

**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION , NOVEMBER - 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 etiopathogenesis of Atherosclerosis.
- 2) Define Chronic obstructive pulmonary disease. Mention the clinical types and discuss any one of them in detail.
- 3) Discuss characteristics of benign and malignant tumors.
- 4) Describe etiopathogenesis and stages of shock.

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

**12 x 5 =60**

- 5) Radiation injury.
- 6) Viral carcinogens.
- 7) Osteoclastoma.
- 8) Chemotaxis.
- 9) Potts' spine
- 10) Bronchopneumonia.
- 11) Leprosy.
- 12) Neurilemmoma.
- 13) Gynaecomastia.
- 14) Tetralogy of Fallot.
- 15) Sequestrum.
- 16) Thrombocytopenia.
- 17) Calcification.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION , NOVEMBER - 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 procedure and maintenance of Schiottz Tonometer.
- 2) Write briefly on dressing preparation, methods of sterilization of dressing materials and method of bandage tying.
- 3) Describe the principles, procedure and types of retinoscopy.

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

**10 x 5 = 50**

- 4) Synaptophore.
- 5) Pterygium.
- 6) Cycloplegic refraction.
- 7) Ophthalmoscope.
- 8) Methods of drug delivery in ocular diseases.
- 9) Evisceration of eyeball.
- 10) Slit lamp biomicroscopy.
- 11) Chalazion.
- 12) Schirmer's Test.
- 13) Pseudomyopia.
- 14) Acute dacryocystitis
- 15) Hypertensive retinopathy.

**III. Write short answers**

**10 x 2 =20**

- 16) Screening program in school going children.
- 17) Methods of preparation of donor cornea.
- 18) Cover test.
- 19) Four drugs for treating glaucoma.
- 20) Mention two uses of Desmarres' retractor.
- 21) Causes of painful loss of vision.
- 22) Types of vision chart.
- 23) Jones' test.
- 24) Cross cylinder.
- 25) Fogging test.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION , NOVEMBER - 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) Describe in detail liver function tests.
- 2) Describe digestion and absorption of proteins. Write a note on gastric juice.
- 3) Normal constituents of urine and detection of the same in a laboratory. Add a note on specific gravity of urine.

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

**10 x 5 =50**

- 4) Ketone bodies.
- 5) Glycogenesis.
- 6) Cardiac profile tests.
- 7) Iodine 131.
- 8) Flame photometry.
- 9) Benedict's test.
- 10) Electrophoresis.
- 11) Auto analyser.
- 12) pH meter.
- 13) Glucagon.
- 14) Lipid profile.
- 15) Clinical importance of blood sugar estimation.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Hay's test.
- 17) Normal range of a) serum sodium and b) serum potassium.
- 18) Micropipettes.
- 19) Name PUFAs.
- 20) Benzidine test.
- 21) Formation of uric acid.
- 22) Fouchet's test.
- 23) Colorimeter.
- 24) Batch analyser.
- 25) Maintenance of statistics in clinical laboratory.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION , NOVEMBER - 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) Describe the epidemiology of cholera and discuss its prevention and control. Add a note on treatment.
- 2) Describe the epidemiology of tuberculosis in India. Write a note on its control and treatment regime.
- 3) Enumerate National Health Programs. Describe National Program for Poliomyelitis.

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

**10 x 5 = 50**

- 4) Natural history of disease.
- 5) Malaria surveillance.
- 6) Mother craft.
- 7) ICDS program.
- 8) Functions of PHC.
- 9) Prevention of Food Adulteration Act.
- 10) Role of Anganwadi in PEM.
- 11) Vitamin A prophylaxis.
- 12) Super ORS.
- 13) Describes danger signals of cancer.
- 14) Health information system.
- 15) Salk vaccine.

**III. Write short answers**

**10 x 2 = 20**

- 16) IFA tablets.
- 17) Vaccine carrier.
- 18) Spot map.
- 19) Chlorine tablets.
- 20) Trained birth attendant (Dai).
- 21) Intelligence quotient.
- 22) Sulabh Shouchalaya.
- 23) Types of disasters.
- 24) Record linkage.
- 25) Tetanus toxoid.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION , NOVEMBER - 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) What are intensifying screens? Draw a neat labeled diagram of the cross section of an intensifying screen.
- 2) What are the common causes of tube failure and how to prevent them?
- 3) Describe the different interactions of radiation with matter.

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

**10 x 5 = 50**

- 4) Lead barrier.
- 5) Safe light.
- 6) Step wedge.
- 7) Squeeze roller.
- 8) Properties of X rays.
- 9) Types of X ray films.
- 10) Mammography X ray tubes.
- 11) Safe exposure limits.
- 12) Hysterosalpingogram.
- 13) Air bells.
- 14) Line focus principle.
- 15) Femur.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Expand PACS.
- 17) Indications for barium enema.
- 18) Stereoscopy.
- 19) Collimater.
- 20) Indications of angiography.
- 21) Resolution.
- 22) Thermostat.
- 23) Expand KvP and MaS.
- 24) Indications for IVP.
- 25) Macroradiography.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Describe effects of radiation on human body. Add a note on permissible dose.
- 2) What are GRIDS? Write in detail their types and uses.
- 3) Draw a neat labeled diagram of a step up transformer in a conventional x-ray machine.

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

**10 x 5 = 50**

- 4) Alpha decay.
- 5) Structure of an atom.
- 6) Hatch box.
- 7) Mass miniature radiography.
- 8) Safe light.
- 9) H & D curve.
- 10) Radio pharmaceuticals.
- 11) Voltmeter.
- 12) Barium swallow.
- 13) Isotope.
- 14) Nuclear fission.
- 15) Computer scattering.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Cones.
- 17) Sievert.
- 18) Silver halide.
- 19) Film fog.
- 20) Hangers.
- 21) Compton effect.
- 22) Dark room.
- 23) Tungsten.
- 24) Radiation badge.
- 25) Three phase generators.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Name five planes of the body.
- 2) Define Abortion. Name different types of abortion
- 3) Define phobia. Write any three phobias with their meanings.
- 4) What are the objectives of medical terminology?
- 5) Differentiate between prefix and suffix.

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

**5 x 1 = 5**

- 1) Duo.
- 2) Ecto.
- 3) Contra.
- 4) Ante.
- 5) Peri.

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

**10 x 1 = 10**

- |                         |            |            |
|-------------------------|------------|------------|
| 1) Death.               | 2) Spider. | 3) Fish.   |
| 4) Speaking in public.  | 5) Water.  | 6) Cold.   |
| 7) Surgical operations. | 8) Eating. | 9) Height. |
| 10) Phone.              |            |            |

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

**10 x 1 = 10**

- |             |             |
|-------------|-------------|
| 1) Ectasis. | 6) Tripsy.  |
| 2) Pexy.    | 7) Megaly.  |
| 3) Otomy.   | 8) Rrhaphy. |
| 4) Rhexis   | 9) Plois.   |
| 5) Plasty.  | 10) Ectemy. |

**V. MATCH THE FOLLOWING**

**5 x 1 = 5**

- |            |                                |
|------------|--------------------------------|
| 1) Stasis  | 1) Dissolution, Breaking down. |
| 2) Rrhagia | 2) Pain.                       |
| 3) Lysis   | 3) Contraction.                |
| 4) Spasm   | 4) Bursting forth              |
| 5) Algia   | 5) Standing still position.    |

**PTO...**

**VI. DEFINE THE FOLLOWING**

**15 x 1 = 15**

- |                  |                  |
|------------------|------------------|
| 1) Asthenia.     | 9) Exophthalmos. |
| 2) Epidermis.    | 10) Aphasia.     |
| 3) Atrophy.      | 11) Stenosis.    |
| 4) Macrocephaly. | 12) Virus.       |
| 5) Hypoglycemia. | 13) Postnatal.   |
| 6) Antiseptic.   | 14) Tachypnoea.  |
| 7) Apnoea.       | 15) Otitis.      |
| 8) Tumor.        |                  |

**VII. DIFFERENTIATE THE FOLLOWING TERMS**

**5 x 1 = 5**

- 1) Aural and oral.
- 2) Palpation and palpitation.
- 3) Ilium and Ileum
- 4) Facial and Fascial.
- 5) Endemic and Epidemic.

**VIII. GIVE THE MEDICAL TERMS**

**10 x 1 = 10**

- 1) Enlargement of spleen.
- 2) Black stools in adult.
- 3) Difficulty in swallowing.
- 4) Paralysis of one side of body.
- 5) Blood inside abdomen.
- 6) Pain in the joint.
- 7) Inflammation of the heart.
- 8) Fungus in ear.
- 9) White patches on skin.
- 10) Abnormal decrease of RBC

**IX. DEFINE THE FOLLOWING**

**5 x 1 = 5**

- 1) Hysterectomy.
- 2) Cholelithiasis.
- 3) Meningomyelocele.
- 4) Hyperthyroidism.
- 5) Pleural effusion.

**X. EXPAND THE FOLLOWING ABBREVIATIONS**

**10 x 1 = 10**

- |         |        |        |        |         |
|---------|--------|--------|--------|---------|
| 1) ASOM | 2) ABG | 3) HBV | 4) BMI | 5) COPD |
| 6) BPH  | 7) RNA | 8) MRI | 9) ECG | 10) LFT |

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Mention the types of Maxillary and Mandibular major connectors.
- 2) Classify fixed partial dentures. Discuss various types of Pontics.
- 3) Write in detail about casting defects / failures, its causes and management.

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

**8 x 5 = 40**

- 4) Major connectors.
- 5) Types of expansion screws.
- 6) Classify direct retainers and mention its parts.
- 7) What is sprue? Mention the principles of spruing.
- 8) Overjet and overbite.
- 9) Dental stone v/s dental plaster.
- 10) Define dental surveyor. Mention its uses
- 11) Adams clasp.
- 12) Components of cast partial denture.
- 13) Dental ceramics classification and its two uses.

**III. WRITE SHORT ANSWERS**

**5 x 3=15**

- 14) Partial crown.
- 15) Occlusal rest.
- 16) Hawley's appliance.
- 17) Refractory cast.
- 18) Custom made post.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Discuss in detail about denture processing, finishing and polishing of dentures.

**II. WRITE SHORT NOTES**

**5 x 5 = 25**

- 2) Fabrication and uses of occlusal rims.
- 3) Anterior teeth selection principles.
- 4) Curve of Spee.
- 5) Flasking and De flasking.
- 6) Record base and its requirements.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 7) Curing cycle.
- 8) Overbite.
- 9) Ceramic teeth.
- 10) Splints.
- 11) Zero degree teeth.

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**PARAMEDICAL BOARD, BANGALORE  
ANNUAL EXAMINATION, NOVEMBER -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) Classify Dental plaque. Describe the various stages of formation of plaque.
- 2) Describe in detail home care instruction and its importance.
- 3) Describe in detail the instrument used for oral prophylaxis with diagrams.
- 4) Describe the Etiology, Clinical features, Histo pathological changes of Chronic Gingivitis.

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

**7 x 5 =35**

- 5) Oral ulcers.
- 6) Chlorhexidene.
- 7) Intrinsic stains.
- 8) Leukoplakia.
- 9) Ultrasonics.
- 10) ANUG.
- 11) Dentigerous cyst.
- 12) Brushing techniques.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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 methods of relieving pain due to periodontal disease.

**II. Write short notes**

**5 x 5 =25**

- 2) Theories of mineralization of calculus.
- 3) Ultrasonics in dental practice .
- 4) Dental health education.
- 5) Intrinsic stains.
- 6) Hand scaling in dental practice.

**III. Write short answers**

**2 x 5 = 10**

- 7) Acute Periodontitis.
- 8) Attached gingiva.
- 9) Bundle bone.
- 10) Dental floss.
- 11) Flourosis.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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**  
**I. ANSWER ANY TWO**

**Max. Marks: 90**  
**2 x 10 = 20**

- 1) Describe in detail the merits and demerits of using halothane.
- 2) Describe in detail how to prepare a patient for general anesthesia and how do you administer G.A?
- 3) What is Tubectomy? Describe the procedure in detail.

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

**10 x 5 = 50**

- 4) Below knee amputation.
- 5) Burst abdomen
- 6) Arthroscopy.
- 7) Breast abscess.
- 8) Hysterectomy.
- 9) Chemotherapy.
- 10) C.P.R.
- 11) Scolene.
- 12) IOL Implant.
- 13) Prolene.
- 14) C.V.P.
- 15) Circumcision.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) I & D.
- 17) Skin grafting.
- 18) Epidural Needle.
- 19) Gastroscope
- 20) Ryle's tube.
- 21) Hernia.
- 22) Propofol.
- 23) A.B.G.
- 24) Cardiac catheterisation.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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**  
**I. ANSWER ANY TWO**

**Max. Marks: 90**  
**2 x 10 = 20**

- 1) Classify volatile anesthetics. Give a note on ether.
- 2) Describe the steps of preparing a patient for laparoscopic appendicectomy.
- 3) What is epidural anesthesia? What are the indications and complications of the same?  
How do you manage complications?

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

**10 x 5 = 50**

- 4) Morphine.
- 5) Laryngeal Mask Airway.
- 6) Accupuncture.
- 7) Informed consent.
- 8) Capnography.
- 9) Glycopyrrolate.
- 10) MaGill's forceps.
- 11) Boyle's apparatus.
- 12) Anaphylaxis.
- 13) Adrenaline.
- 14) Basic life support.
- 15) Controlled ventilation.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Potassium permanganate.
- 17) E.C.G.
- 18) Stylet.
- 19) Hyperglycemia.
- 20) W.T.G Morton.
- 21) Ketamine.
- 22) Labour analgesia.
- 23) Venesection.
- 24) Tonsillectomy.
- 25) Mouth gag.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Explain the monitoring of a patient on Haemodialysis.
- 2) Discuss the normal functions of Kidney and evaluation of proteinuria
- 3) Discuss the etiology, clinical features and management of acute renal failure.

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

**10 x 5 = 50**

- 4) Reverse osmosis.
- 5) Gout.
- 6) A.V fistula.
- 7) Uremia.
- 8) Peritoneal dialysis.
- 9) Pericardial effusion.
- 10) Re-use of a hollow fiber analyser.
- 11) Disinfection during dialysis.
- 12) Dialysate.
- 13) Contraindications of dialysis.
- 14) Hepatitis prophylaxis in a dialysis patient.
- 15) Dialysis Dementia.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Write normal values of concentrations of a) serum calcium b) serum urea.
- 17) Name two Immune suppressing drugs.
- 18) Water purification.
- 19) Acute Tubular necrosis.
- 20) Two complications of Acute tubular necrosis.
- 21) Mention two anticoagulants used in dialysis.
- 22) Dialysis dysequilibrium
- 23) Formaldehyde.
- 24) Name two poisonings treated by dialysis.
- 25) Name two functions of Henle's loop of kidney.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) CKD – stages and complications.
- 2) Enumerate the complications of Haemodialysis and describe the management of hypotension during dialysis.
- 3) Describe the structure of a venous catheter. Add a note on Dialyzer reuse.

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

**10 x 5 = 50**

- 4) Erythropoetin.
- 5) Urea reduction ratio.
- 6) Diet in dialysis patients.
- 7) Regional citrate anticoagulation.
- 8) Methods of drawing post dialysis samples for urea analysis.
- 9) Amyloidosis.
- 10) Bundle volume.
- 11) Uremic Pericarditis.
- 12) Catheter related sepsis.
- 13) Keil dialyser.
- 14) Permacath.
- 15) Ethylene oxide sterilization.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Name two causes of A.R.F.
- 17) Name two Anti hypertensive drugs.
- 18) Name two diets rich in potassium.
- 19) Name two causes of AV fistula failure.
- 20) Name two usual positions of blood leak alarm.
- 21) Normal values of serum sodium and creatinine.
- 22) Mention two cations.
- 23) Saline rinse.
- 24) Name two causes of acute chest pain.
- 25) Name two viral markers to be done before dilaysis.

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**PARAMEDICAL BOARD BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Write Newton laplace equation. Explain variation of velocity of sound with respect to pressure, temperature and humidity.
- 2) What is a Nuclear reactor? Briefly explain the principles of nuclear reactor with a neat labeled diagram.

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

**5 x 5 = 25**

- 3) Refraction.
- 4) Electromagnetic induction.
- 5) Satellite.
- 6) Slide calipers.
- 7) Coulomb's law.
- 8) Vectors.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 9) Charle's law.
- 10) Insulators.
- 11) Real and virtual image.
- 12) Surface tension.
- 13) Electromagnetic spectrum.

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

**Time: 3 hrs**

**Max. Marks: 90**

**I. ANSWER ANY TWO**

**2 x 10 = 20**

- 1) Name the parts of female reproductive system and describe uterus in detail.
- 2) Describe the anatomy of stomach in detail.
- 3) Name the endocrine glands and describe thyroid gland in detail.

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

**10 x 5 = 50**

- 4) Bronchopulmonary segments.
- 5) Name the muscles of Facial expression.
- 6) Enumerate cranial nerves in order.
- 7) Long Saphenous vein.
- 8) Arch of aorta.
- 9) Palatine tonsil.
- 10) Vas deferens.
- 11) Femoral triangle.
- 12) Carpal bones.
- 13) Nasal septum.
- 14) Right kidney.
- 15) Cerebellum.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Name the parts of Internal ear.
- 17) Name the Meningeal layers.
- 18) Name two muscles of tongue.
- 19) Golgi bodies.
- 20) Tendoachilles.
- 21) Clavicle.
- 22) Sesamoid bone.
- 23) Orbit.
- 24) Taenia coli.
- 25) Enumerate the movements of thumb.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Explain cardio respiratory adaptation to physical training.
- 2) What is Tennis elbow? Explain the pathophysiology, clinical features and rehabilitation programmes of the same.
- 3) Explain the therapeutic modalities of sports medicine.
- 4) Classify Sports injuries and explain mechanisms of injury.
- 5) List the investigations done in Cervical spondylosis and explain PT management.

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

**5 x 5 = 25**

- 6) Plantar fasciitis.
- 7) Supraspinatus tendinitis.
- 8) Cryotherapy.
- 9) Foot drop.
- 10) ACL injury.
- 11) Muscular dystrophy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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 management.
- 2) Describe 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) Acute Iridocyclitis.
- 5) Binocular diplopia.
- 6) Ptosis
- 7) B-scan
- 8) Pinhole
- 9) Presbyopia
- 10) Accomodation
- 11) PRISMS
- 12) Sturms conoid.
- 13) What are the layers of cornea? Draw a diagram.
- 14) Vitreous Humor.
- 15) Low vision aids.

**III. Write short answers**

**10 x 2 =20**

- 16) Tonometry.
- 17) Blepharitis.
- 18) Uses of Slit lamp.
- 19) Production of tear.
- 20) Fungal corneal ulcer.
- 21) Congenital cataract.
- 22) Keratometer.
- 23) Triad of Glaucoma.
- 24) Acetazolamide.
- 25) Uses of Maddox rod.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Name the parts of Respiratory system. Discuss the gross anatomy of Lung.
- 2) Classify Epithelium. Describe Stratified Squamous epithelium with a neat labeled diagram.

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

**5 x 5 =25**

- |                               |                         |
|-------------------------------|-------------------------|
| 3) Right atrium.              | 7) Histology of Liver.  |
| 4) Thyroid gland.             | 8) Median cubital vein. |
| 5) Histology of spleen.       | 9) Common bile duct.    |
| 6) Gross anatomy of Duodenum. |                         |

**III. Write short answers**

**5 x 2=10**

- 10) Name four cartilages of larynx.
- 11) Name two muscles of arm.
- 12) Name the salivary glands.
- 13) Parts of fallopian tube.
- 14) Elastic cartilage.

**Section- B, PHYSIOLOGY (Write in separate answer book)**  
**QP CODE – 2102**

**I. Long Essay – Answer any ONE**

**1 x 10=10**

- 1) Describe the composition and functions of Gastric juice.
- 2) Describe stages of Erythropoiesis with a neat labeled diagram.

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

**5 x 5 =25**

- |                                |  |
|--------------------------------|--|
| 3) Cardiac cycle.              | 7) Actions of posterior pituitary hormone. |
| 4) Surfactants.                | 8) Defecation reflex.                      |
| 5) List the functions of bile. | 9) Describe Milk ejection reflex.          |
| 6) Broca's area.               |  |

**III. Write short answers**

**5 x 2=10**

- 10) Write the normal values of a) serum albumin b) serum bilirubin.
- 11) Name any two male contraceptives.
- 12) Dead space.
- 13) State Karl Landsteiner's law.
- 14) Mention four functions of skin.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Define an Atom. Explain Neil Bohr's atomic model.
- 2) Define Transformer. Explain step up and step down transformer and its uses. Add a note on Eddy current loss.

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

**5 x 5 = 25**

- 3) Compton effect.
- 4) Define magnetism. Mention different types of magnets.
- 5) Ohm's law.
- 6) Vacuum tube diode.
- 7) Bremsstrahlung radiation effect.
- 8) Capacitors in parallel - Write formula for effective capacitance of C1, C2 in parallel.
- 9) Mutual Induction.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) Radiation units.
- 11) Define vector. Give an example.
- 12) Fluorescence.
- 13) Half value layer.
- 14) Voltmeter.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) What are the functions of Outpatient and emergency department.
- 2) What is the role of medical records in infection control? Explain the records maintained in the ward by staff nurse.

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

**5 x 5 = 25**

- 3) Medical audit and its importance.
- 4) Draw the flow chart of inpatient records.
- 5) Write the principles of form design.
- 6) Terminal digit filling system.
- 7) Accession register.
- 8) Describe retention of medical records.
- 9) Write the benefits of getting printed medical record forms.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Tracer card.
- 11) Alpha index card.
- 12) Hospital census.
- 13) Discharge against medical advice.
- 14) Death register.

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

**QP CODE – 1007(O.S)**

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

**1 x 10 = 10**

- 1) Describe general exceptions as per Indian Penal Code (sec. 76-106).
- 2) Write detailed procedure for preparing summoned records of court.

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

**5 x 5 = 25**

- 3) Post mortem report.
- 4) Principles of Estoppels and Promissory Estoppels.
- 5) Burden of proof.
- 6) Movable property.
- 7) Explain the effect of non production of documents.
- 8) Who is a public servant as per I.P.C.?
- 9) What are the rights of an accused person?

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Malpractice suits.
- 11) Workmen's compensation act.
- 12) F.I.R.
- 13) Respondent.
- 14) Documentary evidence.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Discuss the values of medical records to each of the following. a) Patients b) Doctor  
c) Hospital d) Research
- 2) Define Summons, service of summons where defendant stays in another state and outside India.
- 3) What are the different types of Evidence? What is Evidence as per Indian Evidence Act, 1872?

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

**10 x 5 = 50**

- 4) Write any three accepted definition of medical records.
- 5) Terminal digit filling.
- 6) Define burden of proof. When does burden rise on the accused?
- 7) Discharge and Acquittal.
- 8) What are the rights of an accused person?
- 9) Discuss about oral and documentary evidence.
- 10) Name the basic and special forms.
- 11) Filling system and re-trial procedure of medical records.
- 12) Differentiate between "Records" and "Medical Records".
- 13) Numbering system.
- 14) Malpractice suits.
- 15) Arrest without warrant.

**III. WRITE SHORT ANSWERS**

**10 x 2=20**

- 16) Casualty.
- 17) Court of Justice.
- 18) D.A.M.A.
- 19) Mode of Proof.
- 20) Third party insurance.
- 21) Relevancy of facts.
- 22) Penalty for default.
- 23) Judge.
- 24) Hospital census.
- 25) Sociological data.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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 co-efficient of thermal expansion? Add a note on expansion of solids, liquids and gases.
- 2) Define dental cast. Mention the different types of cast and parts of cast.
- 3) What are the general properties of metal? Mention the metals and alloys used in Dentistry.
- 4) Define element, compound and mixture. Write in detail differences between compound and mixture.

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

**7x 5 = 35**

- 5) Ductility and Malleability.
- 6) Hardness.
- 7) Electroplating.
- 8) Proportional point.
- 9) Acids and Bases.
- 10) Lever principles.
- 11) Tarnish and corrosion.
- 12) Soldering.
- 13) Solutes and collides.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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 Impression materials. Write in detail about impression compound.
- 2) Mention the types of Plaster of Paris. Describe the methods of manufacturing and its uses.

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

**5 x 5 = 25**

- 3) Dental stones.
- 4) Fluxes and anti fluxes.
- 5) Zinc oxide eugenol cement.
- 6) Gold alloys.
- 7) Properties of Heat cure acrylic resin.
- 8) Reversible Hydrocolloid.
- 9) Casting defects.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Electrolysis.
- 11) 18/8 stainless steel.
- 12) Imbibition & Synergesis.
- 13) Divestment.
- 14) Crazing.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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 Temporo mandibular joint. Name the muscles acting on it.
- 2) Draw a neat labeled diagram of a tooth. Mention the Dental formula in an adult.
- 3) Describe the course, branches and supply of facial nerve.

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

**5 x 5 =25**

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

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

**QP CODE – 1018**

**I. Long Essay**

**1 x 10=10**

- 1) Describe the mechanisms of deglutition and phonation?

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

**5 x 4 =20**

- 2) Carrier mediated transport.
- 3) Functions of platelets.
- 4) Coagulation of blood.
- 5) Functions of Mitochondria and Endoplasmic reticulum.
- 6) Complications of Mismatched blood transfusion.
- 7) Thyroid hormone.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Give an account of lateral wall of nose.
- 2) Describe the course and distribution of trigeminal nerve.

**II. Write short notes on any TWO** **2x 5 =10**

- 3) First Cervical vertebra.
- 4) Nomenclature of human tooth.
- 5) Salivary glands.

**III. Write short answers** **3 x2 =6**

- 6) Lymphatic drainage of face.
- 7) Carotid body.
- 8) Name any 4 laryngeal muscles.

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

**I. Write short notes on any FOUR** **4 x 4 =16**

- 1) Digestion of carbohydrates.
- 2) Composition and functions of blood.
- 3) ABO and Rh blood group system.
- 4) ECG.
- 5) Functions of plasma proteins.
- 6) Anterior pituitary hormones.

**II. Write short answers** **2 x2 = 4**

- 7) Landsteiner's law
- 8) Lysosomes.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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 O.T. Plan and discuss how you begin a new O.T.
- 2) Describe in detail the functions of C.S.S.D in a hospital.
- 3) Discuss in detail the post operative care of patient who has undergone surgery under G.A

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

**10 x 5 = 50**

- 4) Day care surgery.
- 5) Biohazard.
- 6) Ambulatory surgery.
- 7) Haemostasis.
- 8) Endotracheal Intubation.
- 9) C-arm.
- 10) Painting and draping.
- 11) Manifold room.
- 12) Surgical staples.
- 13) Harmonic scalpel.
- 14) Autoclave.
- 15) Fumigation of O.T

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Trendelenburg position.
- 17) Enema.
- 18) Pulse oximeter.
- 19) Instrument count.
- 20) A.M.B.U bag.
- 21) Halothane.
- 22) Boyle's apparatus.
- 23) Vaccum suction.
- 24) Local anaesthetic.
- 25) Tracheostomy set.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Describe Cholelithiasis and its management.
- 2) Discuss preparation for thyroid surgery.
- 3) Discuss the incisions for laparotomy. Add a note on emergency laparotomy.

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

**10 x 5 = 50**

- 4) Varicocele.
- 5) Osteomyelitis.
- 6) Circumcision.
- 7) Wound infection.
- 8) Otitis media.
- 9) Skin grafting.
- 10) Fistulectomy.
- 11) Hilton's method of drainage.
- 12) C.P.R.
- 13) Bipolar cautery.
- 14) Laparoscopic surgery.
- 15) Hysterectomy.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Malecot's catheter.
- 17) Episiotomy.
- 18) Non absorbable suture materials.
- 19) Humby's knife.
- 20) Ring block.
- 21) Atropine.
- 22) M.R.I.
- 23) Epistaxis.
- 24) Hand washing techniques.
- 25) Plethysmography.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Name the members of a Dialysis team. Describe the functions of each of them.
- 2) Describe the anatomy and use of A.V fistula. Add a note on permanent access device in Haemodialysis.
- 3) Describe the etiology, features and management of acute renal failure.

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

**10 x 5 = 50**

- 4) Proteinuria.
- 5) Saline dialysis.
- 6) Reverse osmosis.
- 7) Deionization.
- 8) Functions of Nephron.
- 9) Cardiovascular problems in dialysis patients.
- 10) Common infections associated with dialysis.
- 11) Water purification systems.
- 12) Acetate based dialysate v/s bicarbonate dialysate.
- 13) Composition of dialysis fluid.
- 14) Heparin.
- 15) Dialysis dysequilibrium.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Endocrine functions of kidney.
- 17) Pre dialysis education of patient.
- 18) Name two pathological constituents of urine.
- 19) Normal levels of Blood urea and serum creatinine.
- 20) Name two renal causes of Hypertension.
- 21) Name two contraindications of dialysis.
- 22) Supra pubic catheterisation.
- 23) Central venous line.
- 24) Name two clinical features of Chronic renal failure.
- 25) Bicarbonate buffer system.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER -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) Classify Aminoglycosides. Write their general properties.
- 2) Enumerate anti helminthic drugs. Write in detail about Albendazole.

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

**5 x 5 = 25**

- 3) B.C.G vaccine.
- 4) Vitamin A deficiency.
- 5) Advantages and disadvantages of I.V route of drug administration.
- 6) Aspirin.
- 7) Adverse effects of diuretics.
- 8) Bupivacaine

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name two muscle relaxants.
- 10) Name two drugs given by sublingual route.
- 11) Name the antidotes for poisoning due to a) Organophosphorus. b) Warfarin.
- 12) Name two anti tubercular drugs.
- 13) Name two anti cancer drugs.

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

**QP CODE - 2152**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Draw and explain Haemodialysis circuit.
- 2) Describe the anatomy and functions of Nephron.

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

**5 x 5 = 25**

- 3) R.O plant – components and maintenance.
- 4) Dialysis delivery system.
- 5) A.V fistula
- 6) Post dialysis procedures.
- 7) Alarm systems in dialysis machine.
- 8) Dialyzer re-use.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name two viral infections that can be transmitted during dialysis.
- 10) Antidote for heparin.
- 11) Name two antibiotics for catheter related sepsis.
- 12) Name two indications of Plasmapheresis.
- 13) Pre dialysis weight.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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 anti diabetic drugs; discuss the action, uses and adverse effects of insulin.
- 2) Classify beta blockers. Write the actions, uses and adverse effects of propranolol.
- 3) Classify local anaesthetics; describe the mechanism of action and uses of Lignocaine.
- 4) Classify penicillins; write the antibacterial activity, mechanism, uses and adverse effects of benzyl penicillin.
- 5) Classify anti epileptic drugs; discuss the mechanism of action, uses and adverse effects of phenytoin sodium.

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

**4 x 5= 20**

- 6) Bronchodilators.
- 7) Therapeutic uses of Glucocorticoids.
- 8) Drug synergism and antagonism.
- 9) OP compound poisoning.
- 10) Oral contraception.

**III. Write short answers**

**5 x 2 =10**

- 11) Name two skeletal muscle relaxants.
- 12) Name two anti emetics.
- 13) Name four routes of drug administration.
- 14) Rabies vaccine.
- 15) Name two drugs in Peptic ulcer.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER-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) Discuss in detail the functioning of eye bank, collection, preservation, transplantation and publicity.
- 2) Mention common infective eye disorders and describe one in details.
- 3) Describe screening of school going children for eye diseases.

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

**10 x 5 = 50**

- 4) Keratometry.
- 5) Disease index.
- 6) Prisms.
- 7) Visual acuity testing.
- 8) Rehabilitation of the blind.
- 9) Vitamin A prophylaxis.
- 10) Post operative endophthalmitis.
- 11) OPD and IPD format.
- 12) Global causes of blindness.
- 13) Ocular emergencies.
- 14) Target groups.
- 15) Preparation of sterile ocular bandage.

**III. Write short answers**

**10 x 2 = 20**

- 16) Autoclave.
- 17) Name two anti fungal drugs.
- 18) Survey methodology.
- 19) Indications of enucleation.
- 20) Types of aphakic correction.
- 21) Lens neutralization.
- 22) Uses of spherical and cylindrical lenses.
- 23) Causes of faint fundal glow during retinoscopy.
- 24) Testing for lacrimal patency.
- 25) Types of bi-focal lenses.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER-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) Describe physical, chemical and microscopic examination of CSF.
- 2) Discuss the lab investigation of bleeding disorder; write a note on normal coagulation cascade.
- 3) Mention the types and indications of Coombs' test; describe the procedure for Coombs' test.

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

**10 x 5 =50**

- 4) Donor selection.
- 5) Frozen section.
- 6) Microtomes.
- 7) Barr bodies.
- 8) What is immune cytochemical staining? Give an example for each.
- 9) Reticulin staining.
- 10) Osmotic fragility test.
- 11) Semen analysis.
- 12) Fetal haemoglobin estimation.
- 13) Rapid PAP stain.
- 14) Universal precaution followed in laboratory.
- 15) Buffy coat preparation and its uses.

**III. Write short answers**

**10 x 2 = 20**

- 16) Cryostat.
- 17) Synovial fluid.
- 18) Uses of Neubauer's chamber.
- 19) EDTA.
- 20) Carnois fluid.
- 21) Sickling test.
- 22) Platelet apheresis.
- 23) How to prepare Leishman's stain?
- 24) Urine routine and microscopy.
- 25) Ideal block

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Discuss the various health care systems in India.
- 2) Discuss PEM in detail.
- 3) Define pneumoconiosis and discuss in detail.

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

**10 x 5 = 50**

- 4) PERT.
- 5) Control of diarrhoeal diseases.
- 6) Minimum needs program.
- 7) School health appraisal.
- 8) Mother card.
- 9) Control of rabies.
- 10) ESI.
- 11) Population strategy in road traffic accidents.
- 12) Risk factor and preventive measures for low birth weight babies.
- 13) RNTCP program.
- 14) Child abuse.
- 15) Risk factors for diabetes mellitus.

**III. Write short answer**

**10 x 2 = 20**

- 16) Warning signs of cancer.
- 17) Aedes mosquito.
- 18) Baby friendly hospital.
- 19) Cold chain.
- 20) Breakpoint chlorination.
- 21) Weaning.
- 22) Criteria for overcrowding.
- 23) Dowry prohibition.
- 24) Millennium development Goals.
- 25) Prevention of neonatal tetanus.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Discuss in brief about digital subtraction angiography.
- 2) Discuss in detail about radiotherapy in breast cancer.
- 3) Describe the properties of X rays.

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

**10 x 5 = 50**

- 4) Stenver's view.
- 5) Water phantom.
- 6) Geiger Muller counter.
- 7) Lead apron.
- 8) Cobalt therapy.
- 9) Barium meal.
- 10) Spot film camera.
- 11) Skyline view of patella.
- 12) Stationary anode tube.
- 13) Tube rating.
- 14) Halt valve.
- 15) Skin source distance.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Latent image.
- 17) Urograffin.
- 18) Indications of HSG.
- 19) Oesophagus.
- 20) Carpal bones ossification.
- 21) Tray cleaner formula.
- 22) Developer constituents.
- 23) Elbow joint.
- 24) Use of non-screen films.
- 25) Diffraction.

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**PARAMEDICAL BOARD, BANGALORE**

**ANNUAL EXAMINATION, NOVEMBER - 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 radiology.
- 2) Write in detail about barium meal.
- 3) Explain in detail generation of CT with diagram.

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

**10 x 5 = 50**

- 4) PACS.
- 5) Ohm's law.
- 6) Doppler.
- 7) C-arm.
- 8) Sinogram.
- 9) T-tube cholangiogram.
- 10) Scaphoid view.
- 11) Myelography.
- 12) X-ray centering.
- 13) Fluoroscopy.
- 14) Abdominal binder.
- 15) Optic foramen view.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Resistors.
- 17) Photoelectric effect.
- 18) Expand RIA.
- 19) Tarsal bones.
- 20) Lumbar spine.
- 21) Nonionic contrast.
- 22) Swimmer's view.
- 23) T<sub>1</sub> weighted images.
- 24) Ultrasound.
- 25) Half value layer.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER-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 health information system; discuss it in detail.
- 2) How do you classify hospitals; discuss in detail the uses of medical-college hospital.
- 3) Define disaster; what is the role of hospitals in disaster management.

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

**10 x 5 = 50**

- 4) Medical audit.
- 5) UNICEF.
- 6) Bhore committee.
- 7) Role of paramedical workers in hospitals.
- 8) Cost-benefit analysis.
- 9) Medicosocial worker.
- 10) Organization of nursing department.
- 11) Voluntary health agencies in India.
- 12) Organization and function of physical medicine.
- 13) Segregation of waste.
- 14) Medical ethics.
- 15) Define Nosocomial infections. Enumerate its causes and how do you control it?

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Team spirit.
- 17) Functions of radiology department.
- 18) Emergency services.
- 19) Essential drugs.
- 20) Ancillary services in OPD.
- 21) Doctor patient relationship.
- 22) Dietary department.
- 23) Deep burial pit.
- 24) Autopsy table.
- 25) Hospital pharmacy.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Classify Denture basis. Discuss about compression Moulding technique.
- 2) Write the composition, properties and uses of dental inlay waxes.
- 3) Write the composition, properties and methods of manipulation of self curve acrylic resin.

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

**8 x 5 = 40**

- 4) Zinc oxide eugenol paste.
- 5) Addition Polymerization.
- 6) Hygroscopic setting expansion.
- 7) Solders flux and anti flux.
- 8) Uses of gold in dentistry.
- 9) Reversible Hydrocolloid.
- 10) Composition and uses of Glass Ionomer cement.
- 11) Physical stages seen during a setting of denture base resin.
- 12) What are the methods of joining metals? Describe any one method used in dentistry.

**III. WRITE SHORT ANSWERS**

**5 x 3=15**

- 13) Green shrinkage.
- 14) Comb plaster.
- 15) Electroplating.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 2013**  
**II Year Diploma in Dental Mechanics/ III Year**  
**Certificate course in Dental Mechanics**  
**PARTIAL DENTURES, ORTHODONTIA, MAXILLOFACIAL PROSTHESIS**  
**(N.S)**  
**QP CODE - 3172**

**Time: 1 1/2 hrs**

**Max. Marks: 45**

**I. LONG ESSAY**

**1 x 10 = 10**

- 1) 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) Adam's Clasp.
- 3) Direct retainers.
- 4) Obturator.
- 5) Pindex system.
- 6) Parts of a dental surveyor and its uses.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 7) Hawley's appliance.
- 8) Overjet and overbite.
- 9) Anchorage force.
- 10) Habit breaking appliance.
- 11) Kennedy's class IV.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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 prevalence and prevention of dental caries in Indian population.

**II. Write short notes**

**5 x 5 = 25**

- 2) Oral Hygiene index.  
3) Effect of water supply on dental health.  
4) Child care counselling.  
5) Oral health for Handicapped persons.  
6) Dental camps.

**III. Write short answers**

**5 x 2 = 10**

- 7) Dental floss.  
8) Chemical plaque control.  
9) Dentrifices.  
10) Pit and fissure sealant.  
11) Gingival massage.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) What is Vasectomy? Discuss the preparation of a patient for colorectal surgery.
- 2) Define Hernia. Discuss in detail the repair of Incisional hernia.
- 3) Define amputation. Discuss in detail the procedure of below knee amputation.

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

**10 x 5 = 50**

- 4) Lithotomy position.
- 5) Burr hole.
- 6) Factors influencing wound healing.
- 7) Mention various abdominal incisions.
- 8) Methods of haemostasis.
- 9) Boyle's apparatus.
- 10) Concepts of laparoscopic surgery.
- 11) Foley's catheterisation.
- 12) Non absorbable suture materials.
- 13) Abdominal and pelvic pathologies detected by USG.
- 14) Describe the position of a patient for thyroidectomy.
- 15) Explain in brief various types of abdominal drains.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Babcock's forceps.
- 17) Proctoscope.
- 18) Feeding Jejunostomy.
- 19) Appendicectomy.
- 20) Linen sterilization methods
- 21) Microsurgery.
- 22) Vagotomy.
- 23) I.V cannula.
- 24) Cautery.
- 25) Alley's forceps.

**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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) Discuss pre operative preparation for a patient of thyrotoxicosis.
- 2) Discuss operations for G.I perforation.
- 3) Discuss various methods of sterilization.

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

**10 x 5 = 50**

- 4) C.S.S.D.
- 5) Suture materials.
- 6) Lymphoma.
- 7) Gangrene.
- 8) C.V.P.
- 9) Thoracic incision and closure.
- 10) Enumerate common causes for Haematemesis.
- 11) Renal stones.
- 12) Tonsillectomy.
- 13) Operations for Hydrocele.
- 14) Split skin graft.
- 15) Uses of C-arm in Orthopaedics.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Squamous cell carcinoma.
- 17) Universal precautions in surgery.
- 18) Hand washing techniques.
- 19) Circumcision.
- 20) Hilton's method.
- 21) Sitz bath.
- 22) Cryosurgery.
- 23) Fistula.
- 24) Digital ring block.
- 25) Adrenaline.

**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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 I.P.D and C.A.P.D.
- 2) How do you educate a patient for dialysis?
- 3) Describe the components of a dialysis team and their responsibilities.

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

**10 x 5 = 50**

- 4) A.R.F
- 5) Immunity.
- 6) Heparin.
- 7) Dialysis dysequilibrium.
- 8) Proteinuria.
- 9) Cyclosporine.
- 10) Psychiatric aspects of a patient on dialysis.
- 11) Record keeping in dialysis.
- 12) Electrolyte imbalance.
- 13) Diet in E.S.R.D.
- 14) Immunization schedule in dialysis patient.
- 15) Seldinger's technique of CVP insertion.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Merits and de-merits of femoral catheterisation.
- 17) Semi permeable membrane.
- 18) Write normal values of Serum a) Pottasium b) Calcium.
- 19) Jaundice in Dialysis.
- 20) C.R.R.T.
- 21) Tests involved in renal transplanatation.
- 22) Two types of Dialysate.
- 23) Two indications for acute dialysis
- 24) Chronic complications of dialysis.
- 25) Hyperkalemia.

**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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 Clinical co-ordinator of peritoneal dialysis and his role assigned.
- 2) Discuss in detail indications, types and complications of peritoneal dialysis.
- 3) Describe Non renal indications for dialysis.

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

**10 x 5 = 50**

- 4) Dialysis for poisoning.
- 5) S.L.E.D.
- 6) Permacath.
- 7) Peritoneal equilibration test.
- 8) Urea reduction ratio.
- 9) Therapeutic plasma exchange.
- 10) Re-circulation in dialysis.
- 11) Anti coagulants.
- 12) Bicarbonate dialysate.
- 13) Maintenance of records in dialysis unit.
- 14) Peritonitis in PD patients.
- 15) Diet in ESRD.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 16) Name two antibiotics used in peritonitis.
- 17) Name two Nephrotoxic drugs.
- 18) Name two causes of seizures in Haemodialysis patient.
- 19) Name two foods to be avoided in renal failure.
- 20) Antidote for heparin toxicity.
- 21) Normal values of a) Bleeding time b) Clotting time.
- 22) Fever and chills during dialysis.
- 23) Name two causes of anemia in dialysis patient.
- 24) Name two drugs used in transplant patients.
- 25) Name two causes of fluid overload in P.D patients.

**PARAMEDICAL BOARD BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER -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 Sodium carbonate manufactured by Solvay's process. Mention its uses.
- 2) How is Nitric acid prepared in laboratory by Ostwald's process. Mention its uses.

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

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

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

- 3) Classification carbohydrates.
- 4) Essential amino acids.
- 5) Co-60.
- 6) Normality and Molarity.
- 7) Bio chemical messengers
- 8) Properties of Sulphuric acid
- 9) Types of buffer solutions.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Henderson's Equation.
- 11) Brownian movement.
- 12) Define molecular weight.
- 13) What is colloidal solution?
- 14) What is an oxidizing agent? Give example.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Describe the endometrial changes during menstrual cycle.
- 2) Describe Erythropoiesis with a neat labeled diagram.
- 3) Define Blood pressure. Describe the regulation of blood pressure.
- 4) Describe the formation of urine with a neat labeled diagram of a nephron

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

**5x 5 =25**

- |                                 |  |
|---------------------------------|--|
| 5) Heart sounds.                | 9) Contents and functions of middle ear. |
| 6) Visual cycle.                | 10) Testosterone.                        |
| 7) Cerebrospinal fluid.         |  |
| 8) Transport of carbon dioxide. |  |

**III. Write short answers**

**5 x 2=10**

- 11) Name two digestive enzymes.
- 12) Name two renal function tests.
- 13) Name two placental hormones.
- 14) Name any two errors of refraction.
- 15) Name any two methods of female contraception.

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

**QP CODE - 2193**

**I. Answer any one**

**1 x 10=10**

- 1) What are proteins? Mention their biological importance with a detailed note on essential amino acids.
- 2) What are isoenzymes? Write their clinical importance with two examples

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

**1 x 5 = 5**

- |              |                     |
|--------------|---------------------|
| 3) Collagen. | 4) Polysaccharides. |
|--------------|---------------------|

**III. Write short answers**

**5 x 2=10**

- 5) Scurvy.
- 6) Pancreatic enzymes.
- 7) Hay's test.
- 8) Insulin.
- 9) Lipoproteins.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Describe the therapeutic benefits of Pranayama.
- 2) What are the rules and regulations to be followed while practicing yogasanas?
- 3) Describe the concepts of yamas and niyamas.
- 4) Discuss differences between yoga therapy and modern medical science.
- 5) What is normal mental health? Describe the factors contributing towards it.

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

**5 x 5 = 25**

- 6) Padmasana.
- 7) Bandhas and mudras.
- 8) Dhanurasana.
- 9) Bhujangasana.
- 10) Kriyas.
- 11) Immature personality.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Describe procedures of cataract surgery.
- 2) Classify glaucoma and write briefly on formation and circulation of aqueous humour.
- 3) Describe symptoms, signs and treatment of bacterial corneal ulcer.

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

**10 x 5 = 50**

- 4) Peribulbar and retrobulbar anaesthesia.
- 5) Keratometry.
- 6) Complicated cataract.
- 7) Pseudophakia.
- 8) District Blindness Control Society.
- 9) Spring catarrh.
- 10) Hypertensive retinopathy.
- 11) Ishihara chart.
- 12) Paralytic squint.
- 13) Ophthalmic emergency.
- 14) Errors of refraction and their correction.
- 15) Causes of chemical injury and their treatment.

**III. Write short answers**

**10 x 2 = 20**

- 16) Differential diagnosis of red eye.
- 17) Uveitits.
- 18) Pilocarpine nitrate.
- 19) Occlusal therapy.
- 20) Bifocal lenses.
- 21) Foreign body.
- 22) Mention two anti fungal drugs.
- 23) Causes of iritis.
- 24) Acetalzolamide.
- 25) 2% fluoresceine.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Describe sources, daily requirement, functions and deficiency manifestations of calcium.
- 2) Define carbohydrates. Classify them with suitable examples; add a note on clinical importance.
- 3) Explain the principles, components and applications of a colorimeter with a neat labeled diagram.

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

**10 x 5 = 50**

- 4) Fully automated analyser.
- 5) Laboratory hazards.
- 6) Flame photometer.
- 7) Ultracentrifuge.
- 8) Conjugated proteins.
- 9) Effects of substrate concentration, pH and temperature on enzyme action.
- 10) Invert sugar.
- 11) Derived lipids.
- 12) Aliphatic and aromatic compounds.
- 13) Strong acid and weak base.
- 14) Name four major minerals and write their functions.
- 15) Preanalytical variations.

**III. Write short answers**

**10 x 2 = 20**

- 16) Aldehyde test.
- 17) Function of copper.
- 18) Molar solution.
- 19) Transaminases.
- 20) Indicators used in acid base titrations.
- 21) Molisch test.
- 22) Atomic weight.
- 23) Draw the diagram of a burette and mention its uses.
- 24) Semiautoanalyser.
- 25) Preparation of buffers.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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. Write in detail about indicators of good health.
- 2) Enumerate various portions of digestive system. Describe the structure and functions of stomach.
- 3) Describe natural history of a disease; how do you apply different levels of prevention with reference to natural history of a disease - explain with suitable examples.

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

**10 x 5 = 50**

- 4) Social institutions.
- 5) Consumer Protection act.
- 6) Type A personality.
- 7) Doctor patient relationship.
- 8) Health team concept.
- 9) Drug addiction.
- 10) Germ theory of disease.
- 11) Rehabilitation.
- 12) HDI.
- 13) Rural society.
- 14) Socioeconomic status.
- 15) Medicosocial workers.

**III. Write short answers**

**10 x 2 = 20**

- 16) Social pathology.
- 17) Learning skills.
- 18) Spiritual dimension of health.
- 19) Pandemic.
- 20) Disease elimination.
- 21) Effects of smoking on health.
- 22) Human anthropology.
- 23) Social defence.
- 24) Acculturation.
- 25) Under-5 mortality rate.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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 cartilages with examples, draw a neat labeled diagram of hyaline cartilage.
- 2) Name the chambers of heart and describe right atrium in detail.
- 3) Name the lymphoid structures in the body and give an account on thymus.

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

**5 x 3 = 15**

- 4) Dorsal venous arch of hand.
- 5) Mediastinum.
- 6) Paranasal air sinuses.
- 7) Spermatic cord.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 8) Mention any four muscles of lower limb.
- 9) Peculiarities of clavicle.
- 10) Name any four carpal bones.
- 11) Sesamoid bone.
- 12) Palatine tonsil.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) List the endocrine glands. Describe the Thyroid gland.
- 2) Briefly describe the parts of Central nervous system with a neat labeled diagram.

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

**5 x 5 = 25**

- |                  |                 |
|------------------|-----------------|
| 3) Testis.       | 7) Ureter.      |
| 4) Tarsal bones. | 8) Stomach bed. |
| 5) Clavicle.     | 9) Spleen.      |
| 6) Pericardium.  |                 |

**II. WRITE SHORT ANSWER**

**5 x 2 = 10**

- |                        |                   |
|------------------------|-------------------|
| 10) Taste buds.        | 13) Ossification. |
| 11) Myoglobin.         | 14) Alveoli.      |
| 12) Elastic cartilage. |                   |

**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 the chemical and physical examination of urine.
- 2) Life cycle of Malaria parasite.

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

**5 x 5 = 25**

- |                                      |                 |
|--------------------------------------|-----------------|
| 3) Test for bile salts and pigments. | 6) Widal test.  |
| 4) P.C.R                             | 7) ZN staining. |
| 5) Anticoagulants.                   | 8) VDRL.        |

**III. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 9) Name two DNA viruses.
- 10) Name Gram negative organisms.
- 11) Name four vaccines.
- 12) Semen analysis.
- 13) Name two live vaccines.

**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Enumerate the gross features of Heart and give an account on left ventricle.
- 2) Classify bones according to their shapes. Give an account on Humerus.

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

**2 x 5 = 10**

- 3) Optic nerve.
- 4) Pancreas.
- 5) Kidney.

**III. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 6) Name four Carpal bones.
- 7) Name two Salivary glands.
- 8) Name parts of large intestine.
- 9) First rib.
- 10) Spermatozoa

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

**QP CODE - 2143**

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

**4 x 5 = 20**

- 1) Hypoxia.
- 2) Haemoglobin.
- 3) Functions of cell membrane.
- 4) Gastric juice.
- 5) Functions of testosterone.
- 6) Define cardiac output. Mention the factors regulating it

**II. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 7) Name any two pregnancy tests.
- 8) Name any two anticoagulants.
- 9) Name any two function of Thyroid hormone.
- 10) Name any two functions of CSF.
- 11) Name any two functions of liver.

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

**QP CODE - 2144**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Describe different methods of Haemoglobin estimation. Describe in detail about Sahli's method.
- 2) Describe different methods of sterilization.

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

**2 x 5 = 10**

- 3) Quality control in Hematology.
- 4) AFB staining.
- 5) Bleeding time and clotting time.

**III. WRITE SHORT ANSWER**

**5 x 2 = 10**

- 6) Reticulocyte.
- 7) Name four culture media.
- 8) Name four Gram positive organisms.
- 9) Name four urinary preservatives.
- 10) Name different parts of a Microscope.

**PARAMEDICAL BOARD, BANGALORE  
ANNUAL EXAMINATION, NOVEMBER - 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) Write about mean value articulators and its uses.
- 3) Discuss limiting and supporting structures of mandibular dentures. Add a note on lateral throat form.
- 4) Describe the anatomy Maxillary right central Incisor.

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

**7x 5 = 35**

- 5) Rebasng.
- 6) Sublingual seal area.
- 7) Agar agar.
- 8) Curve of Spee.
- 9) Boxing.
- 10) Inlay wax.
- 11) Articular disc.
- 12) Muscles of mastication.
- 13) Mental foramen.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) Write in detail about Temporomandibular joint.
- 2) Describe the anatomy of Mandibular permanent second molar.

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

**5 x 5 = 25**

- 3) Muscles of Tongue.
- 4) Posterior palatal seal area.
- 5) Tooth carving.
- 6) Tooth numbering systems.
- 7) Lateral pterygoid muscle.
- 8) Types of Human Dentition.
- 9) Define Centric relation and Centric occlusion.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Incisive papilla.
- 11) Retromolar pad.
- 12) Rugae.
- 13) Buccal shelf area.
- 14) Mid palatine raphe.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) What is inflammation? Describe its types, histological differences with diagram.
- 2) Define analgesics. Classify them. Describe any one of them used in dentistry.
- 3) Define Cementum? What are its types, composition and function.
- 4) Define Gingiva. Describe in detail morphological and histological features of Gingiva
- 5) What are antiseptics. Describe in detail antiseptics used in dentistry.

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

**5x 5 =25**

- 6) Chlorhexidene.
- 7) Bacteria of buccal cavity.
- 8) De sensitizing agents.
- 9) Functions of periodontal ligament.
- 10) Cemento-enamel junction.
- 11) Flourosis.

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**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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) What is neoplasia; differentiate between benign and malignant neoplasms.
- 2) Describe briefly the bacteriology of dental caries; gingival and periodontal infections.

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

**4x 5 =20**

- 3) Vitamin C deficiency.
- 4) Attrition and abrasion.
- 5) Hypersensitivity.
- 6) Milk teeth.
- 7) Dental anomalies.

**III. Write short answers**

**3 x2 =6**

- 8) Lignocaine.
- 9) Hypercementosis.
- 10) Infection control.

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

**QP CODE- 2184**

**I. Write short answers**

**5 x 2 =10**

- 1) Vitamin K.
- 2) Ingredient in dentifrice.
- 3) Amoxicillin.
- 4) Heparin.
- 5) Analgesics in dentistry.

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# PARAMEDICAL BOARD, BANGALORE

## ANNUAL EXAMINATION, NOVEMBER - 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 tests.
- 2) Write in detail about factors regulating blood glucose levels.

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

2 x 5 = 10

- 3) Metabolic acidosis.
- 4) Analysis of abnormal urine.
- 5) Proteins in blood.

##### III. WRITE SHORT ANSWERS

5 x 2 = 10

- 6) Benedict's test.
- 7) Normal range of blood urea and creatinine.
- 8) Hay's test.
- 9) Applications of ELISA.
- 10) Chloride shift.

### 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 and mention the advantages and disadvantages of intravenous route.
- 2) Classify penicillins; write about their uses and adverse effects.

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

2 x 5 = 10

- 3) Ciprofloxacin.
- 4) Intravenous induction agents.
- 5) Aspirin.

##### III. WRITE SHORT ANSWERS

5 x 2 = 10

- 6) Write two uses of diazepam.
- 7) Write two complications of spinal anaesthesia.
- 8) Name two opioid analgesics.
- 9) What is idiosyncrasy?
- 10) Name two antiemetics.

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

#### QP CODE - 2134

##### I. ANSWER ANY ONE

1 x 10 = 10

- 1) Enumerate species of Clostridia and add a note on gas gangrene.
- 2) Define immunity. Describe in detail about active and passive immunity.

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

2 x 5 = 10

- 3) Bacterial filters.
- 4) Hot air oven.
- 5) Universal precautions.

##### III. WRITE SHORT ANSWERS

5 x 2 = 10

- 6) Joseph Lister.
- 7) Tyndallization.
- 8) Types of microspores.
- 9) Incineration.
- 10) Robert Koch.

**PARAMEDICAL BOARD, BANGALORE**  
**ANNUAL EXAMINATION, NOVEMBER - 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 the pathway of glycolysis and add a note on its energetic.
- 2) Describe about urea cycle.

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

**5 x 5 = 25**

- 3) Plasma proteins.
- 4) Anion gap.
- 5) Chromatography and its applications.
- 6) Buffer solutions.
- 7) Quality control.
- 8) Abnormal constituents of urine.

**III. WRITE SHORT ANSWERS**

**5x 2 =10**

- 9) Rothera's test.
- 10) Jaffe's test.
- 11) Bile test.
- 12) Van den berg reaction.
- 13) Name two derived lipids.

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

**QP CODE - 2154**

**I. ANSWER ANY ONE**

**1 x 10 = 10**

- 1) Write the pathogenesis of enteric fever and add a note on WIDAL test.
- 2) Define and classify culture media.

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

**5 x 5 = 25**

- 3) Universal precautions.
- 4) Chemical disinfectants.
- 5) Cell mediated immunity.
- 6) Cholera.
- 7) Type I hypersensitivity reaction.
- 8) HIV.

**III. WRITE SHORT ANSWERS**

**5x 2 =10**

- 9) Lesions caused by Staphylococcus aureus.
- 10) Classify levels of disinfection.
- 11) Herd immunity.
- 12) Organisms causing meningitis.
- 13) Two pathogenic fungi.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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) Write in detail about pathogenesis and prophylaxis of Poliomyelitis.
- 2) Define and classify immunity. Write in detail about active immunity.
- 3) Describe the morphology, cultural characteristics and lab diagnosis of *Corynebacterium diphtheriae*. Add note on prophylaxis of Diphtheria.

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

**10 x 5 = 50**

- 4) Coagulase test.
- 5) Hot air oven.
- 6) Botulism.
- 7) Tetanus.
- 8) *Mycobacterium tuberculosis*.
- 9) Bacterial cell wall.
- 10) Widal test.
- 11) IgG antibody.
- 12) Life cycle of *Echinococcus granulosus*.
- 13) Classification of Sterilization methods.
- 14) Bacterial growth curve.
- 15) Modes of transmission of HIV.

**III. Write short answers**

**10 x 2 = 20**

- 16) Louis Pasteur.
- 17) Name two Killed vaccines.
- 18) Name four Gram negative bacteria.
- 19) Enriched media.
- 20) Gaseous disinfectants.
- 21) Life cycle of Ascariasis.
- 22) Methods of demonstration of motility.
- 23) Hanging drop preparation.
- 24) Type III Hypersensitivity.
- 25) Classification of Leprosy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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) Describe Disability evaluation and role of physiotherapy.
- 2) Explain the role of physiotherapy in managing Frozen shoulder.
- 3) Describe the types of Orthosis. Discuss in detail about spinal orthosis.
- 4) Discuss the assessment, prevention and management of Industrial Hazard.
- 5) Discuss the prevention and management of congenital contractures and deformities.

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

**5 x 5 = 25**

- 6) Sach foot.
- 7) Chest physiotherapy.
- 8) Home exercises.
- 9) Hearing aid.
- 10) Principles of magnetic therapy.
- 11) Post natal physiotherapy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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) Equipments used in Histopathology, their merits and demerits.
- 2) Write in detail about collection, screening and storage of blood.
- 3) Describe physical and microscopic examination of urine. Add a note on methods of urine collection.

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

**10 x 5 = 50**

- 4) PCV.
- 5) Sputum examination.
- 6) Decalcification.
- 7) Wintrobe's tube.
- 8) Buffy coat preparation.
- 9) Formalin fixatives.
- 10) Demonstration of Barr body.
- 11) Dehydration.
- 12) Neubaur's counting chamber.
- 13) Semen analysis.
- 14) Serum Bilirubin.
- 15) Pap stain.

**III. Write short answers**

**10 x 2 =20**

- 16) Microtome knives.
- 17) Carnoy's fluid.
- 18) F.N.A.C.
- 19) Ketone bodies.
- 20) Bone marrow needle.
- 21) Fixatives.
- 22) Eosin.
- 23) Benzidene test.
- 24) AEC.
- 25) Supra vital stain.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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) Role of Cultural factors in Health and disease.
- 2) Define Sullage. Describe the different methods of solid waste disposal in urban areas.
- 3) List food-borne diseases. Add a note on treatment and control of Amoebiasis.

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

**10 x 5 = 50**

- 4) Slow sand filter.
- 5) Measles vaccine.
- 6) Phosphatase test.
- 7) Break point chlorination.
- 8) Bore hole latrine.
- 9) First aid in snake bite.
- 10) Primordial prevention.
- 11) Iceberg phenomenon.
- 12) Endemic fluorosis.
- 13) Mid day meal programme.
- 14) Scurvy.
- 15) Sources of air pollution.

**III. Write short answers**

**10 x 2 = 20**

- 16) Define LBW.
- 17) Hazards of noise pollution.
- 18) Global warming.
- 19) Night blindness.
- 20) Osteomalacia.
- 21) Enumerate four water soluble vitamins.
- 22) Kala azar.
- 23) Sources of Vitamin C.
- 24) Comfort zone.
- 25) Balanced diet.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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 phases of Menstrual cycle.
- 2) Name the anterior pituitary hormones. Write in detail about growth hormone.

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

**5 x 5 = 25**

- 3) E.C.G.
- 4) CO<sub>2</sub> transportation in blood.
- 5) Extrinsic coagulation cascade.
- 6) Functions of cerebrum.
- 7) Mechanical events in cardiac cycle.
- 8) Functions of thyroid hormone.
- 9) Pregnancy tests.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) Baroreceptors.
- 11) Give any two functions of spleen.
- 12) Vital capacity.
- 13) Name two Descending tracts of Spinal cord.
- 14) Name any two contraceptive methods in males.

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

**Max. Marks: 90**

**I. LONG ESSAY**

**4 x 10 = 40**

- 1) Define vital statistics. Enumerate vital events and its sources. Describe population census in brief.
- 2) Enumerate the mortality rates. Discuss any three in detail.
- 3) Describe different methods of presentation of data.
- 4) What is Population survey? Explain in detail various types of health surveys.

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

**10 x 4 = 40**

- 5) Sample registration system.
- 6) Scatter diagram.
- 7) Bar chart.
- 8) Student T test.
- 9) Pictogram.
- 10) Null hypothesis.
- 11) Record linkage.
- 12) Incidence and prevalence.
- 13) Probability.
- 14) Growth rate.
- 15) Bed occupancy ratio.
- 16) Use of computers in Medical practice.

**IV) WRITE BRIEFLY ON ANY FIVE**

**5 x 2=10**

- 17) Admission and discharge.
- 18) Turnover interval.
- 19) Co-efficient of variation.
- 20) Un-necessary surgery rate.
- 21) Notification.
- 22) Length of stay.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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**

**1x 10=10**

- 1) Describe general food requirement for growth, maintenance and repair of the body.
- 2) Discuss the role of Vitamins and minerals in relation to dental and oral health.

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

**3 x 5 =15**

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

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

**QP CODE - 2186**

**I. Write short notes**

**4 x 5 =20**

- 1) Paralleling angle technique.
- 2) Occupational exposure to radiation.
- 3) O.P.G.
- 4) Processing solution.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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 Brain. Describe briefly Cerebellum.
- 2) Describe briefly gross anatomy of Right lung. Add a note on broncho pulmonary segments.

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

**5 x 5 = 25**

- |                        |   |
|------------------------|---|
| 3) Interior of larynx. | 6) Portal vein.                           |
| 4) Clavicle.           | 7) Testis.                                |
| 5) Trachea.            | 8) Microscopic structure of a lymph node. |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name four bones of upper limb.
- 10) Name two muscles of thigh.
- 11) Name two functions of skin.
- 12) Name parts of stomach.
- 13) Name two branches of External carotid artery.

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

**QP CODE – 2136**

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

**1 x 10 = 10**

- 1) Define Blood pressure. Describe the mechanism of regulation of blood pressure.
- 2) Describe the composition and functions of bile.

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

**5 x 5 = 25**

- |                           |                              |
|---------------------------|------------------------------|
| 3) Hypovolemic shock.     | 6) Functions of Cortisol.    |
| 4) Functions of Placenta. | 7) Plasma proteins.          |
| 5) Homeostasis.           | 8) Stages of Erythropoiesis. |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Name two functions of Liver.
- 10) Name two hormones secreted by Pancreas.
- 11) Define BT and CT with normal values.
- 12) ABO blood group system.
- 13) Myoglobin.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 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 Bones of upper limb. Describe briefly the Shoulder joint.
- 2) Give an account of Stomach and its blood supply.

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

**5 x 5 = 25**

- |                            |                     |
|----------------------------|---------------------|
| 3) Pons.                   | 6) Urinary Bladder. |
| 4) Thymus.                 | 7) Adrenal gland.   |
| 5) Gross anatomy of liver. | 8) Tongue.          |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Mandible.
- 10) Name four branches of aorta.
- 11) Name the layers of Scalp.
- 12) Name four lymphoid organs.
- 13) Name parts of colon.

**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 Anemias. Explain Iron deficiency anemia in detail.
- 2) Describe the mechanism and formation of urine.

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

**5 x 5 = 25**

- |   |                               |
|---|-------------------------------|
| 3) Cushing's syndrome.  | 7) Erythroblastosis Foetalis. |
| 4) Draw a neat labeled diagram of E.C.G.                          | 8) Acromegaly.                |
| 5) Functions of Testosterone.                                     |                               |
| 6) Classify Body fluid compartments and give their normal values. |                               |

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 9) Give any two functions of Platelets.
- 10) GFR and its normal value.
- 11) Name two anti coagulants.
- 12) Normal values of a) Blood pressure b) Serum albumin
- 13) Mention the functions of Saliva.

**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Describe the etiology, clinical features and management of Hyperthyroidism.
- 2) What is Upper motor neuron and lower motor neuron? Describe the differences between UMN and LMN paralysis.
- 3) Describe the etiology, clinical features, complications and management of Acute Hepatitis.
- 4) Describe the etiology, clinical features, complications and management of Hypertension.
- 5) Discuss the etiology, clinical features and management of Iron deficiency anemia.
- 6) Discuss the etiology, clinical features and management of Lobar pneumonia.

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

**6 x 5= 30**

- 7) Ascites.
- 8) Anxiety neurosis.
- 9) Mumps.
- 10) Amoebiasis.
- 11) Cerebral malaria.
- 12) Bell's palsy.
- 13) Complication of Myocardial Infarction.
- 14) Treatment of Amoebiasis.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Enumerate Antigen antibody reactions. Describe in detail about Widal test.
- 2) Classify staining techniques in Microbiology Laboratory. Write the principles, procedure and uses of Ziehl Neelsen staining.
- 3) Classify Spirochaetes. Describe the serological tests for Syphilis.

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

**10 x 5 =50**

- 4) HBV vaccine.
- 5) Candidiasis.
- 6) Sabouraud's dextrose agar and uses.
- 7) Weil Felix test.
- 8) Life cycle of Ascariasis Lumbricoides.
- 9) Preparation of antibiotics.
- 10) Negative staining.
- 11) IMViC reaction.
- 12) Morphological index and Bacteriological index.
- 13) Lab diagnosis of Hepatitis B virus.
- 14) Tube coagulase test.
- 15) Microbiology lab waste management.

**III. Write short answers**

**10 x 2 = 20**

- 16) Name two anaerobic bacteria.
- 17) Transport media.
- 18) Name two acid fast organisms.
- 19) Name two RNA viruses.
- 20) Name two Opportunistic fungi.
- 21) Name two Trematodes.
- 22) Robertson cooked meat media.
- 23) Name two bile stained eggs.
- 24) LCB mount.
- 25) Draw a neat labeled diagram of Trichuris trichiura egg.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Define Primary health care. Describe the functions of P.H.C.
- 2) Discuss various benefits of ESI act.
- 3) Expand UNICEF. Describe the services rendered by UNICEF in detail.

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

**10 x 5 = 50**

- 4) Infant mortality rate.
- 5) Defense medical services.
- 6) First aid in Monkey bite.
- 7) Works of W.H.O.
- 8) Role of Ayurveda in public health.
- 9) Anganwadi workers.
- 10) Food adulteration.
- 11) Pulse polio immunization.
- 12) Record linkage.
- 13) Disinfection of well.
- 14) Steps of planning cycle.

**III. WRITE SHORT ANSWERS**

**10 x 2 = 20**

- 15) G.O.B.I campaign.
- 16) Cold chain.
- 17) Aedes mosquito.
- 18) Low birth weight.
- 19) Paris green.
- 20) Village Health Guide.
- 21) Genetic counseling.
- 22) Dowry prohibition act.
- 23) Food fortification.
- 24) Breast feeding advantages.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Write in detail regarding ultrasound examination done daily at the radiology department.
- 2) What is a medico legal case? How do you maintain and procure medico legal records in radiology department?
- 3) Write briefly about third generation CT scanners. Add a note on ionic contrast agents.

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

**10 x 5 = 50**

- 4) Court Summons.
- 5) Grid ratio.
- 6) Dark room technique.
- 7) Film density.
- 8) Lead barrier.
- 9) Composition of fixer.
- 10) Cystography.
- 11) Hangers.
- 12) Replenishers.
- 13) Piezo electric crystals
- 14) ERCP.
- 15) Myelography.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) Nuclear reactor.
- 17) Chambers of heart.
- 18) Barium swallow.
- 19) Filters used in mammography tubes.
- 20) Digital subtraction angiography.
- 21) Carpal bones.
- 22) Doppler study.
- 23) Indications of IVP.
- 24) A mode ultrasound.
- 25) Composition of developer.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Describe the role of radio pharmaceuticals in nuclear imaging.
- 2) Discuss briefly principles of image formation in MRI. Add a note on Multi detector CT
- 3) Explain the different components of ultrasound machine and its functions. Add a note on ultrasonic waves.

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

**10 x 5 = 50**

- 4) Loopogram.
- 5) DICOM.
- 6) Film badge.
- 7) CT artefacts.
- 8) Sialogram.
- 9) Towne's view.
- 10) MLC X-rays.
- 11) Immersion heater.
- 12) MCU.
- 13) Line focus principle.
- 14) Invertogram
- 15) Urograffin.

**III. WRITE SHORT ANSWERS**

**10 x 2 =20**

- 16) PET.
- 17) Collimator.
- 18) Dacryocystography.
- 19) High speed X ray films.
- 20) Hounsfield units.
- 21) Fistulogram.
- 22) Rotating Anode tube.
- 23) Blooming.
- 24) Solarization.
- 25) Isotopes.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Define computer. Name the parts of a computer with a neat labeled diagram. Add a note on its uses in different places.
- 2) What are the advantages and limitations of computers in department of medical records?

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

**4 x 5 = 20**

- 3) Application of softwares in MRT.
- 4) Types of printers.
- 5) RAM and ROM.
- 6) Computer virus.
- 7) Flow chart.
- 8) Floppy disk.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 9) Pen drive.
- 10) Networking.
- 11) Arithmetic logic unit.
- 12) PROM.
- 13) Scroll lock.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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 dental case history recording.

**II. Write short notes**

**5 x 5 =25**

- 2) Ethics in dental practice.  
3) Dental Specialities.  
4) Sterilization of dental instruments.  
5) Medico legal aspects in dentistry .  
6) Dental Camp.

**III. Write short answers**

**2 x 5 = 10**

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

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**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, November - 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 a neat diagram of nephron and discuss in detail the formation of urine.
- 2) Define hormones. Describe the functions of hormones secreted by pancreas.

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

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

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

- 3) DNA Finger printing.
- 4) Classification of enzymes.
- 5) Differences between bone and cartilage.
- 6) Placenta.
- 7) Structure of mammalian sperm.
- 8) Digestion of lipids.
- 9) Structure of neuron.

**III. WRITE SHORT ANSWERS**

**5 x 2=10**

- 10) Pace maker.
- 11) Name two diseases caused by virus.
- 12) Name the valves of heart.
- 13) AIDS.
- 14) Name two diseases caused by bacteria.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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 Hernia. Write in detail about management of Inguinal hernia.
- 2) What are the clinical features of duodenal ulcers; discuss the treatment of chronic duodenal ulcer
- 3) Discuss the clinical features, management of appendicitis; add a note on the treatment of appendicular mass.

**II. Write short notes any THREE**

**3 x 5= 15**

- 4) Incision and drainage.
- 5) Skin graft.
- 6) Hydrocoele.
- 7) Ganglion.

**III. Answer any TWO**

**2 x 15= 30**

- 8) Describe the clinical features, etiology and clinical management of shoulder dislocation.
- 9) Describe the Clinical features of clavicular fractures. How do you manage the same?
- 10) What are the causes of fracture neck of femur in elderly patients and how do you manage the same?

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

**3 x 15= 15**

- 11) Non union.
- 12) Trigger finger.
- 13) Intramedullary nailing.
- 14) Osteoclastoma.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, November - 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) Write a note on dagger and asterisk.
- 2) Define volume 3 of ICD 10<sup>th</sup> edition.
- 3) Explain the procedure of coding malignant conditions.
- 4) Define diagnosis; what are the different types of diagnosis?
- 5) Describe coding procedure in a pregnant patient.

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**PARAMEDICAL BOARD BANGALORE**  
**Annual Examination, November - 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) Population explosion.

2) Corruption.

**II. ANSWER ANY ONE**

**1 x 10 = 10**

3) Write a letter to your friend inviting him to a family function.

4) Write a letter to your Municipal commissioner complaining about mosquitoes' and flies' increase and non-disposal of garbage from your locality.

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

**5 x 1 = 5**

5) Salesman 6) Goose 7) Dog 8) Peacock 9) Actor

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

**5 x 1 = 5**

10) Black 13) Brave

11) Opaque 14) Nice

12) Top

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

**5 x 1 = 5**

15) Whether

16) Look after

17) Take over

18) Apparently

19) Even if

**VI. FILL IN THE BLANKS**

**5 x 1 = 5**

20) He is late by ..... hours

21) She nearly died ..... Cholera

22) Steel is often used ..... building bridges

23) The lamp is ..... the table

24) We must talk fast ..... we shall miss the opportunity

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, November 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) Define psychology; discuss the subject matter of psychology; add a note on uses of psychology in physiotherapy.
- 2) Discuss the principles of various neuropsychological tests.
- 3) Give the historical background of the science of human behavior; explain the branches of psychology.
- 4) Describe the influence of heredity and environment on the individual's personality.

**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; make a diagram of perceptual organization.
- 7) What are attitudes? How do they develop and what are the methods to change attitudes.
- 8) What is remembering and forgetting; explain memory process.

**III. Answer any FIVE**

**5 x 3 = 15**

- 9) Study habits.
- 10) Stress management.
- 11) Unconscious behavior.
- 12) Hallucinations and illusions.
- 13) Frustrations.
- 14) Principles of learning.
- 15) SOR mechanism.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, November 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) Describe the types and methods of breathing exercises.
- 2) Explain the assessment of a patient suffering from osteoarthritis. Add a note on its physiotherapy.
- 3) Discuss the role of physiotherapy in management of stroke.
- 4) How do you treat a child in acute and convalescent stage of poliomyelitis.
- 5) Describe the assessment and management of cerebellar ataxia.
- 6) Describe the assessment and management of COPD.

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

**5 x 6 = 30**

- 7) Deep vein thrombosis.
- 8) Foot drop.
- 9) Lung function tests.
- 10) EMG biofeedback.
- 11) CTEV.
- 12) Management of muscular dystrophy.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, November 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 the different the different blood group systems and describe one of them.
- 2) Name the hormones of pituitary gland; describe the functions of any one of them.
- 3) Describe the composition and functions of gastric juice.

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

**10 x 5 = 50**

- 4) Functions of spleen.
- 5) Errors of refraction.
- 6) Carbon dioxide transport in blood.
- 7) Functions of CSF.
- 8) Cardiac output.
- 9) Liver function tests.
- 10) Functions of testosterone.
- 11) Plasma proteins and their functions.
- 12) Formation of urine.
- 13) ESR.
- 14) Pregnancy tests.
- 15) Oestrogen.

**III. WRITE SHORT ANSWERS**

**10 x 2=20**

- 16) Name two functions of haemoglobin.
- 17) Name two types of hypoxia.
- 18) Write the normal values of a) GFR      b) Heart rate
- 19) Name any two functions of Insulin.
- 20) Name two female contraceptive methods.
- 21) Name two non excretory functions of kidney.
- 22) Name two hormones of posterior pituitary.
- 23) Name two lung function tests.
- 24) Name two anti coagulants.
- 25) Name two functions of saliva.

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# PARAMEDICAL BOARD, BANGALORE

Annual examination, November 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 flagella.
- 2) Define and classify culture media; write in detail on ingredients, preparation, storage and uses of blood agar
- 3) Mention various methods of chemical sterilization; add a note on phenolic compounds.

### II. WRITE SHORT NOTES ON ANY TEN

10 x 5 = 50

- 4) Pasteurization.
- 5) Bacterial capsule.
- 6) Robert Koch.
- 7) Membrane filters.
- 8) Slide agglutination test.
- 9) Stroke culture.
- 10) Chocolate agar.
- 11) Antibiotic sensitivity testing.
- 12) Robertson cooked meat media.
- 13) Bacterial spores.
- 14) MacConkey's agar: preparation and uses
- 15) Dark ground microscopy.

### III. WRITE SHORT ANSWERS

10 x 2 = 20

- 16) Tyndallization.
- 17) Urease test.
- 18) Name two bacterial vaccines.
- 19) Name two methods of anaerobic cultivation.
- 20) Name two cocci and two bacilli.
- 21) Catalase test.
- 22) Name two toxoids
- 23) Inspissation.
- 24) Universal precautions.
- 25) Passive immunity.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, November 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) Describe the following.  
a) Epidemic      b) Pandemic      c) Zoonotic disease      d) Infection and infestation
- 2) Define statistics; what are the uses of statistics; name different branches and sources of health statistics.
- 3) What are the different levels of healthcare; discuss with examples.

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

**10 x 5 = 50**

- 4) Vector borne transmission.
- 5) Rehabilitation.
- 6) Quarantine.
- 7) Human reservoir.
- 8) Health advice to travelers.
- 9) Difference between cohort and case control study.
- 10) Risk factors.
- 11) Iceberg phenomenon.
- 12) Itch mites.
- 13) Iodine deficiency disorders.
- 14) Explain the concept of secondary prevention with example.
- 15) Mid year population.

**III. Write short answers**

**10 x 2 = 20**

- 16) Isolation.
- 17) Define census.
- 18) Emporiatrics.
- 19) Epidemiological triad.
- 20) Disease carried by Culex mosquito.
- 21) Crude birth rate.
- 22) Incubation period.
- 23) Disease eradication.
- 24) Diseases transmitted by housefly.
- 25) Name two killed vaccines.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual examination, November 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 neoplasia and outline differences between benign and malignant tumours; mention mode of spread of malignant tumours.
- 2) Define oedema; describe the aetiopathogenesis of oedema.

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

**5 x 5 = 25**

- 3) Ewing's sarcoma.
- 4) Hydronephrosis.
- 5) Sinusitis.
- 6) Phylloides tumour.
- 7) Vitamin C deficiency.
- 8) Pott's spine.
- 9) Achalasia cardia.

**III. WRITE SHORT ANSWERS**

**5 x 2 = 10**

- 10) What is hypertrophy; give two examples.
- 11) Mention stages of lobar pneumonia.
- 12) Define goiter and write two causes.
- 13) Primary complex.
- 14) Embolism.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**II D.P.T – Preventive and Social Medicine**  
**QP CODE – 3195**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any TWO**

- 1) Define Zoonosis. Describe the Epidemiology of rabies.
- 2) Enumerate various occupational diseases. Describe general measures of prevention of occupational diseases.
- 3) Enumerate family planning methods. Describe various temporary methods with their advantages and disadvantages.

**II. Answer any THREE**

**10 x 3= 30**

- 4) Describe the functions of Primary Health centre. Add a note staff position of PHC.
- 5) Describe the Epidemiology of Japanese Encephalitis. Add a note on its control and prevention.
- 6) Define Growth rate. What are the causes of High fertility. Add a note on Population Explosion.
- 7) Enumerate Non – communicable diseases. Describe the risk factors related to coronary Heart disease. How do you manage them?

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

**6 x 5= 30**

- 8) GOBI.
- 9) Epidemiology of cancer.
- 10) Geriatric Health problem.
- 11) Drug resistance.
- 12) Copper T.
- 13) Oral rehydration solution.
- 14) Herd Immunity.
- 15) Drug Dependence.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**FIRST D.P.T-SOCIOLOGY & STATISTICS**  
**QP CODE – 2196**

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

**Time: 3 hrs**

**Max. Marks: 90**

**Section A - Sociology**

**I. Answer any three**

**3 x 10 = 30**

- 1) Define community. Explain the role of Urban and rural community in determining custom belief, practice, treatment and home remedy.
- 2) What are the causes for population explosion. Enumerate the measures to control population.
- 3) Who are Social workers? Write the role of Medical social worker in society.
- 4) Discuss about the caste system, features of the modern caste system and its trends.

**II. Write essay - any six**

**6 x 5 = 30**

- 5) Alcoholism.
- 6) Juvenile Delinquency.
- 7) Health problems due to Industrialization.
- 8) Perception and meaning of Illness.
- 9) Advantages and disadvantages of nuclear family.
- 10) Changes in Modern family.
- 11) Problems of physically handicapped person.

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

**I. Answer any two**

**2 x 7 = 14**

- 1) Define Standard deviation. Calculate the SD for the following.  
32, 38, 29, 36, 30, 27, 18, 42, 39, 21
- 2) Discuss the role of statistics in clinical Physiotherapy.
- 3) Define growth rate. Calculate crude death rate, crude birth rate and growth rate for the following data  
Population of city 50,000  
Total live births 10,000 Total deaths 6,000

**II. Write in brief any four**

**4 x 4 = 16**

- 4) Chi-square test.
- 5) Probability.
- 6) Correlation.
- 7) Pictogram.
- 8) Sources of health information.
- 9) Standardized death rates.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**III D.P.T –PHYSIOTHERAPY IN SURGICAL CONDITIONS**  
**QP CODE – 3205**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any FIVE**

**10 x 5 =50**

- 1) Explain physiotherapy management for above knee amputation.
- 2) Describe the Phase I cardiac rehabilitation.
- 3) What do you mean by Pneumonectomy? Give its indications, pre operative assessment and advice.
- 4) What are the common tendon transfer surgeries done in upper limb? Describe PT management.
- 5) What are the deformities after radial nerve injury? Write its assessment and PT management.
- 6) Describe post operative physiotherapy management of hysterectomy.

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

**5 x 8 = 40**

- 7) Lymphoedema.
- 8) Surgical Emphysema.
- 9) Stress incontinence.
- 10) Types of Breathing exercises.
- 11) Prevention of Bedsore.
- 12) Tendon lengthening.
- 13) Crush injury.
- 14) GB syndrome.
- 15) Thoracotomy.
- 16) PT management in Paediatric ICU.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER – 2013**  
**II D.P.T – Therapeutic Exercise**  
**QP CODE – 3196**

**Time: 3 hrs**

**Max. Marks: 90**

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

**2 x 15=30**

- 1) Discuss the different types of Breathing Exercises, their principles and effects.
- 2) What is Frozen shoulder? Describe its physiotherapy management.
- 3) What are the principles of Goniometry? Explain how do you measure the range of motion for knee joint?

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

**3 x 10= 30**

- 4) Types of Crutch walking.
- 5) What are the aims and techniques of Exercise therapy? Mention briefly tests for Neuro-muscular efficiency.
- 6) Principle indications and contraindications of postural drainage.
- 7) Massage.

**III. Write short answers**

**6 X 5 =30**

- 8) Types of Muscle work.
- 9) Frenkel's exercise.
- 10) Hydrotherapy.
- 11) Suspension therapy.
- 12) Pattern of Good and Bad posture.
- 13) Muscle work in Squatting.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**I D.P.T – Therapeutic Physics**  
**QP CODE – 2197**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any TWO**

**2 x 15=30**

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

**II. Answer any THREE**

**3 x 10= 15**

- 4) Describe the Electromagnetic spectrum.
- 5) What do you mean by Ionization and Excitation?
- 6) Describe Bohr's atomic model with a neat labeled diagram.
- 7) What are Safety devices? Briefly explain the various safety devices.

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

**5 x 6= 30**

- 8) Eddy currents.
- 9) Earthing.
- 10) Electric shock.
- 11) Equilibrium.
- 12) Range of Muscle work.
- 13) Autotransformer.
- 14) Electric shock.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**III D.P.T – Diet & Nutrition**

**QP CODE – 3206**

**Time: 3 hrs**

**Max. Marks: 90**

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

**5 x 12=60**

- 1) What is balanced Diet? Suggest a balanced diet for a pregnant Heavy worker.
- 2) Suggest a Diet for a patient suffering from Coronary Heart disease.
- 3) Define Fever. Plan a diet for patient suffering from fever.
- 4) Explain fat soluble and water soluble vitamins.
- 5) Suggest a diet plan for a school going child.
- 6) What is Food Adulteration? Write four tests to check food adulteration and the common agents used for adulteration.

**II. Write short notes any Five**

**5 x 6= 30**

- 7) Pellagra.
- 8) Rickets.
- 9) Weaning.
- 10) Calorific value of food.
- 11) Role of diet in Nutritional anemia.
- 12) Liquid diet.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**II D.P.T – Electro Diagnosis & Electrotherapy**  
**QP CODE – 3197**

**Time: 3 hrs**

**Max. Marks: 90**

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

**2 x 15=30**

- 1) Describe the production of Ultraviolet rays using high pressure mercury vapor lamp. What are its indications and contraindications?
- 2) Write the methods of application of paraffin wax, indications, effects and contraindications.
- 3) Compare the physiological changes that occur during Hot and Cold therapy.

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

**3 x 10= 30**

- 4) What are the three types of nerve injuries. How is nerve conduction velocity measured?
- 5) What are the Diagnostic uses of Galvani current?
- 6) What is Bio feedback? Discuss the various Bio feedback techniques used in physiotherapy.
- 7) Explain the principles of production of microwave theory.

**III. Write short notes**

**6 x 5= 30**

- 8) SD curve.
- 9) Luminous and Non luminous generators.
- 10) LEWIS therapy.
- 11) Dangers of Laser therapy
- 12) Explain stimulation of motor points.
- 13) Resting and Action potential of a cell.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**I D.P.T – Applied Kinesiology & Applied Physiology**  
**QP CODE – 2198**

**Time: 3 hrs**

**Max. Marks: 90**

**I. Answer any THREE**

**3 x 10=30**

- 1) Describe the arches of foot and Biomechanical application in walking.
- 2) Discuss in detail various force system acting on a human body.
- 3) Describe the movement analysis of the activity "Sit to stand" from a chair.
- 4) Explain the Biomechanics of Respiration.

**II. Answer any THREE**

**3 x 10= 30**

- 5) Describe precision grip.
- 6) Closed Kinematic and Open kinematic system.
- 7) Walking aids in Physiotherapy.
- 8) Write about Extensor mechanism of hand.
- 9) Identify various types of muscle contractions and discuss its role in static and dynamic work.

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

**5 x 6= 30**

- 10) Define Elasticity.
- 11) Define friction and various types of frictional forces.
- 12) Apply Newton's first and second laws to Elbow flexion.
- 13) Describe the Biomechanics of TM joint.
- 14) Angle of pull.
- 15) Ballistic movements.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**III D.P.T – Management Concept in Physiotherapy & Research**  
**Methods**  
**QP CODE – 3207**

**Time: 3 hrs**

**Max. Marks: 90**

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

**4 x 15=60**

- 1) Describe the role of computers in the maintenance of hospital records.
- 2) What do you mean by information and Dissipation? How is it helpful in patients, community and family?
- 3) What is personnel management? How is it important for a Physiotherapist?
- 4) Name different styles of Leadership. Which style is best among them? Explain with examples.
- 5) Describe the procedure to be followed in purchase of various materials to physiotherapy department.
- 6) Explain the role of motivation in Health care sector.

**II. Write short notes any Five**

**5 x 6= 30**

- 7) Matrix organization.
- 8) Labor laws.
- 9) Uses of Mobile rehabilitation unit.
- 10) Steps in planning.
- 11) ABC and VED analysis.
- 12) Employee's state insurance act.
- 13) Compensation.

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**PARAMEDICAL BOARD, BANGALORE**  
**Annual Examination, NOVEMBER - 2013**  
**III D.P.T – Community Based Rehabilitation**  
**QP CODE – 3208**

**Time: 3 hrs**

**Max. Marks: 90**

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

**5 x 12=60**

- 1) Enumerate various functional problems of Disability.
- 2) Institute based rehabilitation V/S community based rehabilitation.
- 3) Rehabilitation of a Geriatric patient.
- 4) What are the members of a Rehabilitation team. Explain the role of any two.
- 5) Explain the role of occupational therapist in CBR.
- 6) Discuss the role of Home exercises in CBR.

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

**5 x 6= 30**

- 7) Mental retardation and its prevention.
- 8) Funding of CBR.
- 9) Bracing materials used in rural rehabilitation.
- 10) Vocational training of a Disabled.
- 11) Field visit.
- 12) Extension services.

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