.
- 3) Describe effects of radiation on the human body, Add a note on permissible dose.

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

**10 x 5 = 50**

- 4) Magnification radiography.
- 5) Ammeter.
- 6) Structure of an atom.
- 7) Green sensitive films.
- 8) Collimator.
- 9) Chest X-ray P/A view.
- 10) Wet bench in a dark room.
- 11) Three phase generators.
- 12) IITV.
- 13) Alpha decay.
- 14) Dental film.
- 15) Nuclear fission.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Cones.
- 17) Scattered radiation.
- 18) Hangers.
- 19) Film fog.
- 20) Plumbicon camera.
- 21) Isobars.
- 22) Resistor.
- 23) Mega hertz.
- 24) Nucleus of an atom.
- 25) Iodine 131.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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**

**5 x 3 = 15**

- 1) What are the chief sources of medical terminology? Give one example.
- 2) Define phobia and write any three phobias with their meanings.
- 3) Name five planes of the body.
- 4) Differentiate between prefix and suffix.
- 5) Differentiate between Fracture and Abortion.

**II. GIVE THE MEANING FOR THE FOLLOWING**

**5 x 1 = 5**

- a) Hyper.
- b) Peri.
- c) Trane.
- d) Contra.
- e) Ecto.

**III. GIVE THE PHOBIAS OF THE FOLLOWING**

**10 x 1 = 10**

- |                    |                        |                         |
|--------------------|------------------------|-------------------------|
| a) Height.         | b) Animal.             | c) Cold.                |
| d) Eating.         | e) Speaking in public. | f) Surgical operations. |
| g) Crossing river. | h) Fear of society.    | i) Phone.               |
| j) Fear of death.  |                        |                         |

**IV. WRITE THE MEANING OF THE FOLLOWING ROOTS**

**10 x 1 = 10**

- |              |             |
|--------------|-------------|
| a) Enter.    | f) Nephro.  |
| b) Hyster.   | g) Aden.    |
| c) Dactyl.   | h) Osteo.   |
| d) Hepat.    | i) Cerebro. |
| e) Encephal. | j) Viscer.  |

**V. MATCH THE FOLLOWING**

**5 x 1 = 5**

- |             |                   |
|-------------|-------------------|
| 1) Aureus   | 1. Yellow.        |
| 2) Candidus | 2. Red.           |
| 3) Luteus   | 3. Brown.         |
| 4) Cirhos   | 4. Golden.        |
| 5) Erthros  | 5. Shining white. |

**PTO...**

**VI. DEFINE THE FOLLOWING**

**15 x 1 = 15**

- |                |                 |
|----------------|-----------------|
| a) Abasia.     | i) Aphasia.     |
| b) Otomylosis. | j) Nyotalopia.  |
| c) Ulcer.      | k) Virus.       |
| d) Tumour.     | l) Prenatal.    |
| e) Dysunia.    | m) Empyema.     |
| f) Orthopnea.  | n) Bradycardia. |
| g) Stenosis.   | o) Glycemia.    |
| h) Apex.       |                 |

**VII. DIFFERENTIATE THE FOLLOWING TERMS**

**5 x 1 = 5**

1. Aural & Oral.
2. Hypotension & Hypertension.
3. Mortal & Mortality.
4. Palpitation & Palpation.
5. Morbid & Morbidity.

**VIII. GIVE THE MEDICAL TERMS**

**10 x 1 = 10**

1. Construction of Pylorus.
2. Muscular pain.
3. Fat in the blood.
4. Enlargement of Liver.
5. Plastic surgery on the hand.
6. Vomiting of blood.
7. Brain tumor.
8. Pain in the joint.
9. Excision of a gland.
10. Rupture of the uterus.

**IX. DEFINE THE FOLLOWING**

**5 x 1 = 5**

1. Trauma.
2. Gestation.
3. Meropia.
4. Lipoid.
5. Cancer.

**XI. EXPAND THE FOLLOWING ABBREVIATIONS**

**10 x 1 = 10**

- |         |        |        |        |          |
|---------|--------|--------|--------|----------|
| 1) BSOM | 2) DUB | 3) BCG | 4) CAD | 5) IVSD  |
| 6) TAH  | 7) EEG | 8) RDS | 9) TBW | 10) LSCS |

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define a Die in FPD. Mention the different die systems and describe any one technique in detail.
- 2) Classify fixed partial dentures and discuss various types of pontics.
- 3) Mention different types of maxillary and mandibular major connectors.

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

**8 x 5 = 40**

- 4) Adams clasp.
- 5) Duplicating materials.
- 6) Casting defects.
- 7) Components of cast partial denture.
- 8) What is sprue? Mention the principles of spruing.
- 9) Tripoding.
- 10) Major connectors.
- 11) Indications of porcelain jacket crown.
- 12) Overjet and overbite.
- 13) Dental ceramics classification and its two uses.

**III. WRITE SHORT ANSWERS**

**5 x 3=15**

- 14) Partial crown.
- 15) Horse shoe shaped major connector.
- 16) Die materials.
- 17) Occlusal rest.
- 18) Hawley's appliance.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe in detail the principles of teeth arrangement.

**II. WRITE SHORT NOTES**

**5 x 5 = 25**

- 2) Relining and Rebasing.
- 3) Cast – Preparation and Trimming.
- 4) Anterior teeth selection principles.
- 5) Mention various materials used in fabrication of record base.
- 6) Posterior teeth types.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 7) Beading and Boxing.
- 8) Ceramic teeth.
- 9) Curing Cycle.
- 10) Thermoplastic sheets.
- 11) Overjet and Overbite

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 the various principles you follow during oral prophylaxis.
- 2) Define dental plaque. What are its types? Give its differences in tabular Column. Give its composition and attachment on root surface.
- 3) Describe in detail home care instructions and its importance.
- 4) Define dental plaque. Classify plaque and describe the various stages of plaque Formation.

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

**7 x 5 =35**

- 5) Ultrasonics.
- 6) Chronic periodontitis.
- 7) Pre malignant lesions.
- 8) Chlorhexidine.
- 9) ANUG.
- 10) Brushing techniques.
- 11) Intrinsic stains.
- 12) Functions of saliva.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe in detail Dental health education and home care instructions for dental Patients.

**II. Write short notes**

**5 x 5 =25**

- 2) Intrinsic stains.
- 3) Brushing Techniques.
- 4) Methods of relieving pain due to periodontal diseases.
- 5) Ultrasonics in dental practice.
- 6) Extrinsic stains.

**III. Write short answers**

**2 x 5 = 10**

- 7) Gingivitis.
- 8) Marginal gingiva.
- 9) Periodontal pocket.
- 10) Mouth Wash.
- 11) Alveolar abscess.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 the preparation, anesthesia and procedure for LSCS.
- 2) Discuss about abdominal incisions for various surgeries.
- 3) What is tubectomy? Describe the procedure in detail.

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

**10 x 5 = 50**

- 4) Burst abdomen.
- 5) Crystalloids and colloids.
- 6) CVP.
- 7) Ultrasonography.
- 8) Transplantation.
- 9) Nitrous oxide.
- 10) Catheterization of urinary bladder.
- 11) CPR.
- 12) Hysterectomy.
- 13) Circumcision.
- 14) Lignocaine.
- 15) Intra ocular lens implant.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Propofol.
- 17) D & C.
- 18) Radiotherapy.
- 19) I and D
- 20) Skin grafting.
- 21) LP needle.
- 22) Endotracheal tube.
- 23) Venesection.
- 24) Hernia.
- 25) Pulse Oximeter.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define general anaesthesia. Enumerate the differences between general anaesthesia and spinal anaesthesia.
- 2) Describe the IV fluids used in OT. Write a note on crystalloids and colloids.
- 3) Write a note on Blood grouping and cross matching. Describe the indications and complications of blood transfusions.

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

**10 x 5 = 50**

- 4) Informed Consent.
- 5) Capnography.
- 6) Accupressure.
- 7) Magill's Forceps.
- 8) Gastroscopy.
- 9) Hypotension.
- 10) Death on table.
- 11) C.P.R.
- 12) Oxygen Cylinder.
- 13) Premedication.
- 14) Defibrillator.
- 15) Vasopressors.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Potassium Permanganate.
- 17) Ryle's tube.
- 18) Nasal airway.
- 19) Foley's Catheter.
- 20) Normal saline.
- 21) Formaline.
- 22) Iodine.
- 23) C V P.
- 24) Medico legal aspects of anaesthesia.
- 25) ECG Monitor.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Discuss the normal functions of kidney and evaluation of proteinuria.
- 2) Discuss the etiology, clinical features and management of chronic renal failure.
- 3) Discuss the steps in evaluation and preparation of a patient before starting on Haemodialysis.

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

**10 x 5 = 50**

- 4) Disinfection in dialysis.
- 5) Reverse osmosis.
- 6) Hepatitis prophylaxis in dialysis patient.
- 7) C.A.P.D.
- 8) Dialysis in seriously ill patient.
- 9) Ultrafiltration.
- 10) Pericardial effusion.
- 11) Dialysis dementia.
- 12) Evaluation of patient before haemodialysis.
- 13) Dialysis disequilibrium.
- 14) Re-use of hollow fibre dialyser.
- 15) Electrolyte.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Assessment of adequacy in dialysis.
- 17) Acute tubular Necrosis.
- 18) CAPD v/s Haemodialysis.
- 19) Name two types of dialysis.
- 20) Write two common infections in dialysis patient.
- 21) Mention two anticoagulants used in haemodialysis.
- 22) What are anticoagulants?
- 23) Write the normal values of a) PPBS b) Serum creatinine.
- 24) Name two poisonings treated by dialysis.
- 25) Name two immune suppressant drugs.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 Intradialytic hypotension its causes and management.
- 2) Discuss the causes of infection in a patient taking haemodialysis and preventive measures advised.
- 3) How will you clinically assess the patient prior to dialysis, during dialysis & after dialysis.

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

**10 x 5 = 50**

- 4) Urea reduction ratio & its use in dialysis efficacy.
- 5) Protamine sulphate.
- 6) Dialysis dementia.
- 7) Acute tubular necrosis.
- 8) Deionization.
- 9) AV Fistula Vs Graft.
- 10) Diet in dialysis patient.
- 11) Dry weight.
- 12) Access recirculation.
- 13) AAMI recommendations.
- 14) Bundle volume.
- 15) Erythropoietin.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Name two contamination of raw water.
- 17) Name two viral infections transmitted by blood.
- 18) Name two diets rich in potassium.
- 19) Name two causes of pedal edema.
- 20) Name two antihypertensive drugs.
- 21) Name two drugs used in anaphylactic reaction.
- 22) Mention the usual position of blood leak alarm.
- 23) Mention two cat-ions.
- 24) Mention two absolute indications for dialysis.
- 25) Mention two dialysis membranes.

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**GOVERNMENT OF KARNATAKA  
PARAMEDICAL BOARD BANGALORE  
Annual Examination, January-2013  
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) Define Energy. State the Law of Conservation of Energy and explain with respect to a freely falling body.
- 2) What is a nuclear reactor? Briefly explain the principle of nuclear reactor. Draw schematic Diagram of a nuclear reactor and label the parts, mention the uses of nuclear reactors.

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

**5 x 5 = 25**

- 3) Orbital velocity and Escape velocity.
- 4) Ultrasonic properties and uses.
- 5) Capacitor and its uses.
- 6) Satellite.
- 7) Reflection of light.
- 8) Slide calipers.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) Kinetic energy.
- 11) Insulators.
- 12) Define power and mention its SI unit.
- 13) State and write the equation of coulomb's law.
- 14) Mass and Weight.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**FIRST DPT – ANATOMY**  
**QP CODE – 2191**

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Describe the gross anatomy of heart.
- 2) Mention the difference between the lungs and a note on Pleura.
- 3) Describe the anatomy of shoulder joint.

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

**10 x 5 = 50**

- 4) Muscles of mastication.
- 5) Arches of foot.
- 6) Long Saphenous vein.
- 7) Gross anatomy of stomach.
- 8) General organization of autonomic nervous system.
- 9) Cerebellum.
- 10) Deltoid muscle.
- 11) Muscles involved in movement of Hip joint and types of Hip movement.
- 12) Uterine tubes.
- 13) Parotid glands.
- 14) Liver.
- 15) Carpal bones.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Layers of skin.
- 17) Spermatogenesis.
- 18) Golgi bodies.
- 19) Lacrimal gland.
- 20) Mitochondria.
- 21) Epiphysis.
- 22) Name two muscles of tongue.
- 23) Hyoid bone.
- 24) Orbit.
- 25) Lymphoid Organ.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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) Define first aid in sports. How will you organize first aid coverage on the field in an athletic Competition.
- 2) Discuss the aims and tasks of physical education and its principles and methods in detail.
- 3) List out five regional sports condition in detail.
- 4) Explain cardio respiratory adaptation to physical training.
- 5) What is Tennis elbow? Explain pathomechanism, clinical features and rehabilitation Programmes for the same.

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

**5 x 5 = 25**

- 6) Fitness testing.
- 7) Health improvement programme.
- 8) Carpel tunnel syndrome.
- 9) Priced treatment.
- 10) Effects of warmup exercise.
- 11) Adhesive capsulitis.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Myopia – definition, types, clinical features and its management.
- 2) Discuss the advantages and disadvantages of spectacle lens and contact lens.
- 3) Describe the anatomy of bony orbit.

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

**10 x 5 = 50**

- 4) Anisometropia.
- 5) Keratometry.
- 6) Aphakia and its correction.
- 7) Fitting and adjustments of spectacles.
- 8) Bitot spots.
- 9) B-Scan.
- 10) Cycloplegic refraction.
- 11) Hypermetropia.
- 12) Diplopia.
- 13) Acute Iridocyclitis.
- 14) Pinhole.
- 15) Biometry.

**III. Write short answers**

**10 x 2 = 20**

- 16) Types of Bifocals.
- 17) Cyclopegics.
- 18) Tears – production and drainage.
- 19) Congenital cataract.
- 20) Slit lamp uses.
- 21) Types of transposition.
- 22) Bupthalmos.
- 23) Blepharitis.
- 24) Placido's disc.
- 25) Low vision aids.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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) Classify Bones and Describe microscopic anatomy of compact bone.
- 2) Classify Epithelial tissue. Describe stratified Squamous epithelium.

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

**5 x 5 =25**

- 3) Broncho pulmonary segment.
- 4) Common bile duct.
- 5) Paranasal air sinuses.
- 6) Median cubital vein.
- 7) Vas deferens.
- 8) Male urethra.
- 9) H & E staining.

**III. Write short answers**

**5 x 2=10**

- 10) Name four gross features of spleen.
- 11) List the structures passing through portahepatis.
- 12) Name four retro peritoneal structures.
- 13) Name the parts of lateral ventricle.
- 14) Neuroglia.

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

**QP CODE – 2102**

**I. Long Essay – Answer any ONE**

**1 x 10=10**

- 1) Define Haemostasis. Describe the mechanisms involved in achieving it.
- 2) Name the hormones of Anterior Pituitary gland. Write the actions of growth hormone.

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

**5 x 5 =25**

- 3) Neuromuscular junction.
- 4) Grave's disease.
- 5) Transport of oxygen in blood.
- 6) Role of baroreceptors in the regulation of blood pressure.
- 7) Functions of posterior pituitary hormones.
- 8) Anemia.
- 9) Contents and functions of middle ear.

**III. Write short answers**

**5 x 2=10**

- 10) Write the normal values of a) WBC count b) Hemoglobin.
- 11) Name any two functions of C.S.F (Cerebro spinal fluid).
- 12) Name any two lung volumes.
- 13) Name any two gastrointestinal hormones.
- 14) Functions of photoreceptors.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Write in detail about scattered radiation and its control. Write note on beam limiting devices.
- 2) Define an Atom, atomic number and mass number? Explain Neil's-Bohr atomic model of an atom.

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

**5 x 5 = 25**

- 3) Grids.
- 4) Voltmeter.
- 5) Ohm's law.
- 6) Line focus principle.
- 7) Vacuum tube diode.
- 8) Bremsstrahlung radiation effect.
- 9) Compton effect.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) Define vector, give an example.
- 11) Periodic table.
- 12) Tube rating.
- 13) Fluorescence.
- 14) Half value layer.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define medical records committee. Describe its composition, responsibilities and functions.
- 2) Name different types of indexes maintained in medical records and define each card.

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

**5 x 5 = 25**

- 3) Medical audit and its importance.
- 4) Values of medical records.
- 5) Filing system and retrieval procedure of medical records.
- 6) Name the basic and special forms used in medical records.
- 7) Define retention of medical records.
- 8) Draw the flow chart of in patient records.
- 9) Medical board.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Tracer card.
- 11) Discharge against medical advice.
- 12) Discharge summary.
- 13) OPD.
- 14) Alpha index card.

**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) Define warrant. Explain the different types of search warrants.
- 2) Describe the legal aspects of medical records.

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

**5 x 5 = 25**

- 3) Postmortem report.
- 4) Criminal cases.
- 5) Burden of proof.
- 6) Rules for birth and death registration.
- 7) Persons exempted from personal appearance in the court.
- 8) Cognizable and Non-cognizable offence.
- 9) Who is public servant as per IPC?

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) FIR.
- 11) Government pleader.
- 12) Decree.
- 13) Defendant.
- 14) Movable property.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Explain Various types of Indexes & Why it is maintained in Medical Records Department.
- 2) Define Burden of Proof. When does the burden lies on the accused & the rights of an accused Person.
- 3) Discuss the values of Medical records to each of the following:  
i) The Patients. ii) The Physicians iii) The Hospital iv) In Research.
- 4) Define Summon, Service of summons where defendant resides in another state and outside India.

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

**10 x 5 = 50**

- 5) Persons exempted from Personal appearance in the court.
- 6) Cognizable & Non-Cognizable offences.
- 7) Explain about the major function of Medical records department.
- 8) Retention of Medical records.
- 9) Distinguish between Billable and Non Billable offences.
- 10) How Medical records used as personal and impersonal documents.
- 11) What are the methods used to trace out the missed files.
- 12) Who is the public servant as per IPC.
- 13) What is Estoppels and promising Estoppels.
- 14) What are the deficiencies commonly found in the case sheets & what are the procedures to Complete it.
- 15) What are the Procedures in case of arrest without Warrant by a police officer.
- 16) Write the rules and regulations of release of information to government and other agencies.
- 17) Qualitative & Quantitative analysis.
- 18) Criminal Liability.

**III. WRITE SHORT ANSWERS**

**10 x 2=20**

- 19) Basic & Special forms.
- 20) Alpha Index Card.
- 21) Deficiency check.
- 22) DAMA.
- 23) Malpractice Suits
- 24) Modes of proof.
- 25) Health Care Provider.
- 26) Accession Register.
- 27) Workmen Compensation ACT.
- 28) Types of filling system.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) What is the coefficient of thermal expansion? Add a note on expansion of solid, liquid and gases
- 2) Define element, compound and mixture. Write in detail differences between compound and mixture.
- 3) Define dental cast. Mention the different types of cast and write the parts of the cast.
- 4) Write the general properties of metal. Mention the metals and alloys used in dentistry and their advantages over resins.

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

**7x 5 = 35**

- 5) Ductility and Malleability.
- 6) Tarnish and Corrosion.
- 7) Lever principles.
- 8) Electrolysis.
- 9) Hardness.
- 10) Syneresis.
- 11) Conduction.
- 12) Proportional point.
- 13) Acid and bases.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Classify Gypsum products and describe in detail type II gypsum product.
- 2) Classify dental cements. Write the composition, setting reaction and uses of Zinc oxide eugenol cement.

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

**5 x 5 = 25**

- 3) Properties of heat cure acrylic resin.
- 4) Uses of zinc phosphate cement.
- 5) Soldering and Welding.
- 6) Difference between Fluxes and antfluxes and their examples.
- 7) Plaster of Paris.
- 8) Material used in fabrication of denture base.
- 9) Gold alloys.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Electroplating.
- 11) Niti wires.
- 12) Die.
- 13) Imbibition and Synergesis.
- 14) Two uses of glass ionomer cement.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe the structure of temporomandibular joint. Name the muscles acting on the joint.
- 2) Describe the tongue.
- 3) Draw a neat labeled diagram of a tooth and mention the dental formula in adults.

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

**5 x 5 =25**

- |                        |                   |
|------------------------|-------------------|
| 4) Hyoid bone.         | 7) Mandible.      |
| 5) Vestibule of mouth. | 8) Parotid gland. |
| 6) Palatine tonsil.    | 9) Milk teeth.    |

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

**QP CODE – 1018**

**I. Long Essay**

**1 x 10=10**

- 1) Describe the composition and functions of blood.

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

**5 x 4 =20**

- 2) Structure of nucleus.
- 3) Salivary juice.
- 4) Insulin.
- 5) Structure of cell.
- 6) Blood transfusion.
- 7) Functions of WBC.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Name the major salivary glands. Give an account on Parotid Salivary Gland.
- 2) Give an account on lateral wall of Nose.

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

**2x 5 = 10**

- 3) Name the muscles of lips & cheeks.
- 4) Digastric muscle.
- 5) First cervical vertebra.

**III. Write short answers**

**3 x2 =6**

- 6) Carotid body.
- 7) Name any 4 bone forming facial skeleton.
- 8) Name any 4 cranial nerves.

**Section – B, GENERAL PHYSIOLOGY (write in separate answer book)**  
**QP CODE – 2182**

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

**4 x 4 =16**

- 1) Structure of a cell.
- 2) Functions of Plasma Proteins.
- 3) Functions W.B.C (White Blood Corpuscles).
- 4) Blood Clotting mechanism.
- 5) Blood groups.
- 6) E.C.G (Electro Cardio Gram).

**II. Write short answers**

**2 x2 = 4**

- 7) Mitochondria.
- 8) Neuron.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 an ideal OT. Plan and discuss how you begin a new OT.
- 2) Discuss the composition and role of different members of health care team.
- 3) Describe the patient monitoring during major surgical procedures.

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

**10 x 5 = 50**

- 4) Day care surgery.
- 5) Haemostasis.
- 6) Informed consent.
- 7) C-arm.
- 8) Manifold room.
- 9) Factors influencing wound healing.
- 10) Surgical staples.
- 11) CSSD(Central sterile supply department).
- 12) Exchange areas in OT.
- 13) Bioburden.
- 14) Professional nursing.
- 15) Preservation of specimens for histopathology.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Enema.
- 17) ICU.
- 18) Draping.
- 19) Gowning.
- 20) Ambu bag.
- 21) Colostomy.
- 22) Halothane.
- 23) Cautery.
- 24) Antiseptics.
- 25) Cardiac Monitoring.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January -2013**  
**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) Discuss Incisions for Laprotomy and also discuss Emergency Laprotomy.
- 2) Discuss Tonsillectomy.
- 3) Discuss Preparation for Thyroid Surgery.

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

**10 x 5 = 50**

- 4) Inter Coastal Drainage.
- 5) Varicose Vein.
- 6) Breast abscess Drainage.
- 7) Mesh repair in hernia.
- 8) Fistulectomy.
- 9) Enema.
- 10) Hiltons Method of Drainage.
- 11) Surgical scrubbing.
- 12) Foleys Catheterization.
- 13) Laser Surgery.
- 14) Discharge and followup.
- 15) Man Lord room Concept.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Wound Management.
- 17) Bioburden.
- 18) Sebaceous cyst.
- 19) Ring Block.
- 20) Humby's Knife.
- 21) Hand Washing Technique.
- 22) Atropine.
- 23) C-Arm.
- 24) MRI.
- 25) Ryles Tube.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe the circuits and monitors in a haemodialysis machine. Add a note on its maintenance.
- 2) Describe the anatomy and use of A.V fistula. Add a note on permanent access devices in Haemodialysis.
- 3) Name the members of dialysis team. Write the function of each of them.

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

**10 x 5 = 50**

- 4) Heparin.
- 5) De-ionisation.
- 6) Proportioning systems.
- 7) Saline Dialysis.
- 8) Cardio vascular problems in patients on dialysis.
- 9) Causes and clinical features of Acute renal failure.
- 10) Waste disposal in haemodialysis unit.
- 11) Proteinuria.
- 12) Acetate based dialysate v/s Bicarbonate dialysate.
- 13) Common infections associated with dialysis.
- 14) Water purification systems.
- 15) Reverse osmosis.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Give the normal values of blood urea and serum creatinine.
- 17) Indications for emergency dialysis.
- 18) Endocrine functions of kidney.
- 19) Osmosis.
- 20) Bicarbonate.
- 21) Name two serum electrolytes.
- 22) Pre-dialysis education of the patient.
- 23) Write two complications for dialysis.
- 24) Name two Anticoagulants.
- 25) Name two investigations before dialysis?

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Mention aminoglycoside antibiotics. Write their general properties
- 2) Enumerate Antihelmintic drugs. Write in detail about Albendazole.

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

**5 x 5 = 25**

- 3) Urinary antiseptic agents.
- 4) Treatment of Datura poisoning.
- 5) Hepatitis-B vaccine.
- 6) Low molecular weight heparins and their uses.
- 7) Lignocaine.
- 8) Diazepam.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name two vitamin deficiency states.
- 10) Write the meaning of the abbreviations a) o.d b) q.h
- 11) Name two fat soluble vitamins.
- 12) Name two drugs included in Schedule I.
- 13) What is Materia Medica?

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

**QP CODE - 2152**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Explain the maintenance of records in dialysis unit.
- 2) Water treatment in Haemodialysis.

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

**5 x 5 = 25**

- 3) Access recirculation.
- 4) Dialyzer reactions.
- 5) SLED.
- 6) Heparin free haemodialysis.
- 7) Types of dialyzer and explain.
- 8) Dialyzer reuse.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Normal level of blood urea and serum creatinine.
- 10) Name two antihypertensive drugs.
- 11) Name two antibiotics used for catheter related sepsis.
- 12) Name two indications for plasmapheresis.
- 13) Name two viral infections that can be transmitted by blood.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**II DPT – PHARMACOLOGY**  
**QP CODE – 3192**

**Time: 3 hrs**

**Max. Marks: 90**

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

**4 x 15=60**

- 1) Classify analgesic. Discuss the indication, contraindications and adverse effects of morphine.
- 2) Classify antidiabetic drugs. Discuss the actions, uses and adverse effects of Insulin. Add a note on newer insulins.
- 3) Enumerate the various routes of drug administration. Write the advantage and disadvantage of intravenous route.
- 4) Classify sedatives and hypnotics. Discuss the advantage of Benzodiazepines over Barbiturates.
- 5) Enumerate Glucocorticosteroids. Write the therapeutic uses and adverse effects of Glucocorticosteroids.

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

**4 x 5= 20**

- 6) Preanaesthetic medication.
- 7) Bronchodilator.
- 8) Co-trimoxazole.
- 9) Mucolytics.
- 10) Organophosphorus compound poisoning .

**III. Write short answers**

**5 x 2 =10**

- 11) Name two anti hypertensive drugs.
- 12) Name two Cephalosporins.
- 13) Name two broad spectrum antibiotics.
- 14) Name two Diuretics.
- 15) Hepatitis B vaccine.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) What are the common infective eye disorder and describe in detail any one of them.
- 2) Discuss major and minor surgical records and its importance.
- 3) Discuss in detail functioning of an eye bank.

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

**10 x 5 = 50**

- 4) Rehabilitation of blind.
- 5) Sterilization.
- 6) Bifocal lenses.
- 7) Disease index.
- 8) Demography and its importance.
- 9) Epidemiology and its importance.
- 10) Publicity methods for eye donation.
- 11) Vision 20-20.
- 12) Low vision aids.
- 13) Prevention of postoperative endophthalmitis.
- 14) Methods of health education.
- 15) Astigmatic fan.

**III. Write short answers**

**10 x 2 = 20**

- 16) Cylindrical lenses.
- 17) Alphabetical index.
- 18) Near vision testing.
- 19) Correction of astigmatism.
- 20) Indication of enucleation.
- 21) Nursing care preoperative and postoperative.
- 22) Lens neutralisation.
- 23) Four suture materials used in ophthalmic surgeries.
- 24) Uses of prisms.
- 25) Types of aphakic correction.

# PARAMEDICAL BOARD, BANGALORE

## Annual Examination, January-2013

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. Mention the types and indications of Coomb's test. Describe the procedure of Coomb's test.
2. Describe physical, chemical and microscopic examination of semen.
3. Write the procedure of PT and APTT test with normal reference range.

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

**10 x 5 =50**

4. Write in detail about ABO and Rh blood group.
5. Donor selection.
6. Preparation of copper sulphate solution in blood bank.
7. What is Immuno cytochemical stain? Give one example for each.
8. Microwave tissue processing.
9. Reverse blood grouping.
10. Frozen section.
11. Quality control in hematology.
12. Microtomes.
13. PAS stain.
14. Barr bodies.
15. Post blood donation advise, "DO's and DON'T'S".

**III. Write short answers**

**10 x 2 = 20**

16. Platelet apheresis.
17. Use of gel card in blood bank.
18. Draw a neat labeled diagram of Histokinette.
19. Different types of wax used in histopathology.
20. Sickling test.
21. Mounting agents.
22. Clotting time.
23. Name three Romanowsky stains.
24. Blueing in H & E staining.
25. Sodium citrate.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe the epidemiology of typhoid. Discuss the magnitude, prevention and control of it.
- 2) Classify diabetes and discuss the different strategies of control and prevention.
- 3) Describe the causes of maternal mortality in India. Add a note on its prevention and control.

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

**10 x 5 = 50**

- 4) Uses of epidemiology.
- 5) Obesity disorders.
- 6) RNTCP programme.
- 7) Mother card.
- 8) ESI.
- 9) Population strategy in road traffic accidents.
- 10) Hospital records.
- 11) School health programme.
- 12) Essential drugs to be used in primary health care.
- 13) Health problems of the aged people.
- 14) Risk factors and preventive measures for low birth weight babies.
- 15) Control of rabies.

**III. Write short answers**

**10 x 2 = 20**

- 16) Primary health care.
- 17) Oral contraceptives.
- 18) Break point in chlorination.
- 19) Danger signal in intra natal care.
- 20) Cold chain.
- 21) Approaches of health education.
- 22) Weaning.
- 23) Net production rate.
- 24) Prevention of neo natal tetanus.
- 25) Dis-infection of HIV virus.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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) Describe the methods of radiation protection.
- 2) Describe the properties of X-rays.
- 3) Discuss in brief digital subtraction angiography.

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

**10 x 5 = 50**

- 4) Skyline view of patella.
- 5) Tube rating.
- 6) Dark room artefacts.
- 7) Stenvers view.
- 8) Barium meal.
- 9) IVP.
- 10) Properties of UV rays.
- 11) Direct positive film.
- 12) Cosmic rays.
- 13) Stationary anode tube.
- 14) Water phantom.
- 15) Halt valve.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Elbow joint.
- 17) Developer constituents.
- 18) Preparation for barium enema.
- 19) Use of non screen films.
- 20) Production of X-rays.
- 21) Latent image.
- 22) Developer constituents.
- 23) Oesophagus
- 24) Urograffin.
- 25) Two advantages of image intensifier.

# PARAMEDICAL BOARD, BANGALORE

## Annual Examination, January-2013

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) What is summons? Who is served with summons? Write briefly about the medico legal records maintained in Radio-diagnosis department.
- 2) Write in detail management of breast cancer.
- 3) Write in detail about barium meal.

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

**10 x 5 = 50**

- 4) HSG.
- 5) Xeroradiography.
- 6) Mammography.
- 7) KUB X-ray.
- 8) Tele roentgenogram.
- 9) Invertogram.
- 10) C.R.Cassette
- 11) Abdominal binder.
- 12) Erect abdomen X-ray.
- 13) Fluoroscopy.
- 14) Ohm's law.
- 15) Macroradiography.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) T1W1.
- 17) Cholecystography.
- 18) Thermography.
- 19) C.T myelography.
- 20) Photoelectric effect.
- 21) Film speed.
- 22) Dark room temperature.
- 23) Radio-Pharmaceuticals.
- 24) High M.A/low K.V.P technique.
- 25) Resistors.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 disaster. What is the role of hospitals in disaster management?
- 2) How do you classify hospitals? Describe the functions of Medical college hospital.
- 3) What is planning? Explain in detail planning cycle.

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

**10 x 5 = 50**

- 4) Write briefly on organization of nursing department and its function.
- 5) Dietary department.
- 6) Functions of district hospitals.
- 7) Medical audit.
- 8) UNICEF.
- 9) Bhole committee.
- 10) Inventory control.
- 11) Define nosocomial infections. How do you control it?
- 12) Cost benefit analysis.
- 13) What are essential drugs? Write a note on need for essential drugs.
- 14) Enumerate differences between planning & management.
- 15) Role of paramedical workers in hospitals.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Delegation.
- 17) Enumerate two health planning committees in India.
- 18) Actuating.
- 19) Doctor patient relationship.
- 20) Zero base budgeting.
- 21) Enumerate different out-patient services.
- 22) Functions of lab services.
- 23) House keeping department.
- 24) Ambulance service.
- 25) Leadership qualities.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Write the composition, properties and method of manipulation of self cure acrylic resin.
- 2) Write the composition, properties and uses of dental inlay waxes.
- 3) Classify denture bases. Discuss about compression moulding technique.

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

**8 x 5 = 40**

- 4) Discuss about dental plaster and its uses.
- 5) Soldering and welding.
- 6) Solders, flux and anti flux.
- 7) Types of stainless steel.
- 8) Composition of impression compound.
- 9) Zinc oxide eugenol paste.
- 10) Hygroscopic setting expansion.
- 11) Composition and uses of ionomer cement.
- 12) Addition polymerization.

**III. WRITE SHORT ANSWERS**

**5 x 3=15**

- 13) Types of investment materials.
- 14) Green shrinkage.
- 15) Electroplating.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**II Year Diploma in Dental Mechanics/ III Year**  
**Certificate course in Dental Mechanics**  
**PARTIAL DENTURES, ORTHODONTIA, MAXIOFACIAL PROSTHESIS**  
**(N.S)**  
**QP CODE - 3172**

**Time: 1 1/2 hrs**

**Max. Marks: 45**

**I. LONG ESSAY**

**1 x 10 = 10**

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

**II. WRITE SHORT NOTES**

**5 x 5 = 25**

- 2) Direct retainers.
- 3) Parts of cast partial denture.
- 4) Adams clasp.
- 5) Casting defects.
- 6) Principle of sprue designing.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 7) Minor connector.
- 8) Hygienic pontic.
- 9) Feeding plate.
- 10) Arbitrary blockout.
- 11) Habit breaking appliance.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Discuss the effect of water supply to community and their implication  
on dental health.

**II. Write short notes**

**5 x 5 =25**

- 2) Oral hygiene maintenance instructions.
- 3) Oral hygiene habits and their effects on dental structures.
- 4) Child care counseling.
- 5) Oral health for handicapped patients.
- 6) Home care measures.

**III. Write short answers**

**5 x 2 = 10**

- 7) Dentrifices.
- 8) Cleaning agents for interdental regions.
- 9) Brushing techniques.
- 10) Plaque control.
- 11) Fluoride varnish.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Discuss the pre operative preparations of a patient undergoing major abdominal surgery.
- 2) What is vasectomy? Describe the preparation of a patient for haemorrhoidectomy.
- 3) Define amputation. Describe in detail the procedure of below knee amputation.

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

**10 x 5 = 50**

- 4) Lasers in surgery.
- 5) Mention various types of abdominal drains.
- 6) Describe the position of a patient undergoing thyroidectomy.
- 7) What abdominal and pelvic diseases can be detected by ultra-sonography.
- 8) Advantages of ambulatory surgery.
- 9) Lithotomy position.
- 10) Intravenous cannula.
- 11) Foley's catheterization.
- 12) Burr hole.
- 13) Boyle's apparatus.
- 14) Position of patient in anorectal surgery.
- 15) Factors influencing wound healing.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) MRI.
- 17) Enema.
- 18) Haemostasis.
- 19) Intravenous fluids.
- 20) Babcock's forceps.
- 21) Tubectomy.
- 22) Appendicectomy
- 23) Corrugated rubber piece.
- 24) Sterilization of linen.
- 25) Vagotomy.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define hernia and describe different types of hernia and surgical repairs in inguinal hernia.
- 2) Discuss about calculus cholecystitis, diagnosis and management.
- 3) Discuss about organ transplantation, its types & complications in kidney Transplantation.

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

**10 x 5 = 50**

- 4) DVT (Deep vein thrombosis).
- 5) Management of head injury patient.
- 6) Breast abscess.
- 7) Normal delivery.
- 8) CVP (Central venous pressure).
- 9) Buerger's disease (TAO).
- 10) Thoracic incisions and closures.
- 11) Enumerate common causes for Haematemesis.
- 12) Tubectomy.
- 13) Tuberculosis lymphadenitis.
- 14) Renal stones.
- 15) Hydrocele.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Bronchoscopy.
- 17) Pyogenic abscess.
- 18) Tetanus.
- 19) Fissure in ano.
- 20) Foley's catheter.
- 21) PCNL.
- 22) Circumcision.
- 23) Episiotomy.
- 24) Acute retention of urine.
- 25) Rodent ulcer.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) What are the advantages and disadvantages of IPD and CAPD.
- 2) Discuss the indications, types and complications of peritoneal dialysis.
- 3) Discuss the components of dialysis team and responsibilities of each member.

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

**10 x 5 = 50**

- 4) Dietary changes in patient of chronic renal failure.
- 5) Indications for stopping dialysis.
- 6) Cyclosporine.
- 7) Immunization schedule of patient on dialysis.
- 8) Indications for post transplant dialysis.
- 9) Special techniques used in dialysis.
- 10) Hemoperfusion.
- 11) Record keeping.
- 12) Complication of haemodialysis.
- 13) Renal diet in ESRD.
- 14) Acute dialysis.
- 15) Electrolyte imbalance.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Early complications of renal transplant.
- 17) Semi permeable membrane.
- 18) Name two tests involved in renal transplantation.
- 19) CRRT.
- 20) Name two poisonings where haemodialysis is beneficial.
- 21) Name two modes of replacement fluid infusion in slow continuous therapies.
- 22) Name two types of heparinization other than routine one used in haemodialysis.
- 23) Name two dialysate used in haemodialysis.
- 24) Write normal values of serum sodium and serum potassium.
- 25) Write normal values of bleeding time and clotting time.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 plasmapheresis its indications, procedure and complications.
- 2) Discuss non renal indications for dialysis.
- 3) Discuss indications, types, complications of peritoneal dialysis.

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

**10 x 5 = 50**

- 4) Dialysis for poisoning.
- 5) CAPD.
- 6) Permacath.
- 7) Causes for acute renal failure.
- 8) SLED.
- 9) Dialysis in infants and children.
- 10) Hemodiafiltration.
- 11) Management of anemia in dialysis patient.
- 12) Renal transplantation.
- 13) Interdialytic weight gain.
- 14) Urea reduction ratio.
- 15) Central venous catheter care.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Name two types of PD catheter.
- 17) Tests involved in renal transplantation.
- 18) Expand CVVHD & CAVHD.
- 19) Fever and chills during dialysis.
- 20) Name two immunosuppressive drugs.
- 21) Name two poisons removed by haemodialysis.
- 22) Name two foods to be avoided in hyperkalemia.
- 23) Mention two complications of blood transfusion.
- 24) Mention two complications of immunosuppressive drugs in transplantation.
- 25) Name two antibiotics used in peritonitis.

**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, January-2013**  
**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) How is nitric acid manufactured by ostwald's process. Mention its uses.
- 2) Explain the manufacture of rectified spirit from molasses.

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

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

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

- 3) Double helical structure of DNA.
- 4) Properties of alpha, beta, gamma rays.
- 5) Applications of colloids in medicine and food.
- 6) Properties and uses of ethyl alcohol.
- 7) Buffer solution.
- 8) Properties and uses of sodium hydroxide.
- 9) Organic and inorganic.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Alum.
- 11) Formalin.
- 12) Name two indicators.
- 13) What is an oxidizing agent? Give example.
- 14) What is half period?

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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) Define blood pressure. Describe the mechanism of regulation of blood pressure.
- 2) Describe the different phases of cardiac cycle with neat diagrams.
- 3) Classify WBC & write its functions.
- 4) Describe erythropoiesis with a neat diagram.

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

**5x 5 =25**

- 5) Myasthenia gravis.
- 6) Visual pathway.
- 7) Menstrual cycle.
- 8) Excitation – contraction coupling.
- 9) Cardiac output.
- 10) Blood groups.

**III. Write short answers**

**5 x 2=10**

- 11) Name any two types of contraction.
- 12) Name two muscle proteins.
- 13) Name two pathological constituents of urine.
- 14) Name two digestive enzymes.
- 15) Baroreceptor reflex.

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

**QP CODE - 2193**

**I. Answer any one**

**1 x 10=10**

- 1) Classify lipids. Give examples. What are the functions of phospholipids?
- 2) What are vitamins? Classify them with examples.

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

**1 x 5 = 5**

- 3) Enzymes.
- 4) Hormones secreted by pancreas.

**III. Write short answers**

**5 x 2=10**

- 5) Lipo proteins.
- 6) Collagen.
- 7) Photometry.
- 8) Fructose.
- 9) Insulin.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) What is normal health? What are the factors contributing to it?
- 2) Discuss the role of yoga in physical therapy.
- 3) Discuss the role of yogasanas in the management of hypertension.
- 4) Discuss the limitation of mental health efforts.
- 5) Therapeutic benefits of pranayama.

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

**5 x 5 = 25**

- 6) Kriyas.
- 7) Yamas and niyamas.
- 8) Bhujangasana technique.
- 9) Vakrasana.
- 10) Dhanurasana.
- 11) Jalaneti.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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) Discuss various mechanical injuries to the eye and add a note on first aid and treatment.
- 2) Discuss ocular trauma, its prevention, first aid and treatment.
- 3) Discuss conjunctivitis, its types, clinical features and management.

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

**10 x 5 = 50**

- 4) Watering of eyes – causes and its management.
- 5) Steroids in ophthalmology.
- 6) Cataract – types, clinical features and management.
- 7) Drugs in management of primary open angle glaucoma.
- 8) Binocular vision.
- 9) Eye bank.
- 10) DBCS (District Blindness Control Society).
- 11) Lagophthalmos.
- 12) Hyphaema.
- 13) Uveitis.
- 14) Hordeolum internum.
- 15) Lens induced glaucoma.

**III. Write short answers**

**10 x 2 = 20**

- 16) A-scan.
- 17) Gonioscopy.
- 18) Sources of Vitamin-A.
- 19) Atropine.
- 20) Amblyopia – definition & types.
- 21) Red eye – differential diagnosis.
- 22) Timolol eye drops.
- 23) Steroids – indications & contraindications.
- 24) Viral keratitis.
- 25) Pilocarpine.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define protein. Classify them according to structural organization with example.
- 2) Discuss the principle, types & use of Electrophoresis.
- 3) Explain the principle of colorimeter and write its uses.

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

**10 x 5 = 50**

- 4) Centrifuge.
- 5) Fully automated analyser.
- 6) Disaccharides.
- 7) Blood gas analyser.
- 8) Strong acid and weak base.
- 9) Derived lipids.
- 10) Phospholipids.
- 11) One pan balance.
- 12) Safety measures in laboratory.
- 13) Ligases and lyases.
- 14) Effect of substrate concentration on enzyme activity.
- 15) Preanalytical variations.

**III. Write short answers**

**10 x 2 = 20**

- 16) Optical density.
- 17) Dry chemistry analyser.
- 18) Peptide bond.
- 19) Digital balance.
- 20) Aldehyde test.
- 21) Functions of phosphorus.
- 22) Triacylglycerol.
- 23) Name any four amino acids.
- 24) Full saturation
- 25) Epimers.

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# PARAMEDICAL BOARD, BANGALORE

## Annual Examination, January-2013

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) Define health. Add a note on indicators of health.
- 2) Enumerate various organs of digestive system. Describe the structure & functions of stomach
- 3) Draw a neat labeled diagram of the respiratory system and explain.

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

**10 x 5 = 50**

- 4) Type – A personality.
- 5) Social security system in India.
- 6) Consumer protection act.
- 7) Life style diseases.
- 8) Disease eradication.
- 9) Effects of smoking on health.
- 10) Spectrum of health.
- 11) Spiritual dimension of health.
- 12) ECG.
- 13) Germ theory of disease.
- 14) Secondary prevention.
- 15) Right atrium.

**III. Write short answers**

**10 x 2 =20**

- 16) Medical social worker.
- 17) Drug addiction.
- 18) WBC.
- 19) Culture contact.
- 20) Blood groups.
- 21) Acculturation.
- 22) Epidemic.
- 23) Positive health.
- 24) Sociology.
- 25) Primary health care.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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) Classify Synovial joints. Describe shoulder joint.
- 2) Name the parts of excretory system. Describe briefly the gross anatomy of urinary bladder.
- 3) List the parts of Central nervous system and give a brief account on spinal cord.

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

**5 x 3 = 15**

- 4) Maxillary air sinus.
- 5) Spermatic cord.
- 6) Oesophagus.
- 7) Lymph nodes.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 8) Sesamoid bone.
- 9) Name the branches of brachial artery.
- 10) Name any four carpal bones.
- 11) Name any four cartilages of larynx.
- 12) Differences between thick skin & thin skin.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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 male reproductive system and describe the testis in brief.
- 2) Name the parts of respiratory system. Add a note on paranasal air sinuses.

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

**5 x 5 = 25**

- |                     |                       |
|---------------------|-----------------------|
| 3) Parotid gland.   | 7) Hyaline cartilage. |
| 4) Trachea.         | 8) Right kidney.      |
| 5) Urinary bladder. | 9) Stomach.           |
| 6) Pericardium.     |                       |

**II. WRITE SHORT ANSWER**

**5 x 2 = 10**

- |                  |                    |
|------------------|--------------------|
| 10) Tarsal bone. | 13) Biceps muscle. |
| 11) Neuron.      | 14) Teeth.         |
| 12) Myoglobin.   |                    |

**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 ten routine investigations done in hematology laboratory. Describe the procedure for 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 & sensitivity.        |
| 5) Disinfectants.  | 8) Differential count.           |

**III. WRITE SHORT ANSWER**

**5 x 2 = 10**

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

# PARAMEDICAL BOARD, BANGALORE

Annual Examination, January-2013

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) Classify bones according to the shapes and give an account on humerus.
- 2) Enumerate gross features of heart & give an account on right atrium.

### II. WRITE SHORT NOTES ON ANY TWO

2 x 5 = 10

- 3) Right coronary artery.
- 4) Typical inter costal space.
- 5) Optic nerve.

### III. WRITE SHORT ANSWER

5 x 2 = 10

- 6) List the parts of femur.
- 7) List the contents of anatomical snuff box.
- 8) List the Dural venous sinuses.
- 9) What are the layers of scalp?
- 10) Sagittal plane.

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

## QP CODE - 2143

### I. WRITE SHORT NOTES ON ANY FOUR

4 x 5 = 20

- 1) Erythroblastosis Foetalis.
- 2) Micturition.
- 3) Functions of growth hormone.
- 4) Actions of thyroid hormone.
- 5) Neuromuscular junction.
- 6) Menstrual cycle.

### II. WRITE SHORT ANSWER

5 x 2 = 10

- 7) Name four G.I. hormones.
- 8) Write normal values of cardiac output and cardiac index.
- 9) Define diffusion with one example.
- 10) Functions of platelets.
- 11) Define tidal volume & residual volume.

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

## QP CODE - 2144

### I. ANSWER ANY ONE

1 x 10 = 10

- 1) Write in detail on Erythropoiesis and Leucopoiesis. Draw the figures of different types of cells of Leucopoiesis.
- 2) Describe different methods of sterilizations.

### II. WRITE SHORT NOTES ON ANY TWO

2 x 5 = 10

- 3) Pre-analytical errors that can occur in histopathology lab.
- 4) AFB stain.
- 5) Colour codes used for different waste in lab.

### III. WRITE SHORT ANSWER

5 x 2 = 10

- 6) Name four gram negative organisms.
- 7) Normal total & differential WBC count.
- 8) Name the tests for bleeding time & clotting time.
- 9) Indications for blood transfusion.
- 10) Paraffin wax.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Write about principles of arrangement of teeth.
- 2) Discuss lining and supporting structures of mandibular denture and discuss lateral throat form.
- 3) Write about mean value articulators.
- 4) Describe the anatomy of 1<sup>st</sup> molar.

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

**7x 5 = 35**

- 5) Inlay wax.
- 6) Mental foramen.
- 7) Boxing.
- 8) Mandibular movements.
- 9) Rebasing.
- 10) Repair of denture.
- 11) Curve of spee.
- 12) Muscles of mastication.
- 13) Agar agar.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe in detail about course, branches and supply of facial nerve.
- 2) Describe the anatomy of Mandibular permanent second molar.

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

**5 x 5 = 25**

- 3) Mandibular supporting structures.
- 4) Class III occlusion.
- 5) Maxillary lateral incisor.
- 6) Muscles of tongue.
- 7) Maxillary supporting structures.
- 8) Maxillary canine.
- 9) Posterior palatal seal area.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Linguo – dental sounds.
- 11) Buccal shelf area.
- 12) Curve of spee.
- 13) Mention different tooth numbering systems.
- 14) Rugae.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Describe the various neoplasms of oral cavity.
- 2) What are antiseptics? Describe in detail antiseptics used in dentistry.
- 3) Define analgesics. How do you classify them and describe anyone analgesic used in dentistry.
- 4) Explain various routes of drug administration.
- 5) What is inflammation? Describe its types, histological differences with diagrams.  
Add a note on repair.

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

**5x 5 =25**

- 6) Cemento enamel junction.
- 7) Local anaesthetics.
- 8) Desensitizing agents.
- 9) Chlorhexidine.
- 10) Gram positive and gram negative organisms.
- 11) Scurvy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 neoplasia. Give differences between benign & malignant lesion.
- 2) Draw a neat labeled diagram of bacterial cell. Write in infection control measures.

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

**4x 5 =20**

- 3) Oral leukoplakia.
- 4) Vitamin C deficiency.
- 5) AFB stain.
- 6) White patches in oral cavity.
- 7) ZN stain.

**III. Write short answers**

**3 x2 =6**

- 8) Four causes of gingival hyperplasia.
- 9) Rickets.
- 10) Difference between carcinoma & sarcoma.

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

**QP CODE- 2184**

**I. Write short answers**

**5 x 2 =10**

- 1) Doxycycline.
- 2) Uses of chlorhexidine.
- 3) Binders.
- 4) Name two antibiotics.
- 5) Name two fat soluble vitamins.

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# PARAMEDICAL BOARD, BANGALORE

Annual Examination, January-2013

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) Describe renal function test.
- 2) Write in detail about factors regulating blood glucose level.

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

**2 x 5 = 10**

- 3) Disorders of acid base balance.
- 4) Normal urine.
- 5) Formation of creatinine.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 6) Benedict's test.
- 7) Write normal values of serum electrolytes.
- 8) Name any four normal constituents of urine.
- 9) Full saturation test.
- 10) Name any two glycolytic enzymes.

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

**QP CODE - 2133**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Enumerate various routes of drug administration. Write the advantages & disadvantages of intravenous route.
- 2) Classify tetracyclines. Write their uses & adverse effects.

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

**2 x 5 = 10**

- 3) Aspirin.
- 4) Lignocaine.
- 5) Ciprofloxacin.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 6) Name two IV fluids.
- 7) Define pharmacodynamics & pharmacokinetics.
- 8) Uses of mannitol.
- 9) Mention two merits of Halothane.
- 10) What is schedule FII.

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

**QP CODE - 2134**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Enumerate species of clostridium. Add a note on gangrene.
- 2) Define nosocomial infection. Describe the mode of transmission & prevention of nosocomial infection.

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

**2 x 5 = 10**

- 3) Bacterial filters.
- 4) Universal precautions.
- 5) Biomedical disposal waste.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 6) What is generation time?
- 7) Define anaphylaxis.
- 8) Prophylaxis of hepatitis B virus infection.
- 9) Tyndallization.
- 10) Joseph lister.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Write formation of Creatinine with associated disorders.
- 2) Describe kidney function tests.

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

**5 x 5 = 25**

- 3) Digestion and absorption of carbohydrate.
- 4) Spectrophotometer.
- 5) Blood pH and factors regulating it.
- 6) Abnormal constituents of urine.
- 7) Liver function test.
- 8) Glucose transporters.

**III. WRITE SHORT ANSWERS**

**5x 2 =10**

- 9) Anti coagulants.
- 10) Benedict's test.
- 11) Mention two methods for estimation of blood glucose and write the sensitivity of the methods.
- 12) Rothera's test.
- 13) Chloride shift.

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

**QP CODE - 2154**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Write the pathogenesis of tetanus and add a note on its laboratory diagnosis.
- 2) Classify immunity and add a note on passive immunity.

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

**5 x 5 = 25**

- 3) HIV Virus.
- 4) Hot-Air oven.
- 5) Cell wall of bacteria.
- 6) Active immunity.
- 7) Type I hypersensitivity.
- 8) Prophylaxis of diphtheria.

**III. WRITE SHORT ANSWERS**

**5x 2 =10**

- 9) Name two acid fast organisms.
- 10) Name two viral vaccines.
- 11) Herd immunity.
- 12) Name two lesions caused by Staphylococcus aureus.
- 13) Disposal of needle.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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) Classify anaemias. Discuss the clinical features and management of iron deficiency.
- 2) Describe the etiology, Clinical features, management and prevention of acute stroke.
- 3) Describe the Clinical features, complications and management of Pulmonary tuberculosis.
- 4) Describe the clinical features and management of Hyperthyroidism.
- 5) Describe the clinical features and management of acute poliomyelitis.
- 6) Discuss Etiology, clinical features and management and complications of Rheumatoid arthritis.

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

**6 x 5= 30**

- 7) Complications of Diabetes mellitus.
- 8) Tubercular meningitis.
- 9) Hypertensions.
- 10) Osteoarthritis.
- 11) Skeletal muscle relaxants.
- 12) Myxedema.
- 13) Lung abscess.
- 14) Bell's palsy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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. Classify antigen-antibody reactions. Describe the RPR test in detail.
2. Classify Hypersensitivity and describe in detail about Type 1 Hypersensitivity.
3. Enumerate organisms causing Meningitis. Write about Laboratory diagnosis of meningococcal Meningitis.

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

**10 x 5 =50**

4. Collection of urine sample.
5. Precipitation test.
6. Preparation of LPCB mount and its uses.
7. Preparation of blood agar.
8. Citrate test.
9. Coagulase test.
10. Candida.
11. Coomb's tests.
12. Catalase test.
13. Inoculation methods.
14. Cholera red reaction.
15. Lepromin test.

**III. Write short answers**

**10 x 2 = 20**

16. Name two gram negative cocci.
17. Name two Cestodes.
18. BCG Vaccination.
19. Name two motile bacteria.
20. Name two spore forming bacteria.
21. Name two RNA Viruses.
22. Two examples for slide agglutination test.
23. Name two ELISA tests.
24. Name two Nematodes.
25. Draw a neat labeled diagram of Taenia saginata egg.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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) Describe the various benefits under the ESI act.
- 2) Write various social causes of PEM. Discuss in detail the National programs addressing PEM.
- 3) Describe primary health care. Write in detail about functions of primary health centre.

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

**10 x 5 = 50**

- 4) Social and spiritual health.
- 5) Randomized control trails.
- 6) Importance of screening.
- 7) Environmental measures for controlling of vector born diseases.
- 8) School health appraisals.
- 10) Post natal complications.
- 11) Indian factories act.
- 12) Record linkage.
- 13) Cost effective analysis.
- 14) Steps of planning cycle.
- 15) Child Labour act.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) ASHA Workers.
- 17) Types of disaster.
- 18) Genetic counseling.
- 19) Chlorination of water.
- 20) GOBI.
- 21) PERT.
- 22) Village health guide.
- 23) Pearl Index.
- 24) Vitamin A Prophylaxis.
- 25) Koplik's spot.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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) What is medico legal case? How do you maintain and procure Medico legal records.
- 2) Discuss in detail regarding Ultra sound examination done daily at the department of radiology.
- 3) Discuss in detail the technique and procedure of excretory Urography.

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

**10 x 5 = 50**

- 4) Crossed grids.
- 5) Barium swallow examination.
- 6) Safe light.
- 7) Film density.
- 8) Cystography.
- 9) Grid ratio.
- 10) Replenisher.
- 11) X-ray of hand.
- 12) Hangers.
- 13) Dark room technique.
- 14) Atomic number.
- 15) Lead barrier.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Composition of developer.
- 17) Chambers of heart.
- 18) D.S.A.
- 19) Expand MMR.
- 20) Filters used in mammography tubes.
- 21) Carpal bone.
- 22) Sinus and fistula.
- 23) A mode ultrasound.
- 24) Aorta.
- 25) Nuclear reactor.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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) Mention the principles of a C.T scan machine. Explain different sequences involved in Obtaining the images on the monitor screen.
- 2) What are the types of Doppler's? Explain the uses of each type.
- 3) Discuss the role of radiopharmaceuticals in nuclear imaging.

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

**10 x 5 = 50**

- 4) Characteristic X-ray.
- 5) Electron binding energy.
- 6) Silverless radiology.
- 7) Inherent filtration.
- 8) Line focus principle.
- 9) Planning of dark room.
- 10) Half wave rectifier.
- 11) Xero Radiography.
- 12) Film Badge.
- 13) Rotating anode tube.
- 14) Urograffin.
- 15) MR angiogram.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Cellulose.
- 17) Latent image.
- 18) Cathode.
- 19) Tube Rating.
- 20) Isotones.
- 21) Technetium.
- 22) Gelatin.
- 23) Blooming.
- 24) Expand SPECT.
- 25) Solarisation.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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) What is software of a computer? Describe the various types of software.
- 2) Describe the various input and output devices of a computer.

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

**4 x 5 = 20**

- 3) Flow chart.
- 4) Floppy disc.
- 5) Third generation computer.
- 6) Write different types of computer.
- 7) What is the importance of computer programming.
- 8) Application of computer.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 9) ROM.
- 10) Monitor.
- 11) Memory Unit.
- 12) E-mail.
- 13) Algorithm.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January – 2013**  
**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 case history recording before oral surgery.

**II. Write short notes** **5 x 5 =25**

- 2) Dental specialties.
- 3) Material maintenance.
- 4) Medico legal problems in dentistry.
- 5) Sterilization of dental instruments.
- 6) Ethics in dental practice.

**III. Write short answers** **2 x 5 = 10**

- 7) Audio visual aids.
- 8) Malpractice.
- 9) Models and charts.
- 10) Dental auxiliary.
- 11) Chair side assistance.

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**GOVERNMENT OF KARNATAKA**  
**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, January – 2013**  
**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 and label the different stages of Cell division. Distinguish between Mitosis and Meiosis.
- 2) What are hormones? Name the hormones secreted by pituitary gland and write their Functions.

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

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

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

- 3) Placenta – Structure and function.
- 4) Types of cancer and prevention.
- 5) Functions of Enzymes.
- 6) Blood pressure.
- 7) Functions of blood.
- 8) Carcinogens and methods of detection of cancer.
- 9) Digestion of LIPIDS.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Cranial nerves.
- 11) Pace maker.
- 12) Implantation.
- 13) Fertilization.
- 14) Ovary.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Mention the different staining techniques. Write in detail about active immunity.
- 2) Write in detail about pathogenesis and Prophylaxis of poliomyelitis.
- 3) Discuss the different sources of infection.

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

**10 x 5 = 50**

- 4) Classification of sterilization methods.
- 5) Botulism.
- 6) Different source of infection.
- 7) Methods of disposal of biomedical waste.
- 8) Live attenuated vaccines.
- 9) Bacterial growth curve.
- 10) Laboratory diagnosis of meningitis.
- 11) Polio Virus.
- 12) Draw a neat labelled diagram of bacterial cell.
- 13) Add a note on Flagella.
- 14) Coagulase test.
- 15) Widal test.

**III. Write short answers**

**10 x 2 =20**

- 16) Name four anaerobes.
- 17) Active immunity.
- 18) Prophylaxis of diphtheria.
- 19) Name four sexually transmitted infections.
- 20) Name four gram positive organisms.
- 21) Name two organisms causing meningitis.
- 22) Name two differential media.
- 23) Autoclave.
- 24) Name two toxoids.
- 25) Laboratory diagnosis of cholera.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Evaluation tools to identify disabilities.
- 2) Describe the types of orthosis. Discuss in detail about spinal orthosis.
- 3) Define the objectives and scope of community physiotherapy and their importance to Indian community.
- 4) Describe the factors, assessment, prevention and management and rehabilitation of industrial injuries.
- 5) Describe the disability evaluation and role of physiotherapy.

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

**5 x 5 = 25**

- 6) Neonatal reflexes.
- 7) Cock-up splint.
- 8) CTEV.
- 9) ADL training.
- 10) Vocational rehabilitation for stroke patient with speech disorder.
- 11) Mobile rehabilitation Unit.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Write briefly on methods of urine collection. Write in detail about microscopic examination Of urine.
- 2) Describe the steps in Platelet counting. Discuss advantages and disadvantages of manual platelet counting.
- 3) Discuss in detail pre analytical, analytical and post analytical errors that happen in hematology lab.

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

**10 x 5 = 50**

- 4) Rotatory microtome.
- 5) Frozen section.
- 6) Absolute eosinophil count.
- 7) Romanowsky stains.
- 8) Pap smear.
- 9) CSF analysis.
- 10) ESR in detail.
- 11) Buffy coat preparation and its uses.
- 12) Fixatives and their mechanisms of action in histopathology.
- 13) External quality control in hematology.
- 14) PCV.
- 15) Ideal blood smear.

**III. Write short answers**

**10 x 2 =20**

- 16) Normal counts of RBC, WBC and platelets.
- 17) Cob web in CSF.
- 18) Bone marrow aspiration needles.
- 19) Different types of wax.
- 20) DPX.
- 21) What is fine needle aspiration cytology (FNAC).
- 22) Carnoy's fluid.
- 23) Ideal peripheral smear.
- 24) Uses of Neubauer chamber.
- 25) Supravital stains.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**I Year Diploma in Health Inspector/ II Year Certificate course in Health**  
**Inspector**  
**PAPER - II**  
**QP CODE – 2112**

**Time: 3 hrs**

**Max. Marks: 90**

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

**2 x 10 = 20**

- 1) What is low birth weight? How do you assess the nutritional status in your district?
- 2) Classify vitamins. Describe the manifestations of vitamin A deficiency. How do you prevent vitamin A deficiency.
- 3) Discuss in detail about food additives, food fortification and food adulteration with suitable Examples.

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

**10 x 5 = 50**

- 4) List water born diseases & control measures.
- 5) Effect of high attitude atmospheric pressure on health.
- 6) Prevention and control of Ascariasis.
- 7) Neurolathyrism.
- 8) 'Fluorine is often called a two edged sword' Explain.
- 9) Pasteurization of milk.
- 10) Road to health.
- 11) First aid in burns.
- 12) Enumerate blood born diseases.
- 13) Treatment of malaria.
- 14) Primordial prevention.
- 15) Integrated vector control.

**III. Write short answers**

**10 x 2 =20**

- 16) Iodine deficiency disorder.
- 17) Mass drug administration in Filariasis.
- 18) Role of fiber in diet.
- 19) Mechanical ventilation.
- 20) Fluorosis and its management.
- 21) Global warming.
- 22) Name two important sources of Iron.
- 23) Obesity.
- 24) Name any two hazards of noise pollution.
- 25) Name essential fatty acids.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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 transport of oxygen in the blood.
- 2) Describe the endometrial changes during menstrual cycle. Explain their hormonal basis.

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

**5 x 5 = 25**

- 3) ABO Blood Groups.
- 4) Refractive errors of EYE.
- 5) Heart Sounds.
- 6) E.C.G (Electro Cardiogram)
- 7) Function of Liver.
- 8) Renal function tests.
- 9) Anticoagulants.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) List four properties of Cardiac muscle.
- 11) Name any two hormones of Pancreas.
- 12) Name two pathological constituents of Urine.
- 13) Draw and Label Neuron.
- 14) Mention five primary taste sensations.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January -2013**  
**I Year Diploma in Medical Records Technology/ II Year Certificate course in**  
**Medical Records Technology**  
**HOSPITAL STATISTICS & BIostatistics**  
**QP CODE – 2145**

- 1) Define BioStatistics. Enumerate different methods of presentation of statistical data. Explain Histogram with example.
- 2) Define Vital Statistics. Enumerate different Vital Events and its sources. Describe Population Census in brief.
- 3) Enumerate Mortality related statistics. Describe any two with example.
- 4) Define Crude Death Rate. Mention the uses of mortality data and its limitation.

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

**10 x 4 = 40**

- 5) Sensitivity and Specificity.
- 6) Birth and Death Registration.
- 7) Normal curve.
- 8) Calculate Mean & Median of following data.  
64, 67, 63, 67, 64, 67, 66, 67, 72 & 73
- 9) Disease Register.
- 10) Define Correlation. Describe different types of Correlation.
- 11) Population Census.
- 12) Net Infection Rate.
- 13) Bar charts.
- 14) Record linkage.
- 15) Ratio.
- 16) Histogram.

**IV) WRITE BRIEFLY ON ANY FIVE**

**5 x 2=10**

- 17) Post operative Death Rate.
- 18) Uses of Computers in Hospital.
- 19) Spot Map
- 20) Probability
- 21) Queue system in OPD.
- 22) Discharge

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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**

**1 x 10 = 10**

- 1) Describe the effects of malnutrition on Oral health.
- 2) Describe special diet in Maxillofacial Injury cases.

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

**3 x 5 = 15**

- 3) Heller's test.
- 4) Spot test for urine analysis.
- 5) Calcium.
- 6) Diet analysis.

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

**QP CODE - 2186**

**I. Write short notes**

**4 x 5 = 20**

- 1) Bisecting angle technique.
- 2) Occupational exposure.
- 3) Processing solutions.
- 4) Paralleling technique.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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 and describe briefly gross anatomy of Ovary.
- 2) Name the parts of Brain. Describe briefly Cerebral hemisphere.

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

**5 x 5 = 25**

- 3) Left Lung.
- 4) Axillary artery.
- 5) Esophagus.
- 6) Salivary glands.
- 7) Name the bones of skull.
- 8) Microscopic structure of Retina.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name the contents of Carotid sheath.
- 10) Name the 4 basic tissues of the body.
- 11) Name the parts of Hind Brain.
- 12) Name the parts of Pancreas.
- 13) Vocal cords.

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

**QP CODE – 2136**

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

**1 x 10 = 10**

- 1) Draw a neat labeled diagram of Nephron. Describe the formation of urine.
- 2) Describe the composition and functions of Bile.

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

**5 x 5 = 25**

- 3) Transport of Carbon dioxide in blood.
- 4) Plasma proteins.
- 5) Salivary juice.
- 6) Artificial respiration.
- 7) Temperature regulation.
- 8) Cardiac cycle.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Define bleeding time & Clotting time.
- 10) Write down the names of bile pigments.
- 11) Functions of large intestine.
- 12) Name any two muscles of respiration.
- 13) Name any two functions of W.B.C (White Blood Corpuscles).

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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 excretory systems. Describe briefly gross anatomy of kidney.
- 2) Name the abdominal organs. Describe briefly Liver.

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

**5 x 5 = 25**

- |                         |                     |
|-------------------------|---------------------|
| 3) Cardiac muscle.      | 6) Pleura.          |
| 4) Submandibular gland. | 7) Urinary bladder. |
| 5) Skeletal muscle.     | 8) Fallopian tube.  |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) What muscles are supplied by mandibular nerve.
- 10) Name four peritoneal folds.
- 11) Name the parts of Uterine tube.
- 12) Taste Buds.
- 13) Name 4 bones of Skull.

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

**QP CODE – 2156**

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

**1 x 10 = 10**

- 1) Define and classify anaemias. Explain Iron deficiency anaemia in detail.
- 2) Describe the synthesis, regulation and functions of growth hormone.

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

**5 x 5 = 25**

- |                               |                                       |
|-------------------------------|---------------------------------------|
| 3) Hypothyroidism.            | 7) Types and functions of hemoglobin. |
| 4) Dwarfism.                  | 8) Homeostasis.                       |
| 5) Diabetes mellitus.         |                                       |
| 6) Packed cell Volume (P.C.V) |                                       |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name posterior pituitary hormones.
- 10) What is G.F.R? Give the normal value.
- 11) Name any two plasma proteins.
- 12) Mention any two factors influencing E.S.R
- 13) Mention the functions of Lymphocytes.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January - 2013**  
**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) Classify wounds and write in detail the management of Intra abdominal injuries.
- 2) What are the clinical features of Duodenal ulcer and discuss the management of chronic Duodenal ulcer.
- 3) Classify hernia and write in detail management of Inguinal hernia.

**II. Write short notes any THREE**

**3 x 5= 15**

- 4) Gall stones.
- 5) Skin graft.
- 6) Hydrocele.
- 7) Fissure-in-ano.

**III. Answer any TWO**

**2 x 15= 30**

- 8) What are the causes of fracture neck of femur in an elderly patient? How do you manage the same?
- 9) Discuss the clinical features of shoulder dislocation and how do you manage the same.
- 10) Describe the causes for rib fracture and discuss the management of multiple rib fractures.

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

**3 x 15= 15**

- 11) Intramedullary nailing.
- 12) Mallet finger.
- 13) Osteoclastoma.
- 14) Tennis elbow.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January - 2013**  
**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 principles & rule of coding.
- 2) Discuss the coding procedure for external injuries.
- 3) Write briefly about the sources for 3<sup>rd</sup> & 4<sup>th</sup> character classification.
- 4) Define diagnosis.
- 5) Explain the hierarchical structure of ICD 10<sup>th</sup> edition.

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**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, January - 2013**  
**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**

**1 x 15 = 15**

**1 x 10 = 10**

- 1) Mobile phones – advantages and disadvantages.
- 2) Solar energy.

**II. ANSWER ANY ONE**

**1 x 10 = 10**

- 3) Write a letter to the Municipal Commissioner complaining about mosquitoes and Flies on increase and non-disposal of garbage from your area.
- 4) Write a letter to your principal requesting him to issue a transfer certificate.

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

**5 x 1 = 5**

- 5) Horse.      6) Stag.      7) Prince.      8) Daughter-in-law.      9) Peacock.

**IV. WRITE THE OPPOSITE OF THE FOLLOWING**

**5 x 1 = 5**

- 10) Opaque.      13) Cheap.  
11) Alive.      14) Refuse.  
12) Failure.

**V. MAKE THE SENTENCES USING THE FOLLOWING**

**5 x 1 = 5**

- 15) At a stretch.
- 16) However.
- 17) Look into.
- 18) Take over.
- 19) As if.

**VI. FILL IN THE BLANKS**

**5 x 1 = 5**

- 20) He died.....cholera.
- 21) The sun..... a hot ball of fire.
- 22) She is.....honest girl.
- 23) Two.....two makes four.
- 24) Ramu sat..... a corner.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Give a historical background to the development of science of behavior. Explain some of the branch of psychology.
- 2) Mention the principles of learning. Explain classical conditioning and apparent learning. Briefly discuss the laws of learning.
- 3) What are motives? Give classification of motives. What are the importance of motives in our life?
- 4) What is emotion? Mention physiological changes during emotions & its types. How positive emotions are experienced.

**II. Answer any THREE**

**3 x 10 = 30**

- 5) What is meant by thinking? Explain its types with examples. What is positive mental attitude?
- 6) Define perception. How perception is an organized response? Give examples.
- 7) What are attitudes? How they develop? What are the methods to change attitudes?
- 8) What is remembering & forgetting? Explain memory processes. How memory can be improved?

**III. Answer any FIVE**

**5 x 3 = 15**

- 9) Stress management.
- 10) S-O-R mechanism.
- 11) Biology of behavior.
- 12) Principles of heredity.
- 13) Study habits.
- 14) Memory training.
- 15) Psychological testing.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Discuss the physiotherapy management of 60yrs old woman with hemiplegia.
- 2) Describe the role of physiotherapist in ICU.
- 3) What is osteo arthritis? How would you manage a fifty year old patient with chronic OA of both knees?
- 4) Explain the investigations done in lumbar spondylosis and explain PT management.
- 5) Describe the clinical features, medical and physiotherapy management of cerebellar ataxia.
- 6) Discuss types & methods of breathing exercise.

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

**5 x 6 = 30**

- 7) Carpal tunnel syndrome.
- 8) IVDP.
- 9) Bell's palsy.
- 10) Hand function.
- 11) Functional electrical stimulation.
- 12) Parkinsonism.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Name different blood group systems & describe any one of them.
- 2) Describe the formation of urine.
- 3) Name all the hormones of pituitary gland. Describe the function of any one of them.

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

**10 x 5 = 50**

- 4) Insulin.
- 5) Anticoagulants.
- 6) Myasthenia gravis.
- 7) Plasma proteins and functions.
- 8) Hypoxia.
- 9) Cardiac output.
- 10) Errors of refraction.
- 11) Bile juice.
- 12) Salivary juice.
- 13) Nephron.
- 14) Testosterone.
- 15) Estrogen.

**III. WRITE SHORT ANSWERS**

**10 x 2=20**

- 16) Name two female sex hormones.
- 17) Name two lung function tests.
- 18) Name two functions of liver.
- 19) Name any two endocrine glands.
- 20) Name two types of cell division.
- 21) Name any two function of hemoglobin.
- 22) Name two hormones of anterior pituitary.
- 23) Name two errors of refraction.
- 24) Write the normal values of **a)** RBC count **b)** Blood pressure.
- 25) Name two cellular components of blood.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Draw a neat labeled diagram of bacterial cell. Write in brief about bacterial flagella.
- 2) Enumerate different type of antibodies. Write in detail about IgG.
- 3) Mention different staining techniques. Write in detail on procedure and uses of Ziehl-Neelsen's stain.

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

**10 x 5 = 50**

- 4) Dark ground microscope.
- 5) RCM – preparation & uses.
- 6) Different sources of infection.
- 7) L J media.
- 8) Bacterial filters.
- 9) Preparation & uses of nutrient agar.
- 10) Universal precautions.
- 11) Pasteurization.
- 12) Robert Koch.
- 13) Name five culture methods.
- 14) Mention different phases in bacterial growth curve.
- 15) Fimbriae.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Name two uses of bacterial filter
- 17) Name two anaerobic media.
- 18) Define antigen.
- 19) Tyndallisation.
- 20) Function of buffer.
- 21) What is simple staining, give example.
- 22) Mention nutritional requirements for growth and multiplication of bacteria.
- 23) Name two halogen disinfectants.
- 24) Herd immunity.
- 25) Name two motile and non-motile bacteria.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, January-2013**  
**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) Define epidemiology. Classify the different types of epidemiology & discuss the steps of descriptive epidemiology.
- 2) Discuss various modes of transmission of disease with suitable examples.
- 3) Enumerate vaccine preventable diseases. Add a note on National immunization schedule.

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

**10 x 5 = 50**

- 4) What is incidence?
- 5) Diseases transmitted by house fly.
- 6) What is migration studies?
- 7) Explain the concept of secondary prevention with example.
- 8) Diseases transmitted by Rat flea & its control measures.
- 9) Prevalence.
- 10) Disease carrier.
- 11) Itch mite.
- 12) Mid – year population.
- 13) Census.
- 14) Sampling methods in statistics.
- 15) Levels of prevention.

**III. Write short answers**

**10 x 2 = 20**

- 16) Droplet infection.
- 17) Cyclops.
- 18) Nosocomial infection.
- 19) Paris green.
- 20) Name any four insecticides.
- 21) Guidelines for defining "at-risk" group.
- 22) Crude death rate.
- 23) Diseases elimination v/s eradication.
- 24) Iceberg of disease.
- 25) Live vaccines.

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**PARAMEDICAL BOARD, BANGALORE**

**Annual Examination, January-2013**

**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 Gangrene. Discuss the various types of Gangrene.
- 2) Define Rheumatic heart disease. Describe etiopathogenesis of Rheumatic heart disease.

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

**5 x 5 = 25**

- 3) Sequestrum.
- 4) Phagocytosis.
- 5) Osteosarcoma.
- 6) Kwashiorkor & Marasmus.
- 7) Five characters of benign & malignant tumors.
- 8) Lipoma.
- 9) Aneurysm.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) What is Exudate? Give two examples.
- 11) Name different types of WBC.
- 12) Renal causes for blood in urine.
- 13) TB osteomyelitis.
- 14) Atrophy.

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