

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR CERTIFICATE COURSES

TIME 1.30 HRS

(RS-1 SCHEME)

MAX.MARKS.45

QP CODE: 1101, PHYSICS

- I. Long essay. Answer any ONE** **10 x1=10**
1. What is meant by current, voltage and resistance? Explain Ohm's Law
 2. Explain scalars and vectors with examples. State Parallelogram law of forces.

- II. Short notes on any FIVE** **5x5=25**

3. Properties of light
4. Boyle's law and Charles law
5. Thermal radiation
6. Simple harmonic motion
7. Dispersion
8. Capacitors
9. Semiconductors

- III. Write short answers** **5x2=10**

10. X-Rays
11. Acceleration
12. Mirrors
13. Total Internal reflection
14. Kinetic energy

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3101, BIOCHEMISTRY

I Long Essays - Answer any TWO

2 x 10 =20

- 1) Name the hormones involved in regulation of blood glucose and write in detail about their mechanism of action.
- 2) Define chromatography. Write the principle, types and clinical importance of chromatography in Clinical Biochemistry.
- 3) Mention the precautionary measures to be taken while a) recording of patients data
b) investigations and c) reporting

II Write short notes on any TEN

10 x 5 = 50

- 4) Gluconeogenesis
- 5) Digestion and absorption of proteins
- 6) Internal quality control
- 7) GTT
- 8) Discrete analyzers
- 9) Semi auto analyzers
- 10) Principle of RIA
- 11) Urea cycle
- 12) Name the normal constituents of urine and the tests done to demonstrate organic constituents
- 13) Name the abnormal constituents of urine and the tests done to identify them in urine.
- 14) ISE
- 15) What are ketone bodies. Write how are they formed and utilized in the body

III Write short answers

10 x 2 =20

- 16) Mention the normal levels of FBS, urea, creatinine and cholesterol
- 17) Constituents of gastric juice
- 18) Functions of proteins
- 19) Uric acid
- 20) Clinical importance of LDH
- 21) Write different methods of estimation of cholesterol
- 22) Functions of calcium
- 23) Reagent kits
- 24) Renal glycosuria
- 25) Specific gravity of urine

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3111, COMMUNITY MEDICINE, PAPER-I

I. Long Essay – Answer any TWO

2X10=20

- 1) Enumerate National Health Programmes. Add a note on vitamin A prophylaxis Programme
- 2) Enumerate mosquito borne diseases. Write in detail on Vector Control measures..
- 3) Describe epidemiology, clinical features and management of measles. Write a note on its prevention.

II. Write short notes on any TEN

10 X 5=50

- 4) Risk factors for Diabetes Mellitus.
- 5) Modes of HIV transmission
- 6). Epidemiology of Typhoid
- 7) Janani Suraksha Yojana
- 8) Vision 2020.
- 9) Pulse polio Immunization
- 10) Causes of blindness in India.
- 11) National Immunization schedule
- 12) Hazards of Obesity
- 13) Scabies
- 14) First Aid in Burns
- 15) Danger signals of Cancer

III. Write short answers

10X2=20

- 16) Name two sexually transmitted diseases
- 17) DDT
- 18) Iron Folic Acid Tablets
- 18) Rehabilitation in Leprosy.
- 19) Rule of halves in hypertension
- 20) Anganawadi worker.
- 21) Sub centre
- 22) Measles vaccine
- 23) Composition of Oral Rehydration Solution (ORS).
- 24) Hazards of smoking
- 25) Mention any four zoonotic diseases

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
X-RAY TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3121, RADIOGRAPHY INCLUDING RADIOLOGY PHYSICS

I.LONG ESSAY- ANSWER ANY TWO

2x10=20

- 1) Write about fluoroscopy. Write about its technique and indications.
- 2) Explain basic principles of x ray imaging and its properties.
- 3) Write about interaction of radiation with matter.

II.WRITE SHORT NOTES ON ANY TEN.

10X5=50

- 4)Three phase generators.
- 5)Fixers.
- 6)Intensifying screens
- 7)Mammography.
- 8)Exposure factors.
- 9)Cathode tube.
- 10)KVP and MAS.
- 11)Resistors
- 12)Xray films and papers
- 13)Isotopes
- 14)Alpha and beta rays
- 15)X- ray developers
- 16)Effect of light on photographic films.

III.WRITE SHORT ANSWERS

10X2=20

- 17)Mass number.
- 18)Tungsten.
- 19)Pyrex glass.
- 20)Space charge effect.
- 21)Heat unit.
- 22)Fleming's right hand rule.
- 23)Thermionic emission.
- 24)Molybdenum
- 25)PACS
- 26)Conventional radiography.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3131, ANAESTHESIS AND ALLIED TOPICS

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

- 1) Mention the intraoperative monitoring and write in detail about pulse oximetry
- 2) Define the IV fluids used in OT. Write a note on crystalloids and colloids.
- 3) Enumerate the different blood groups. Add a note on transfusion reaction

II. SHORT NOTES ANSWER ANY TEN **10X5=50**

- 4) Lithotomy position
- 5) Non – steroidal anti-inflammatory drugs
- 6) Morphine
- 7) Tracheostomy
- 8) Epidural anaesthesia
- 9) Drug interaction
- 10) Bupi-vaccaine
- 11) Hypotension
- 12) Laryngoscope
- 13) Accupuncture
- 14) O T sterilization
- 15) Safety measured in anaesthesia machine

III. WRITE SHORT ANSWERS **10X2=20**

- 16) Epidural needle
- 17) Informed consent
- 18) Soda bicarbonate
- 19) Non adrenaline
- 20) Stylet
- 21) Ondansetron
- 22) Pediatric endotracheal tube
- 23) Dopamine
- 24) Neostigmine
- 25) ECG monitor

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3141, MEDICAL TERMINOLOGY

NOTE: QP CONTAINS TWO PAGES

I. Answer the following

5x3=15

1. Define Eponyms and give three examples
2. Chief Sources of Medical terminology and give two examples for each
3. Define Adjective suffixes and Noun suffixes with two examples.

II. Write the prefixes for the following

5x1=5

- 1) Not lack off 2) Before 3) Through 4) Under 5) Across

III. Write the Suffixes for the following

5x1=5

- 1) Rupture 2) Tumor 3) Suture 4) Softening 5) Disease

IV. Write the Roots for the following

5x1=5

- 1) Bladder 2) Eyelid 3) Muscle 4) Vertebra 5) Uterus

V. Give the meanings for the following phobias

10x1=10

- | | |
|---------------------|-----------------------|
| 1. Fear of Marriage | 6. Fear of Doctor |
| 2. Fear of children | 7. Fear of Everything |
| 3. Fear of Crowds | 8. Fear of colors |
| 4. Fear of Pain | 9. Fear of Dogs |
| 5. Fear of water | 10. Fear of Water |

VI. Differentiate the following terms

5x2=10

1. Addiction & Adduction
2. Callus & Callous
3. Endemic & Epidemic
4. Epigastric & Epispastic
5. Carpus & Corpus

VII. Match the following

5x1=5

- | | |
|---------------------|---------------------------------------|
| 1. Hysterectomy | Paralysis of all the four extremities |
| 2. Addisons Disease | Vomiting of Blood |
| 3. Hematemesis | Primary adrenal deficiency |
| 4. Geriatrics | Study & treatment of Old age diseases |
| 5. Quadriplegia | Excision of uterus |
| | Excision of pancreas |

PTO

.....2

VIII. Give the Medical Terms for the following

10x1=10

1. Dimness vision
2. Young appearance in old age
3. Fluid on the peritoneal sac or abdominal cavity
4. Enlargement of liver and spleen
5. Paralysis affecting both sides
6. Removal of tonsil
7. Difficulty in breathing
8. Fixation of an undescended testes
9. Painful intestinal contractions
10. Profuse sweating

IX. Define the following

10x1=10

- | | |
|-------------------|-----------------|
| 1. Cholelithiasis | 6. Dyspepsia |
| 2. Hematoma | 7. Glycemia |
| 3. Glycopenia | 8. De-hydration |
| 4. Iritis | 9. Hypertension |
| 5. Splenomegaly | 10. Metacarpals |

X. Expand the following abbreviations

10x1=10

- | | |
|---------|----------|
| 1. RHD | 6. ABCD |
| 2. PPBS | 7. BOO |
| 3. NLDO | 8. DCR |
| 4. TVH | 9. LFT |
| 5. EEG | 10. PIVD |

XI Give the meaning for the following colours

5x1=5

1. Flavis
2. Candidus
3. Erythros
4. Cirrhos
5. Albus

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE : 3151

FUNDAMENTALS OF HEMODIALYSIS AND COMPONENTS

I. LONG ESSAYS - ANSWER ANY TWO

2 X 10 = 20

- 1) Alarms during haemodialysis and its management
- 2) Reuse of dialysers
- 3) Discuss about common infections encountered in haemodialysis and its prevention

II. WRITE SHORT NOTES ON ANY TEN

10 X 5 = 50

- 4) Hypertension during haemodialysis
- 5) Composition of dialysate
- 6) Heparinisation methods
- 7) Common causes of chronic renal failure
- 8) Chest pain during haemodialysis
- 9) Water pre treatment
- 10) Anaemia in haemodialysis patients
- 11) Ultrafiltration in haemodialysis
- 12) Special dialysate solutions
- 13) Dialyser clotting during dialysis
- 14) Emergency discontinuation of haemodialysis
- 15) Types of dialysate delivery

III. WRITE SHORT ANSWERS

10 X 2 = 20

- 16) Two clinical signs of dialysis inadequacy
- 17) Two types of heparin
- 18) Two causes of headache during haemodialysis
- 19) Two types of dialysis closure
- 20) Two indications for starting dialysis
- 21) Two causes of acute renal failure
- 22) Two blood tests in evaluation of anaemia in dialysis patients
- 23) Two preventive steps to limit hypotension during haemodialysis
- 24) Two drugs used to treat cramps during haemodialysis
- 25) Two blood borne viruses in haemodialysis

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OPHTHALMIC TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE 3161, PAPER-I

I. LONG ESSAY (ANSWER ANY TWO) 2 X 10 = 20

1. Discuss Post-operative care and visual rehabilitation after cataract surgery.
2. Define external hordeolum (stye) and discuss its management.
3. Discuss Maintenance of Operation Theatre sterilization – personnel and instruments.

II. SHORT ESSAY (ANSWER ANY TEN) 10 X 5 = 50

4. Dendritic keratitis.
5. Pin hole test.
6. Mydracaine.
7. Neutralization of spectacle lenses.
8. SRK formula.
9. Therapeutic contact lenses.
10. Streak retinoscope.
11. Entropion.
12. Procedure of lacrimal syringing.
13. Chalazion.
14. Ectropion.
15. Placido disc.

III. WRITE SHORT ANSWERS 10 X 2 = 20

16. Antibiotic eye drops.
17. Mention two dyes for staining.
18. Mention two mydriatics.
19. Epilation.
20. Uses of povidone iodine.
21. Subconjunctive injection.
22. Disinfection of tonometer.
23. Chemical cautery.
24. Steinopic slit.
25. Red and green glasses.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS

TIME 1.30 HRS

(RS-1 SCHEME)

MAX.MARKS.45

QP CODE 3171, COMPLETE DENTURES

I. Long Essay 1x10=10

1. Describe in detail the principal factors of teeth arrangement.

II. Write short notes 5x5=25

- 2) Cast preparation and trimming
- 3) Uses of occlusal rims
- 4) Mean value Articulator
- 5) Beading and boxing
- 6) Curing cycles

III. Write short answers 5x2=10

- 7) Repair of dentures
- 8) Acrylic teeth
- 9) Relining
- 10) SPA factor
- 11) Dewaxing

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE

TIME 1.30 HRS

(RS-1 SCHEME)

MAX.MARKS.45

QP CODE 3181, DENTAL HYGIENE & ORAL PROPHYLAXIS

I. Long Essay **1x10=10**

1. Define and classify dental plaque. Describe stages of dental plaque formation

II. Write short notes **5x5=10**

- 2) Macroscopic features of gingiva
- 3) Difference between supragingival and subgingival calculus
- 4) Clinical feature of chronic periodontitis
- 5) Periodontal abscess
- 6) Dental stains

III. Write short answers **5x2=10**

- 7) Aims and objectives of dental hygiene
- 8) Periodontics probes
- 9) Oral hygiene maintenance
- 10) Interdental cleaning aids
- 11) Topical fluoride application

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA COURSES

TIME 3 HRS

(RS-2 SCHEME)

MAX.MARKS.100

NOTE: QP CONTAINS 2 PAGES

QP CODE: 4101, SECTION –A, PHYSICS

I. Short Notes: Answer any four questions

4x5=20

1. State and explain Newton's law of gravitation
2. Define a) Streamline flow b) Turbulent flow
3. What are cohesive and adhesive forces? Give examples
4. Mention the applications of Thermal Conductivity

5. Match the following

- | | |
|---------------------|----------------|
| a) Power | oxygen |
| b) Potential energy | $PV=nRT$ |
| c) Pascal's law | watt |
| d) Medical gas | mgh |
| e) Perfect gas | Hydraulic lift |

II. Short Answers

10x3=30

6. Define derived unit give example
7. State law of conservation of momentum
8. Mention the applications of Bernoulli's theorem
9. Define uniform circular motion give example
10. State Archimedes principle
11. Define angle of contact
12. What are medical gases? Give example
13. Write the principle of thermometer
14. State & explain Boyle's law
15. Fill in the blanks
 - a) The acceleration due to gravity on the earth surface is.....
 - b) The force b/w same kind of molecules is called.....
 - c) Dimension of pressure is.....

QP CODE: 4102, SECTION –B, PHYSICS

I. Short Notes: Answer any four questions

4x5=20

1. State law of refraction of light
2. What are transverse and longitudinal waves? Give example
3. Derive the expression for resistances in parallel
4. Explain the action of NPN transistor

5. Multiple Choice Questions

- a) The speed of light in air is.....
i) 2×10^8 m/s ii) 2×10^9 m/s iii) 3×10^8 m/s iv) 3×10^9 m/s
- b) SI unit of frequency is.....
i) second ii) meter iii) hertz iv) watt
- c) The device which stores the electric charge is.....
i) Resistance ii) Transistor iii) Semiconductor iv) Capacitor
- d) Silicon is a.....
i) conductor ii) semiconductor iii) insulator iv) none of these
- e) The phenomenon in which light splits into seven colors is.....
i) reflection ii) refraction iii) dispersion iv) interference

II. Short Answers

10x3=30

- 6. Define mirror? Mention its types
- 7. Write the applications of colorimeter
- 8. Mention the principal of ultrasonography
- 9. State Ohm's law
- 10. Mention the condition for total internal reflection of light
- 11. Write the uses of thermistor
- 12. Define Radioactivity
- 13. What are p-type and N-type semiconductors?
- 14. Define 1) Real image 2) Virtual image
- 15. **Answer in one word/Sentence**
 - a) Which is the instrument or device used to measure current?
 - b) What is reverse biasing?
 - c) Name the substance which opposes the flow the charges

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 2103, BIOCHEMISTRY

I. Long Essays - Answer any TWO

2 x 10 =20

- 1) Define lipids. Classify lipids with suitable examples.
- 2) Define enzymes. Classify with suitable examples. Add a note on isoenzymes.
- 3) Mention the important minerals required by the body. Describe the sources, daily requirement, biochemical functions and deficiency manifestations of calcium.

II. Write short notes on any TEN

10 x 5 = 50

- 4) Essential amino acids
- 5) Factors affecting enzyme activity.
- 6) Co enzymes
- 7) Colorimeter
- 8) Analytical balance
- 9) Structure of atom
- 10) Hot air oven
- 11) Pre analytical variations
- 12) pH meter
- 13) Glycogen
- 14) Enzymes of diagnostic importance
- 15) Auto analyzer

III. Write short answers

10 x 2 =20

- 16) Benedict's test
- 17) Seliwanoff's test
- 18) Uses of analytic balance
- 19) Define pH
- 20) Name essential fatty acids
- 21) Write the functions of phosphorous
- 22) Sucrose
- 23) Name two strong alkalis
- 24) Name two sulfur containing amino acids
- 25) Define buffers and give one example

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 2111, COMMUNITY MEDICINE, PAPER-I

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

1. Write a neat diagram of lungs. write the function of lungs
2. Define health. add a note on determinants of health
3. Write different concept of causation. Write in detail about epidemiological triad.

II. Write Short Notes on any TEN **10X5=50**

4. Explain the Roles and Responsibility of Medico Social Worker.
5. What is Iceberg Phenomenon? Explain with an Example.
6. Difference between developed and developing countries
7. Mental dimension of health
8. What is joint family .its advantages and disadvantages
9. Define rehabilitation write about vocational rehabilitation
10. Write about primary prevention with examples
11. Functions of thyroid gland
12. Explain food habits related to diseases
13. Acculturation
14. Urban society
15. Name different parts of brain .add a note on function of brain

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

16. Define family
17. Primordial prevention
18. Two functions of kidneys
19. Mention four risk factors for CVD.
20. Two examples for mass treatment
21. Write two functions for liver
22. Define society
23. Give four examples for social institution
24. Illness behavior
25. Name four social problems

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY

TIME 1.30HRS

(RS-1 SCHEME)

MAX.MARKS. 45

QP CODE: 2122, ANATOMY

I. Long Essay – answer any two

2x10=20

1. Name the parts of female reproductive system. Describe ovary in detail
2. Name the parts of gastrointestinal system. Describe stomach in detail.
3. Classify Joints. Describe synovial Joints in details with examples.

II. Short Notes – answer any three

3x5=15

4. Histology of spleen
5. Heart
6. Trachea
7. Suprarenal gland

III. Short answers

5x2=10

8. Name four paranasal air sinuses
9. Name the parts of Femur
10. Name the types of cartilage
11. Name any four muscles of upper limb.
12. Name any four cranial Nerves.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY

TIME: 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 2132, SECTION-A, BIOCHEMISTRY

(WRITE IN SEPARATE ANSWER BOOKLET)

I. Long Question - Answer any ONE

1 x 10 = 10

1) Write in detail about Digestion and absorption of carbohydrates. Add a note on lactose intolerance.

2) Write in detail about Urea cycle and disorders associated with urea cycle.

II. Write short notes on any TWO

2 x 5 = 10

3) Urine Analysis.

4) Formation of creatinine and its importance.

5) Metabolic acidosis.

III. Write short answers

5 x 2 = 10

6) Fouchet's test.

7) Benzedrine test.

8) Define clearance tests. Give two examples.

9) Normal levels of serum electrolytes.

10) Factors maintaining pH of blood

QP CODE: 2133, SECTION-B, PHARMACOLOGY

(WRITE IN SEPARATE ANSWER BOOKLET)

I. LONG ESSAY – ANSWER ANY ONE

1x 10 = 10

1. Classify local anaesthetic drugs. Write on the mechanism of action, uses and adverse effects of Lignocaine. (2+4+3+2)

2. Classify opioid analgesics. Write the mechanism of action, therapeutic uses and adverse effects of morphine. (3+2+3+2)

II. WRITE SHORT NOTES ON ANY TWO

2 X 5 =10

3. Write advantages and disadvantages of intramuscular route

4. Morphine

5. Cotrimoxazole

III. WRITE SHORT ANSWERS

5 X 2 =10

6. Name two disinfectants

7. Name two hypnotic drugs

8. Name two drugs used in the treatment of Hypersensitivity reactions

9. Name two general anesthetics

10. Name two amino glycosides.

QP CODE: 2134, SECTION-C, MICROBIOLOGY

(WRITE IN SEPARATE ANSWER BOOKLET)

Long essay (answer any one)

1x10=10

1. Draw a neat labeled diagram of bacteria. Add a note on cell wall.

2. Define sterilization? Classify different methods of sterilization. Write in detail about Hot air oven.

Write short note on any two

5x2=10

3. Universal precautions,

4. Louise Pasteur

5. Cryptococcus

Write short answers

5x2=10

6. Name two Acid fast bacilli

7. Name two commensals of skin
8. Name two examples of filters
9. Name two sexually transmitted diseases
10. Name two bacteria producing pigment.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
MEDICAL RECORD TECHNOLOGY

TIME: 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 2142, SECTION-A, ANATOMY
(WRITE IN SEPARATE ANSWER BOOKLET)

LONG ESSAY- ANSWER ANY ONE

1X10=10

1. Mention the parts of female reproductive system. Write in detail about Uterus.
2. Name the parts of gastrointestinal system. Describe Pancreas in detail.

WRITE SHORT NOTES

2X5=10

3. Liver
4. Trachea

WRITE SHORT ANSWERS

5X2=10

5. Name any four muscles of upper limb.
6. Name any two branches of Axillary artery.
7. Name three major salivary glands.
8. Mitochondria.
9. Name any four bones of Lower limb.

QP CODE: 2143, SECTION-B, PHYSIOLOGY
(WRITE IN SEPARATE ANSWER BOOKLET)

I. LONG ESSAY (ANSWER ANY ONE)

1X10 =10

1. Describe functions of thyroid hormones. Add a note on hypothyroidism.
2. Describe the composition and functions of Pancreatic juice.

SHORT NOTES

5X2= 10

3. Menstrual cycle.
4. Renal function tests.

SHORT ANSWERS

2X5=10

5. Albumin.
6. Coronary circulation.
7. Blood Indices.
8. Functions of platelets.
9. Functions of sertoli cells.

QP CODE: 2144, SECTION-C, PATHOLOGY & MICROBIOLOGY
(WRITE IN SEPARATE ANSWER BOOKLET)

Long Essay (Answer any one)

1 x 10= 10

1. Write briefly about methods of collection of urine sample. Write a note on gross and chemical tests performed in routine urine analysis.
2. Mention different types of microscopes. Describe briefly about different investigations in microbiology.

Short Essay(on any two)

2x 5 = 10

3. Write briefly about investigations in hematology.
4. Mention the common infectious diseases. Write a note on tuberculosis.

Short Answers

5x 2 = 10

5. Zeihl-nelson's stain.
6. Differences between gram positive and gram negative organisms.
7. Define hypertrophy and hyperplasia.
8. Advantages of Sahil's hemoglobin estimation method.
9. Mention four parasites of medical importance.

PARAMEDICAL BOARD, BENGALURU
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I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY

TIME: 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 2153, SECTION-A, BIOCHEMISTRY

(WRITE IN SEPARATE ANSWER BOOKLET)

Long Question - Answer any ONE

1 x 10 = 10

- 1) Write in detail about Digestion and absorption of carbohydrates. Add a note on lactose intolerance.
- 2) Explain the principle, components and applications of pH meter with a neat labeled diagram.

Write short notes on any FIVE

5 x 5 = 25

- 3) Respiratory acidosis.
- 4) Formation of Creatinine.
- 5) Clearance tests.
- 6) Factors maintaining pH of blood
- 7) Colorimeter.
- 8) Serum electrolytes.

Write short answers

5 x 2 = 10

- 9) Benedict's test.
- 10) Anti coagulants.
- 11) Benzedine test.
- 12) Give the normal urinary excretion of urea and creatinine.
- 13) Define acids and bases. Give two examples.

QP CODE: 2154, SECTION-B, MICROBIOLOGY

(WRITE IN SEPARATE ANSWER BOOKLET)

Long essay

1x10=10

1. Draw a neat labeled diagram of bacterial cell wall. Add a note on spores.
2. Discuss in detail about laboratory diagnosis of Enteric fever.

Write short note on any five

5x5=25

3. Fumigation
4. Universal precautions
5. Sterilization by radiation
6. Autoclave
7. Cryptococcus
8. Nosocomial infections

Write short answers

5x2=10

9. Name two Gram negative bacteria
10. Name two capsulated bacteria
11. Name two Sexually transmitted diseases
12. Name two motile bacteria
13. Name two skin commensals.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
OPHTHALMIC TECHNOLOGY

TIME 3.0 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 2162, PAPER-II

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY (Answer any two)

2 X 10 = 20

1. Classify conjunctivitis, add a note on Bacterial Conjunctivitis
2. Describe first Aid Management of Chemical injury
3. How to Assess Binocular single vision ?

SHORT ESSAY

10 X 5 = 50

4. Clinical features of Dacryocystitis
5. Maddox wing
6. Clinical significance of Diplopia charting .
7. Uses of Atropine
8. Complications of Central Corneal ulcer .
9. Classify Cataract
10. Uses of Synaptophore.
11. How to Recognize Glaucoma?
12. Write the Epidemiology of Cataract
13. Common Microbiological investigations done in Eye problems.
14. How to follow up patient of Diabetic Retinopathy?
15. How to Diagnose a case of Cataract?

WRITE SHORT ANSWERS

10X2=20

16. Complications of Hypermature cataract
17. What are drugs used for infiltration in Peribulbar Block
18. Uses of Mannitol
19. Mention systemic anti-bacterial drugs used in ocular infection
20. Specific treatment of Corneal Ulcer
21. Specific treatment of Iritis .
22. Mention 2 uses of Topical steroids in ophthalmology
23. Mention 2 fundus changes of Diabetic Retinopathy
24. What are 4 Traditional Hazards seen in Eye?
25. Mention 2 types of tonometers

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS

TIME 1.30HRS

(RS-1 SCHEME)

MAX.MARKS. 45

QP CODE: 2172, APPLIED ORAL ANATOMY

Long Essay – answer any ONE

1x10=10

1. Describe the anatomy of Maxillary permanent first molar
2. Mandibular denture supporting and limiting structures

Short Notes – answer any FIVE

5x5=25

3. Overjet and overbite
4. Define Centric relation and centric occlusion
5. Muscles of mastication
6. Movements of temporomandibular joint (TMJ)
7. Histology of teeth
8. Mandibular canine
9. Importance of Incisive Papillae

Short answers

5x2=10

10. Mid Palatine Raphe
11. Hamular Notch
12. Mention different tooth numbering system
13. Dento-Labial Sounds
14. Muscles of tongue

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA /II YEAR CERTIFICATE COURSE IN DENTAL HYGIENCE

TIME 1.30HRS

(RS-1 SCHEME)

MAX.MARKS. 45

General Instructions:

- i. The question paper has TWO parts. Both parts are compulsory.
- ii. Write neat diagrams wherever necessary, handwriting should be legible.
- iii.

QP CODE: 2183, SECTION-A,
GENERAL PATHOLOGY & MICROBIOLOGY

I. Long Essay (Answer any one)

1 x 9= 9 Marks

1. What is leucoplakia. Write briefly about oral manifestation of systemic diseases.
2. Describe briefly about patho-physiology of vitamin D deficiency.

II. Short Notes (on any four)

4x 5 = 20 Marks

3. Infection control in microbiology
4. Dental anomalies.
5. Describe vascular events of inflammation
6. Write differences between benign and malignant tumors.
7. Describe types and stages of wound healing.
8. Describe types of gangrene with examples.

III. Short Answers

3x 2 = 6 Marks

9. Mention two types of necrosis with examples.
10. Define dental attrition and erosion.
11. Mention types of odontogenic cysts.

QP CODE: 2184, TOTAL MARKS: 10 MARKS
SECTION-B, PHARMACOLOGY

Short Answers

5X2 = 10

- 1 Name any two beta-lactam antibiotics
- 2 Name any two uses of Heparin
- 3 Name any two systemic routes of drug administration with one example for each
- 4 Name two fluoride preparations used in dentistry
- 5 Name any two local anesthetic agents.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS

(RS-2 SCHEME)

MAX.MARKS.100

QP CODE: 5103, BIOCHEMISTRY, SECTION –A

I SHORT NOTES ANSWER ANY FOUR

5X4=20

1. Colorimeter
2. Phlebotomy procedure
3. Different types of flasks
4. Different types of balances
5. Centrifugation and its uses

II SHORT ANSWERS

3X10=30

6. Disposal of specimen
7. Incubators
8. Normal solution
9. Define buffer and mention its significance
10. What is primary standard and mention its importance
11. Use of spectrophotometer
12. How do you prepare 10% NaCl solution ?
13. What is stock solution and mention its importance
14. Hot air oven
15. Different types of glass and plastic ware in laboratory and their significance

QP CODE: 5104, BIOCHEMISTRY, SECTION –B

I SHORT NOTES ANSWER ANY FOUR

5X4=20

1. Define and classify salts with examples
2. Classify proteins with examples
3. Define lipids. How are they classified?
4. Isoenzymes
5. Abnormal constituents of urine

II SHORT ANSWERS

3X10=30

6. Lowry Bronsted theory of acids and bases
7. List out three differences between DNA and RNA
8. Patient data registration
9. Essential amino acids
10. Polysaccharides
11. Micro minerals- definition and examples
12. Lipoprotein
13. Reagent stock book
14. Acid base indicators
15. Fat soluble vitamins - definition and examples

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN HEALTH INSPECTOR

TIME 3 HRS

(RS-2 SCHEME)

MAX.MARKS.100

QP CODE: 5111, COMMUNITY MEDICINE, SECTION –A

General Instructions:

- i. The question paper has two parts A and B. Both the parts are compulsory.
- ii. Write neat diagrams wherever necessary, handwriting should be legible.

I. Short notes, Answer any four questions

4 x 5 = 20

1. Explain epidemiological triad with a neat diagram
2. Write a note on dimensions of health
3. Add a note on Iceberg phenomenon with one example.
4. Structure and functions of heart
5. Explain disease control, elimination and eradication with one example each.

II. Short Answers

10 x 3 = 30

6. What are the functions of respiratory system?
7. Mention three components of Human Development Index
8. Mention three mortality indicators
9. Germ theory of disease
10. Name three hormones with their functions
11. What is secondary prevention? Give suitable example
12. What is rehabilitation?
13. Health team
14. Name special sense organs
15. Give three examples of specific protection

Q P Code: 5112, SECTION B

I. Short notes, Answer any four questions

4 x 5 = 20

1. Write a note on social problems. Name any 4 of them.
2. Role of diet in health
3. What are the types of family? Mention advantages and disadvantages.
4. Alcohol abuse
5. Write a note on industrialization and its impact on health.

II. Short Answers

10 x 3 = 30

6. Personal hygiene.
7. Acculturation
8. Give three examples of cultural factors affecting health
9. Effects of smoking
10. Importance of family in health give three examples
11. Mention three diseases associated with poverty
12. Mention different types of rehabilitation.
13. What are risk factors for diseases give three examples
14. Problem family.
15. What is anthropology?

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN
MEDICAL IMAGING TECHNOLOGY

TIME 1.30HRS

(RS-2 SCHEME)

MAX.MARKS.50

QP CODE: 5123, ANATOMY

I.Short Answers, (Answer any 4)

4 x 5 = 20

1. Describe heart in detail
2. Describe the parts of central nervous system with a neatly labelled diagram.
3. Palatine tonsil
4. List the parts of female reproductive system, Describe gross features of fallopian tube.
5. Synovial joint in detail

II. Short Notes

10 x 3 = 30

6. Mention any 4 endocrine glands
7. Mention any 4 veins of lower limb
8. Mention any 4 nerves of upper limb
9. Mention the parts of hip bone
10. Mention any 4 branches of external carotid artery
11. Pharynx
12. Mention the associated glands of digestive system
13. Mention any 4 tributaries of Inferior vena cava
14. Mention the layers of skin
15. Mention the parts of small intestine

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN
OPERATION THEATRE TECHNOLOGY

TIME: 3.0HRS

(RS-2 SCHEME)

MAX.MARKS.100

General Instructions:

- iv. The question paper has **THREE** parts. All parts are compulsory.
- v. Write neat diagrams wherever necessary, handwriting should be legible.

QP CODE: 5133, SECTION-A, BIOCHEMISTRY

I. Short Essay: (Answer any FIVE questions) 5 x 5 =25

- 1) Classification of amino acids.
- 2) Define carbohydrates. Classify with suitable examples.
- 3) Discuss the ionization of water.
- 4) Discuss the concepts of acid base reaction.
- 5) What are plasma proteins? Write its classification.
- 6) Define purines and pyrimidines. Discuss the structure of DNA

II. Write short answers 3 X5 =15

- 7) Universal indicators.
- 8) Respiratory acidosis
- 9) Classification of lipids with examples.
- 10) Benedict's test
- 11) t RNA

QP CODE: 5134, SECTION-B, PHARMACOLOGY

Long Essay (Answer any THREE) (3X5 = 15)

- 1 Mention any three advantages and two disadvantages of oral route of drug administration
- 2 Name any four commonly used Non-steroidal Anti-inflammatory drugs (NSAIDs).
Mention any four uses and two adverse effects of Aspirin
- 3 Liquid dosage forms
- 4 Name any three Glucocorticoidss. Mention any four uses and two adverse effects of
Glucocorticoids

Short Answers (5X3 = 15)

- 5. Name three surface anesthetics
- 6. Name three uses of Vitamin C
- 7. Name three uses of Diazepam
- 8. Name three agents used in OT fumigation
- 9. Name the antidote for poisoning due to a. Morphine b. Paracetamol

QP CODE: 5135, SECTION-C, MICROBIOLOGY

Write Short notes (any three) 3x5=15

- 1. Robert Koch
- 2. Hot air oven
- 3. Innate immunity
- 4. Bacterial cell wall

Write short answers 5x3=15

- 5. Draw a neat labeled diagram of Hepatitis B virus

6. List the measures to prevent HIV
 7. Name any 3 alcoholic disinfectants
 8. Pasteurization
 9. List the materials sterilized in Autoclave
- *****

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN
MEDICAL RECORD TECHNOLOGY

TIME: 3.0HRS

(RS-2 SCHEME)

MAX.MARKS.100

General Instructions:

- vi. The question paper has **THREE** parts. All parts are compulsory.
- vii. Write neat diagrams wherever necessary, handwriting should be legible.

QP CODE: 5143, SECTION-A, ANATOMY

(WRITE IN SEPARATE ANSWER BOOKLET)

I.Short Answers, (Answer any 2)

2 x 5 = 10

1. Describe spinal cord
2. Define epithelium, classify with examples
3. Mention the parts of young long bone with diagram

II. Short Notes

10 x 3 = 30

4. Mammary gland
5. Name any 4 nerves of upper limb
6. Mention any 4 arteries of lower limb
7. Palatine tonsil
8. Paranasal air sinuses
9. Name the organs of special senses
10. Mention the associated glands of digestive system
11. Mention the parts of synovial joints
12. Urethra
13. Mention any 4 organs of respiratory system

QP CODE: 5144, SECTION-B, PHYSIOLOGY

(WRITE IN SEPARATE ANSWER BOOKLET)

I. Short Notes – Answer any THREE questions

3 x 5=15

1. E.C.G.(Electro cardiogram)
2. Intrinsic mechanism of blood coagulation.
3. Transport of oxygen in blood.
4. Neuromuscular junction

II. Short Answers

5 x 3 =15

5. Landsteiner's Law
6. Write the normal values of 1) Pulse 2) Blood pressure 3) Cardiac Output
7. Pregnancy tests.
8. Hypoxia
9. Bile Juice

QP CODE: 5145, SECTION-C, PATHOLOGY & MICROBIOLOGY

(WRITE IN SEPARATE ANSWER BOOKLET)

II. Short Notes: Answer any THREE questions

3x5=15

1. Define neoplasia. Write differences between benign and malignant tumors.
2. Tuberculosis osteomyelitis.
3. Cirrhosis of liver.
4. Define hyperplasia. Give four examples.

II. Short Answers

5x3=15

5. Nasal polyps.
6. Mention four gram positive bacteria of medical importance.
7. Mention four parasites of medical importance.
8. Name 6 common infectious diseases.
9. Fibroid uterus.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN
DIALYSIS TECHNOLOGY

TIME: 3.0HRS

(RS-2 SCHEME)

MAX.MARKS.100

General Instructions:

- viii. The question paper has TWO parts. Both parts are compulsory.
- ix. Write neat diagrams wherever necessary, handwriting should be legible.

QP CODE: 5153, SECTION-A, BIOCHEMISTRY

I Short Notes – Answer any four

(4 x 5 = 20)

1. Isoenzymes – Any Five
2. Abnormal constituents of urine
3. Renal regulation of p^H
4. Heteropolysaccharides
5. Chylomicrons and LDL

II Short Answers

(10 x 3 =30)

6. Bence Jones Proteins
7. Definition of acid and base
8. Biogenic amines
9. Laws of photometry
10. K_m
11. Derived lipids
12. Metabolic Acidosis
13. Vandenberg Test
14. Pattern of Cardiac Enzymes in heart diseases
15. Creatinine Clearance Test

QP CODE: 5154, SECTION-B, MICROBIOLOGY

Write Short notes (any four)

4x5=20

1. Koch postulates
2. Bacterial spore
3. Pasteurization
4. Universal precautions
5. Infection control measures

Write short answers

5x3=15

6. Name any three materials used to sterilize in Autoclave
7. Name three viral vaccines
8. List any three normal flora of skin
9. List any three Gram positive bacteria
10. List any three contributions of Louise Pasteur
11. Draw a neat labeled diagram of Hepatitis B
12. List the mode of spread of HIV
13. List the sterilization control of Hot air oven
14. Name any three infections caused by Staphylococcus aureus
15. Name any 3 chemical disinfectants

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN OPHTHALMIC TECHNOLOGY

TIME: 3.0HRS

(RS-2 SCHEME)

MAX.MARKS.100

General Instructions:

- x. The question paper has **TWO** parts. Both parts are compulsory.
- xi. Write neat diagrams wherever necessary, handwriting should be legible.

QP CODE: 5163, SECTION-A, PAPER-II

- **Short Notes. Answer any four questions.** **4 X 5 = 20 marks**
 - 1. Discuss Ophthalmia neonatorum. And its management
 - 2. Classification of Diabetic retinopathy.
 - 3. Interpretation of lacrimal syringing.
 - 4. Chemical injuries of the eye.
 - 5. Visual rehabilitation of cataract surgery patients.
- **Short Answers** **10 X 3 = 30 marks**
 - 6. Blepharitis.
 - 7. Vitamin A deficiency.
 - 8. Management of corneal aberrations.
 - 9. Acute glaucoma.
 - 10. Orbital cellulitis.
 - 11. Types of hyper mature cataracts.
 - 12. Investigations before cataract surgery.
 - 13. Near vision correction following IOL surgery.
 - 14. Types of senile cataract.
 - 15. External hordeolum(stye).

QP CODE: 5164, SECTION-B, PAPER-II

- **Short Notes. Answer any four questions.** **4 X 5 = 20 marks**
 - 1. Early diagnosis of glaucoma.
 - 2. Diagnosis and treatment of amblyopia.
 - 3. Ocular features of vitamin A deficiency.
 - 4. Cover tests.
 - 5. Concomitant squints.
- **Short Answers** **10 X 3 = 30 marks**
 - 6. Digital tonometry.
 - 7. Static perimetry.
 - 8. Optic disc examination in glaucoma.
 - 9. Diabetic cataract.
 - 10. Stereopsis.
 - 11. Hypertensive retinopathy.
 - 12. Mention grades of binocular single vision.
 - 13. Topical beta blockers.
 - 14. Night blindness.
 - 15. Diabetes control for cataract surgery.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN DENTAL MECHANICS

TIME 1.30HRS

(RS-2 SCHEME)

MAX.MARKS. 50

QP CODE: 5172, APPLIED ORAL ANATOMY

WRITE SHORT NOTES ON ANY FOUR

4x5=20

1. Anatomy of Mandibular Permanent Molar
2. Morphology of Mandibular canine
3. Stress bearing and relieving areas
4. Muscles of mastication
5. Tooth curving

SHORT ANSWERS

10x3=30

6. FDI tooth numbering
7. Bilabial sounds
8. Muscles of tongue
9. Incisive Pailae
10. Hamular Notch
11. Branches of facial nerve
12. Buccinator
13. Rugae
14. Mid-Palatine Raphae
15. Parotid duct

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN
DENTAL HYGIENE

TIME: 1.30 HRS

(RS-2 SCHEME)

MAX.MARKS.50

General Instructions:

- xii. The question paper has TWO parts. Both parts are compulsory.
- xiii. Write neat diagrams wherever necessary, handwriting should be legible.

QP CODE: 5183, SECTION-A,
GENERAL PATHOLOGY & MICROBIOLOGY

III. Short Notes: Answer any FOUR questions

4x5=20

1. Describe the investigations done in microbiology.
2. Dental nomenclature
3. Briefly describe pathology of peri-odontal infections.
4. Define inflammation. Describe the vascular events of acute inflammation.
5. Vitamin C deficiency.

II. Short Answers

5X3= 15

6. Mention 4 bacteria of medical importance.
7. Name common infectious diseases.
8. Define dental attrition and dental erosion.
9. Write two differences between benign and malignant tumors.
10. Oral candidiasis

QP CODE- 5184, SECTION-B

PHARMACOLOGY

TOTAL MARKS: 15 MARKS

Short Notes (Answer any one)

1X6 = 6

1. Name any four commonly used Non-steroidal Anti-inflammatory drugs (NSAIDs). Write the four uses and two adverse effects of Aspirin.
2. Mention three advantages and two disadvantages of intravenous route of drug administration

Short Answers

3X3 = 9

- 3 Name two commonly used local anesthetics
- 4 Name two uses of Amoxycillin
- 5 Name two antiseptics used in dentistry

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR CERTIFICATE COURSES

TIME 1.30 HRS

(RS-1 SCHEME)

MAX.MARKS.45

QP CODE: 1102
CHEMISTRY

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

- 1) Explain the preparation, any two properties and uses of nitric acid.
- 2) Explain preparation of phenol from coal tar, any two properties and uses.

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

- 3) Atomic mass and molecular mass
- 4) Brownian movement
- 5) Structure of atom
- 6) Structure of glucose and fructose
- 7) Uses of ethyl alcohol
- 8) Preparation of hydrogen peroxide
- 9) Functional properties of DNA

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

- 10) Functions of Insulin
- 11) Natural radioactivity
- 12) Two uses of sodium hydroxide
- 13) Acid and Base
- 14) Henderson's equations.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3102, PATHOLOGY

I. Long Essay : (Answer any two)

2x10=20

1. Describe procedure of phlebotomy. Write a note on prothrombin time (PT) and activated partial thromboplastin time(aPTT) procedure and their importance.
2. Describe gross examination and microscopy of CSF sample. Add a note on CSF changes in tuberculous meningitis.
3. Describe criteria for donor selection. Add a note on component separation and storage of blood sample in blood bank.

II. Short Essay : (Answer any ten)

10x5=50

4. Mention the indications of bone marrow aspiration. Mention the sites of aspiration.
5. Cross matching
6. Forward and reverse blood grouping.
7. Demonstration of Barr bodies.
8. Draw a neat labeled diagram of normal sperm. Mention various abnormal forms of sperms seen in semen analysis.
9. Automation in hematology.
10. Describe H&E staining procedure.
11. Quality control in blood banking.
12. Mounting technique of museum specimen.
13. Periodic acid Schiff (PAS) stain in histopathology
14. Microwave tissue processing
15. Qualities of ideal paraffin block.

III. Short Answer :

10x2=20

16. Mention 2 immunohistochemical stains used in IHC
17. Mention 4 special stains used in histopathology.
18. Mention the types of blood groups and importance of blood grouping.
19. Mention 2 authorities controlling blood bank
20. Prothrombin time
21. Storage of blood in blood bank
22. Mention 4 types of haematoxylin
23. Gross examination of CSF sample
24. Write the principle of osmotic fragility test
25. Mention four transfusion reaction.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3112, COMMUNITY MEDICINE, PAPER-II

I. Long Essay: (Answer any two)

2x10=20

1. What is antenatal care write briefly on antenatal care services?
2. Define health education Enumerate various methods of health education. Write merits & demerits of each method
3. Define low birth weight. Write on causes of low birth weight.

II. Write Short Notes on any TEN

10x5=50

4. ORS
5. MTP
6. Demographic cycle
7. Couple protection rate
8. Barriers of communication
9. Postnatal complication
10. Geriatric health problem
11. Kangaroo mother care
12. Intra uterine device
13. Prevention of neonatal tetanus\
14. Causes of infant death
15. Child abuse

III. Write Short Answers.

10x2=20

16. Infant mortality rate
17. No scalpel vasectomy
18. Mala D
19. Two way communication
20. Colostrum
21. Use of growth charts
22. Television
23. Eligible couple
24. Safe period (Rhythm method)
25. Weaning

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3122, RADIGRAPHY INCLUDING MEDICAL RECORDS

I.LONG ESSAY- ANSWER ANY TWO

2x10=20

- 1) Discuss about X-rays and briefly explain about conventional and digital radiography.
- 2) What is urethrogram? Discuss about antegrade and retrograde urethrogram.
- 3) Define medical records. Explain briefly about special medical record forms.

II.WRITE SHORT NOTES ON ANY TEN.

10X5=50

- 4) Barium enema
- 5) Properties of X-ray.
- 6) Dark room procedures
- 7) X-ray KUB technique
- 8) Sialogram
- 9) Discuss about PACS
- 10) Explain mammography
- 11) Consent forms
- 12) Hyterosalphingography .
- 13) Negative contrast
- 14) Medicolegal cases
- 15) Image intensifiers.

III.WRITE SHORT ANSWERS

10X2=20

- 16) Bowel preparation
- 17) Explain MCU
- 18) Chest X-ray views
- 19) View box
- 20) Values of good medical records
- 21) Cassettes
- 22) Radiation protection devices
- 23) Film badge
- 24) Potter bucky grid
- 25) Anode heating effect.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3132, OPERATIVE PROCEDURE

IV. LONG ESSAY – ANSWER ANY TWO

2 X10=20

- 4) Discuss operations for GI perforations
- 5) Describe the short term and long term management of burns patients
- 6) What is orthopaedic surgery? Discuss the types of fractures and their management.

V. SHORT NOTES ANSWER ANY TEN

10X5=50

- 4) MRI
- 5) TURP
- 6) Burns
- 7) ICD TUBE
- 8) Below knee amputation
- 9) Hemorrhoids
- 10) Cataract surgeries
- 11) Tonsillectomy
- 12) Normal delivery
- 13) Robotic surgery
- 14) Management of burns
- 15) Joint replacement surgery

VI. WRITE SHORT ANSWERS

10X2=20

- 16) Local anaesthesia
- 17) Lipoma
- 18) Sims position
- 19) Circumcision
- 20) Chemotherapy
- 21) Intra-ocular lens
- 22) Breast abscess
- 23) Hydrocele
- 24) Devers retractor
- 25) Rodent ulcer

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3142, HOSPITAL ADMINISTRATION

I. LONG ESSAY – ANSWER ANY TWO **2 X 10 = 20**

- 1) Objective, role, functions and types of pharmacy services
- 2) Write the role and functions of nursing services
- 3) Mention the classification of hospital and write the relationship of nursing department with medical record department

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

- 4) Team work
- 5) Mudaliar committee
- 6) Health Insurance
- 7) Role of hospital in primary health care
- 8) Nosocomial infection
- 9) PERT
- 10) History of hospitals in India
- 11) Ambulance services
- 12) Hospital environment
- 13) Two bin system
- 14) Medical audit
- 15) Functions of house keeping

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

- 16) Classification of hospital waste
- 17) Laundry services
- 18) Purchase committee
- 19) Disaster cycle
- 20) Diet counseling
- 21) Objectives of CSSD
- 22) Essential drugs
- 23) Universal precaution
- 24) Indian Red Cross
- 25) Collection and dispatch of linen

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3152

RENAL REPLACEMENT THERAPY OTHER THAN HEMODIALYSIS

I. LONG ESSAYS - ANSWER ANY TWO

2 X 10 = 20

- 1) Discuss in detail about CVVHD
- 2) Use of dialysis for poisoning
- 3) Automated peritoneal dialysis

II. WRITE SHORT NOTES ON ANY TEN

10 X 5 = 50

- 4) Psychological problems in dialysis patient
- 5) Anticoagulation for dialysis in a septic patient in ICU
- 6) Special precautions while dialyzing a post renal transplant patient
- 7) Tidal peritoneal dialysis
- 8) Consent forms for various activities regarding dialysis
- 9) Physiology of peritoneal dialysis
- 10) Infective complications in CAPD
- 11) Importance of record maintenance in dialysis
- 12) Replacement fluid in CVVH
- 13) AV fistula malfunctioning
- 14) Adequacy in peritoneal dialysis
- 15) Compare advantages and disadvantages between HD and CAPD.

III. WRITE SHORT ANSWERS

10 X 2 = 20

- 16) Name 2 dialyzable poisons
- 17) 2 adjustments of parameters in HD machine for performing SLED
- 18) 2 disadvantages of CVVH
- 19) 2 non clinical responsibilities of a dialysis technicians
- 20) Name 2 layers of peritoneum
- 21) 2 common alarms in haemodialysis
- 22) 2 common alarms in APD
- 23) 2 complications of blood transfusion to HD patients
- 24) 2 diseases transmitted by needle stick injuries
- 25) 2 causes of breathlessness of patients on CAPD

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
OPHTHALMIC TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3162, PAPER-II

- **LONG ESSAY** (ANSWER ANY TWO) **2 X 10 = 20**

1. What is cataract surgery report (CSR)? How is it prepared?
2. What are ophthalmic emergencies? Add a note on chemical injuries.
3. Describe eye bank organization. What is grief counselling?

- **SHORT ESSAY** (ANSWER ANY TEN) **10 X 5 = 50**

4. DBCS.
5. Corneal preservation medium.
6. Keratomalacia.
7. Corneal foreign body removal.
8. Prisms in ophthalmology.
9. Visual acuity testing
10. School eye problems.
11. Conjunctivitis – how to prevent spread.
12. Operation theatre (OT) list.
13. What is Informed consent.
14. Post-operative dressing in cataract surgery.
15. Chalazion surgery.

- **WRITE SHORT ANSWERS** **10 X 2 = 20**

16. Lacrimal syringing.
17. Vision recording in children.
18. NPCB
19. Identification of cylindrical lenses.
20. Bitot's spots.
21. Snellen's chart.
22. Role of Vitamin A.
23. Prevention of amblyopia.
24. Corneal transplantation.
25. Vision 20/20.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL MECHANICS

TIME 1.30 HRS

(RS-1 SCHEME)

MAX.MARKS.45

QP CODE: 3172

PARTIAL DENTURES, ORTHODONTIA, MAXIOFACIAL PROSTHESIS

IV. LONG ESSAY

1 X 10 = 10

- 1) Describe in detail with diagrams, Kennedy's Classification and Applegate's Rules

V. WRITE SHORT NOTES

5 X 5=25

- 2) Principles of wire bending
- 3) Surveying and Types of block outs
- 4) Connections in Fixed Partial Dentures
- 5) Components of Cast Partial Dentures
- 6) Casting defects

VI. WRITE SHORT ANSWERS

5 X 2=10

- 7) Hawleys's Appliance
- 8) Indirect retainer
- 9) Classification of Pontics
- 10) Tripoding
- 11) Materials used n Maxillofacial Prosthesis

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE

TIME 1.30 HRS

(RS-1 SCHEME)

MAX.MARKS.45

QP CODE: 3182

**DENTAL HEALTH EDUCATION, SOCIAL & PUBLIC HEALTH & PREVENTIVE
DENTISTRY**

VII. LONG ESSAY

1 X 10 = 10

- 1) Classify chemical plaque agents. Describe in detail chlorhexidine

VIII. WRITE SHORT NOTES

5 X 5=25

- 1) Oral hygiene index simplified
- 2) Community water supply on dental health
- 3) Prevalence and prevention of periodontitis
- 4) Environmental health
- 5) Oral health in handicapped

IX. WRITE SHORT ANSWERS

5 X 2=10

- 6) Mouth breathing
- 7) Methods of brushing
- 8) Aims and objectives of dental health education
- 9) Audiovisual aids
- 10) School dental health education

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA COURSES
TIME 3 HRS (RS-2 SCHEME)

MAX.MARKS. 100

QP CODE: 4103, CHEMISTRY, SECTION –A

I. SHORT NOTES. ANSWER ANY FOUR QUESTIONS

4 X 5 = 20

1. How is nitric acid manufactured by Ostwald's process?
2. Applications of colloids in food and medicine
3. Classification of buffers. Give examples for each.
4. Explain production of X-rays. Mention any two applications.
5. Match the following.

A	B
a) Co^{60}	i. Age of fossil fuel
b) P^{32}	ii. Goitre
c) I^{131}	iii. Efficiency of phosphate fertilizer
d) Na^{24}	iv. Cancer treatment
e) C^{14}	v. circulation of blood

II. SHORT ANSWERS

10 X 3 = 30

- 6) Define a) Atomic mass b) Molecular mass
- 7) Mention any three types of indicators. Give example for each
- 8) What happens when hydrogen peroxide react with a) KI b) FeSO_4 . Give chemical equations
- 9) Mention any three uses of Iodine
- 10) What is washing soda? Mention two uses.
- 11) Define the terms a) Acid b) Base c) Salt
- 12) Mention any three importances of buffer solutions
- 13) Write any three differences between colloids and crystalloids
- 14) 25cm^3 of $0.1\text{N H}_2\text{SO}_4$ required 28.8cm^3 of sodium hydroxide for complete neutralization. Calculate normality of

NaOH solution.

15) Fill in the blanks

- i) $\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$ is the composition of.....
- ii) H_2O_2 is the chemical formula of
- iii) Na_2CO_3 is the chemical formula of

QP CODE: 4104, CHEMISTRY, SECTION –B

III. SHORT NOTES. ANSWER ANY FOUR QUESTIONS

4 X 5

= 20

- 1) How is ethyl alcohol manufactured from molasses?
- 2) Classification of carbohydrates
- 3) What happens when phenol react with a) Br_2 solution b) with Na c) Nitric acid in presence of conH_2SO_4 . Give chemical reactions.
- 4) Discuss effect of temperature and pressure for the reaction
 $2\text{SO}_2 + \text{O}_2 \rightleftharpoons 2\text{SO}_3$ $\Delta H = -\text{QKJ}$
- 5) Choose the correct answer
 - i) General formula of alkane is a) CnH_{2n+2} b) CnH_{2n} c) CnH_{2n-2} d) CnHn
 - ii) Ethene is a) saturated aliphatic hydrocarbon b) unsaturated aliphatic hydrocarbon c) aromatic hydrocarbon d) None of these
 - iii) Benzene is a) Aliphatic hydrocarbon b) aromatic hydrocarbon c) Heterocyclic hydrocarbon d) None of the se
 - iv) Acetylene has Carbon-Carbon a) single bond, b) double bond, c) triple bond d) none of these

II. SHORT ANSWERS

10 X

3 =30

- 6) Biological functions of a)enzymes b) Transport agents c) Antibodies
- 7) Write a note on global warming
- 8) Define the terms a) Free radicals b) carbocations c) carb anions
- 9) What are reversible reactions? Give example
- 10) Explain Friedel craft's reaction with an example
- 11) Any three characteristic properties of ionic compounds.
- 12) Three uses of acetone
- 13) Biological functions of RNA
- 14) Structure of glucose and Maltose
- 15) Give an example for a) acidic amino acid b) basic amino acid and c) neutral amino acid.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN MEDICAL
LABORATORY TECHNOLOGY

TIME 3 HRS
MAX.MARKS.90

(RS-I SCHEME)

QP CODE: 2104, PATHOLOGY

I. Long Essay (Answer any TWO) 2x10=20

1. Describe the procedure of phlebotomy. Write a brief note on smear preparation and leishman staining of peripheral smear. [3+3+4]
2. Describe the gross and chemical analysis of urine sample in routine urine analysis. Add a note on microscopy of urine. [3+3+4]
3. Describe in detail about tissue processing in histopathology.

II. Short Essay (Answer any TEN) 10x5=50

4. Describe WBC counting in Neubauer's chamber. Mention the importance of WBC count
5. Reticulocyte count
6. Packed cell volume (PCV)
7. Erythrocyte sedimentation rate. (ESR)
8. Describe the features of ideal peripheral smear.
9. Fixatives used in histopathology with the mention of factors affecting tissue fixation.
10. Impregnation of paraffin wax in histopathology
11. Absolute eosinophil count.
12. Describe advantages and disadvantages of Sahli's Hb estimation.
13. Write neat labelled diagram of normal and 4 abnormal erythrocytes.
14. Differential leukocyte count.
15. Describe chemical tests for proteins in urine.

III. Short Answer 10x2=20

16. Mention anticoagulants used in hematology.
17. Preparation of urine sample for urine microscopy.
18. Mention the instruments used in hematology.
19. Mention 2 causes of eosinophilia.
20. Mention 2 clearing agents used in histopathology.
21. Mention blood indices.
22. Mention fixatives used in cytology.
23. Mention advantages and disadvantages of formalin fixatives.
24. Preparation of leishman stain.
25. Mention the components of blood.

SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
TIME 3 HRS
MAX.MARKS.100
(RS-II SCHEME)

QP CODE: 5105, SECTION-A, PATHOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

IV. Short Notes: Answer any FOUR questions **4x5=20**

1. Describe principle, procedure and importance of Benedict's test.
2. Write various methods of urine sample collection with mention on types of preservatives.
3. Write about stool examination for occult blood.
4. Describe types and use of different types of vacutainers.
5. Preparation and staining of peripheral smear.

II. Short Answers **10x3=30**

6. Mention four anticoagulants. Mention two uses of EDTA as an anticoagulant.
7. Describe urine sample preparation for urine microscopy.
8. Write about composition of Leishman stain with a note on preparation of the working solution of the stain.
9. Mention the blood indices and their importance.
10. Write about equipments used, procedure and importance of absolute eosinophil count.
11. Automation in complete blood count (CBC) analysis.
12. Write about advantages and disadvantages of cyanmethemoglobin method of hemoglobin estimation.
13. Write about physical examination of urine sample.
14. Write on stool microscopy for ova and cyst.
15. Write principle and types of dipstick method of urine analysis.

QPCODE: 5106, SECTION-A, PATHOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

I. Short Notes: Answer any FOUR questions **4x5=20**

1. Write a note on sample collection, physical and microscopic examination of CSF.
2. Mention stains used in cytopathology. Describe PAP staining procedures.
3. Mention equipments used in histopathology with note on tissue processing.
4. Composition of Harris haematoxylin. Write about H&E procedure.
5. End point decalcification.

II. Short Answers **10x3=30**

6. Write about Preparation and staining of Sputum smear. Add a note on sputum microscopy.
7. Write a note on Physical examination of pleural fluid.
8. Demonstration of BARR bodies.
9. Write about advantages of DRY and WET smear in cytopathology.
10. Write a note on grossing technique in histopathology.

11. Mention four fixatives used in histopathology. What is master registry in histopathology.
12. Mention indications of PAP smear. Describe advantages of PAP stain in cytopathology.
13. Write about preparation of eosin reagent for H&E stain.
14. Mention various types of Haematoxylin.
15. Mention special stains used in Histopathology.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR
QP CODE 2112,(RS-I SCHEME)
Subject: COMMUNITY MEDICINE, PAPER-II

Time: 3 Hrs.

Max.

Marks: 90.

I. LONG ESSAY - ANSWER ANY TWO

2X10=20

1. What is protein Energy Malnutrition? How to prevent & control it?
2. Purification of water for large scale use eg whole community.
3. Discuss life cycle of round worm and impact of round worm infestation health

II. WRITE SHORT NOTES ON ANY TEN

10X5=50

4. Food adulteration
5. Pasteurization of milk
6. Fluorosis
7. Impact of noise pollution on Health
8. Sanitation barriers
9. Types of ventilation
10. Life cycle of hook worm
11. Overcrowding and its effects on health
12. Beri beri
13. Xerophthalmia
14. Tube wells
15. Global warming

III. WRITE SHORT ANSWERES

10X2=20

16. Name two haemoparasites
17. Name two Essential fatty acids
18. Survey
19. Give two examples for food fortification
20. Lime
21. Benefits of midday Meal Programme
22. Epidemic dropsy
23. All species of malarial parasite
24. Entamoeba Histolytica
25. Name 2 methods of solid waste disposal

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
II YEAR DIPLOMA COURSE IN HEALTH INSPECTOR
QP CODE 5113, SECTION-A, COMMUNITY MEDICINE, PAPER-II
(WRITE IN A SEPARATE ANSWERBOOKLET)

Time: 3 Hrs.

(RS-II SCHEME)

Max. Marks: 100

I. SHORT NOTES: ANSWER ANY FOUR QUESTIONS

4 X 5=20

- 1) Sanitary well
- 2) Discuss the effects of noise pollution
- 3) What is sewage? Discuss the health aspects of improper sewage disposal
- 4) Sanitation barrier
- 5) Housing standards

II. SHORT ANSWERS

10 X 3 = 30

- 6) Give 3 examples for water borne diseases spread by helminthes
- 7) Breakpoint chlorination
- 8) Bleaching powder
- 9) Septic tank
- 10) Mention any 3 methods of solid waste disposal
- 11) Give examples for different types of ventilation
- 12) List the preventive measures of air pollution
- 13) Mention the compounds resulting in hardness of water
- 14) Orthotoluidine test
- 15) Sulabh shauchalaya

Q.P.CODE 5114, SECTION – B (WRITE IN A SEPARATE ANSWERBOOKLET)

I. SHORT NOTES: ANSWER ANY FOUR QUESTIONS

4 X 5 = 20

- 1) Prevention and control of soil transmitted helminthes
- 2) Discuss mosquito control measures
- 3) Name some diseases transmitted by housefly. Discuss the fly control measures
- 4) Public health importance of hard ticks. Discuss the control of ticks and mites
- 5) Public health importance of tiger mosquito. Discuss the control measure of the same

II. SHORT ANSWERS.

10 X 3 =30

- 1) Tablet albendazole
- 2) Give 3 examples of diseases transmitted by mosquito
- 3) Define definitive host with an example
- 4) Give 3 examples of diseases transmitted by sand fly
- 5) Give examples for commonly used insecticides
- 6) Give examples for diseases transmitted by rats
- 7) Give examples for environmental control of mosquitoes
- 8) Give examples for biological transmission of arthropod borne diseases
- 9) Female anopheles mosquito
- 10) Define vector

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY
QP CODE 2123, (RS-I SCHEME), PHYSIOLOGY

Time: 1. 30 Hrs.

Max. Marks: 45

I. LONG ESSAY - ANSWER ANY ONE

1X10 =10

1. Describe composition and functions of saliva.
2. Describe renal function tests.

II. SHORT ESSAY - ANSWER ANY FIVE

5X5 = 25

3. Actions of growth Hormones.
4. Hypothyroidism.
5. Functions of inner ear.
6. Transport of oxygen.
7. Anaemias.
8. Family planning methods.
9. Functions of stomach.

III. SHORT ANSWERS

5X2=10

10. Neuron.
11. Primary tastes sensation.
12. Functions of Thalamus.
13. Functions of gall bladder.
14. Apnoea.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
II YEAR DIPLOMA MEDICAL IMAGING TECHNOLOGY
QP CODE 5124, (RS-II SCHEME), PHYSIOLOGY

Time:1. 30 Hrs.

Max. Marks: 50

I. SHORT NOTES – ANSWER ANY FOUR

4x5=20

1. Describe Erythropoiesis.
2. List the properties of synapse.
3. List the functions of Bone and Muscles.
4. Lung volumes.
5. Movements of Intestine.

II. SHORT ANSWERS

10X3=30

6. Functions of CSF.
7. Organ of Corti.
8. Two Refractive errors and their corrections.
9. Immunological pregnancy tests.
10. Rh blood group.
11. List the hormones of adrenal cortex.
12. Pulmonary surfactant.
13. Functions of gall bladder.
14. Draw and label reflex Arc .
15. Hazards of mismatched blood transfusion.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
OPERATION THEATRE TECHNOLOGY
QP CODE 2135, (RS-I SCHEME)

SECTION-A, ANATOMY (WRITE IN A SEPARATE ANSWER BOOKLET)

Time:3. 0 Hrs.

Max. Marks: 90

I. LONG ESSAY- ANSWER ANY ONE **1X10=10**

1. Classify Joints. Write in detail about synovial Joints with examples.
2. Name the parts of gastrointestinal system. Describe pancreas in detail

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

3. Testis
4. Trachea
5. Supports of Uterus
6. External features of heart
7. Diaphragm
8. Cerebellum

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

9. Skeletal muscles
10. Name four veins of lower limb
11. Name four muscles of upper limb
12. Name four endocrine glands
13. Name any four arteries of Head & Neck region.

QP CODE 2136, (RS-I SCHEME),

SECTION-B, PHYSIOLOGY (WRITE IN A SEPARATE ANSWER BOOKLET)

LONG ESSAY **1X10 =10**

1. Describe the conducting system of Heart.
2. Describe the movements of intestine.

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

3. Artificial respiration.
4. Autonomic nerves system functions.
5. Blood groups.
6. Structure and functions of skins.
7. Body fluids.
8. Stages of ventricular systole in cardiac cycle.

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

9. Hormones of posterior pituitary gland.
10. Semen.
11. Functions of CCK.
12. Pulmonary surfactant.
13. Draw and label Nephron.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
II YEAR DIPLOMA OPERATION THEATRE TECHNOLOGY (RS-II SCHEME)
QP CODE 5136, ANATOMY (WRITE IN A SEPARATE ANSWER BOOKLET)

Time: 3.0 Hrs.

Max.

Marks: 100

I. Short Notes, Answer any FOUR questions

4 x 5 = 20

1. Classify joints with examples
2. Describe thyroid gland in detail
3. Write in detail about larynx
4. Describe Ovary in detail
5. Describe gross features of lung

II. Short Answers

10 x 3 = 30

6. Mention any 4 veins of upper limb
7. Mention any 4 Branches of cervical plexus
8. Right atrium
9. Mention the coverings of brain
10. Mention any 4 types of epithelium
11. Mention any 4 muscles of abdomen
12. Mention any 4 features of spleen
13. Mention the cells & fibres of connective tissue
14. Mention the organs of special senses
15. Mention the types of vertebral bone

QP CODE 5137, PHYSIOLOGY (WRITE IN A SEPARATE ANSWER BOOKLET)

I. Short Notes – Answer any FOUR questions

4 x 5 = 20

- 1) Plasma Proteins.
- 2) Draw a labeled diagram of Nephron
- 3) Pancreatic Juice.
- 4) Hypoxia.
- 5) Neuromuscular Junction.

II. Short Answers

10 x 3 = 30

6. Menstrual cycle
7. Functions of cerebro spinal fluid.
8. Cardiac output
9. Oxytocin
10. Contraception in females
11. Surfactant
12. Active transport across cell membrane.
13. Hemoglobin
14. Types of sensory receptors
15. Deglutition

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY, (RS-I SCHEME)

QP CODE 2145, HOSPITAL STATISTICS & BIOSTATISTICS

Time: 3.0 Hrs.

Max. Marks: 90

I. LONG ESSAY

4 X 10 = 40

1. Define data. What are the different sources of data? Describe presentation of data.
2. Describe measures of central tendency.
3. Enumerate fertility indicators. Add a note on net reproductive rate (NRR)
4. Describe the normal distribution curve.

II. Write briefly on any TEN

10x4 = 40

5. ICDS classification of disease
6. Record linkage
7. Infant mortality rate
8. Uses of computer in medical record department
9. Death certificate
10. Histogram
11. Record maintained at emergency room
12. Sample registration system
13. Alpha index cards
14. Admission and discharge analysis
15. Properties of normal distribution

III. Write Short answers on any five

5 x 2 = 10

16. Notifiable diseases
17. Medical audit
18. Incidence and prevalence
19. Bed occupancy rate
20. Growth rate
21. Bar chart

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
II YEAR DIPLOMA IN MEDICAL RECORDS TECHNOLOGY, (RS-II SCHEME)
QP CODE 5146, HOSPITAL STATISTICS & BIOSTATISTICS
(WRITE IN A SEPARATE ANSWER BOOKLET)

Time: 3.0 Hrs.

Max. Marks: 100

I. Short notes, answer any FOUR questions

4 x 5 = 20

1. Define data. Explain methods of data collection.
2. Characteristics of standard normal curve.
3. Explain standard deviation and write down its merits and demerits
4. Calculate Range, Mean deviation and Standard deviation of 22, 24, 18, 36, 27, 42, 28
5. Explain about Bar diagram

II. Short answers

10 x 3 = 30

6. Uses of biostatistics
7. Define variable with example
8. Histogram
9. Standard normal curve
10. Median and Mode
11. Variable and its types
12. Pie chart
13. Sample and population
14. Tabulation of data
15. General format of table

QP CODE 5147, HOSPITAL STATISTICS & BIOSTATISTICS

I. Short note, answer any FOUR questions

4 x 5 = 20

1. Define Morbidity and explain two indicators
2. Explain about Census
3. Explain civil registration system
4. Notification of diseases
5. Crude birth rate and general fertility rate

II. Short answers

10 x 3 = 30

6. Age specific Fertility rate
7. Define Admission and Discharge
8. Bed occupancy rate
9. Average length of stay
10. Hospital death rate
11. Autopsy rate
12. Caesarean section rate
13. Prevalence
14. Infant mortality rate
15. Net reproduction rate *****

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DIALYSIS TECHNOLOGY, (RS-I SCHEME)

QP CODE 2155

SECTION-A, ANATOMY (WRITE IN A SEPARATE ANSWER BOOKLET)

Time: 3. 0 Hrs.

Max. Marks: 90

I. LONG ESSAY- ANSWER ANY ONE

1X10=10

1. Name the endocrine glands of the body. Describe thyroid gland in detail.
2. Name the parts of the respiratory system. Describe Lung in detail.

II. WRITE SHORT NOTES ON ANY FIVE

5X5=25

3. Histology of Bone.
4. Ovary
5. External features of Heart.
6. Hip Joint.
7. Stomach
8. Spinal cord

III. WRITE SHORT ANSWERS

5X2=10

9. Pericardium
10. Mitochondria
11. Name any four muscles of upper limb
12. Name any four arteries of lower limb
13. Name the Ear ossicles

QP CODE 2156, SECTION-B, PHYSIOLOGY (WRITE IN A SEPARATE ANSWER BOOKLET)

I. LONG ESSAY - ANSWER ANY ONE

1 x 10 = 10

- 1) Describe the mechanism of blood coagulation.
- 2) Define Blood Pressure. Discuss the factors regulating the blood pressure.

II. WRITE SHORT NOTES ON ANY FIVE

5 x 5 = 25

- 3) Classify body fluid compartments and give their normal values.
- 4) Renal Function Tests.
- 5) ABO Blood group system.
- 6) Anaemia.
- 7) Acid base balance
- 8) Functions of Proximal convoluted tubule of Kidney.

III. WRITE SHORT ANSWERS

5 x 2 =10

- 10) Give any two, Non excretory functions of kidneys.
- 11) Name any two maturation factors influencing erythropoiesis.
- 12) Write the normal levels of a) Blood Urea b) Serum Creatinine.
- 13) Write normal values of a) Pulse b) Blood pressure.
- 14) Mention any two functions of White blood cells.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
II YEAR DIPLOMA COURSE IN DIALYSIS TECHNOLOGY, (RS-II SCHEME)
QP CODE 5155

SECTION-A, ANATOMY
(WRITE IN A SEPARATE ANSWER BOOKLET)

Time: 3. 0 Hrs.

Max. Marks: 100

I.Short Answers, (Answer any 4)

4 x 5 = 20

1. Name the parts of respiratory system & Describe Trachea briefly
2. Classify the glands with examples
3. List the parts of digestive system, describe stomach
4. Describe gross features of urinary bladder
5. Classify joints with examples

II. Short Notes

10 x 3 = 30

6. Mention any 4 bones of upper limb
7. Mention any 4 nerves of lower limb
8. Name the parts of brain
9. Mention the parts of male reproductive system
10. Mention the parts of uterus
11. Mention the differences between right and left lung
12. Mention the types of muscle
13. Name the quadrants of abdomen
14. Mention any 4 differences between right and left kidney
15. Mention the types of cartilage

QP CODE 5156
SECTION-B, PHYSIOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

I. Short Notes – Answer any four questions
marks

4 x 5=20

1. Functions of W.B.C
2. Electrocardiogram (E.C.G)
3. Functions of Kidneys
4. Functions of Thyroid Hormones
5. Acid base regulation of kidneys.

II. Short Answers

10 x 3 =30 marks

6. Anaemia
7. Erythropoietin
8. Diagram of Structure of cell
9. Platelets
10. P.C.V (Packed cell volume)
11. Blood transfusion.
12. Parts of Nephron
13. Anticoagulants.
14. Functions of Oestrogen
15. Blood transfusion

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
I YEAR DIPLOMA / II YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE, (RS-I SCHEME)

QP CODE 2185

SECTION-A, GENERAL BIOCHEMISTRY
(WRITE IN A SEPARATE ANSWER BOOKLET)

Time: 1.30 Hrs.

Max. Marks: 45

- I. Long Question - Answer any ONE** **1 x 10 = 10**
- 1) Describe the assessment and charting of individual diet and counseling.
 - 2) Describe the source, requirement, biochemical functions and deficiency of fluoride
- II. Write short notes on any THREE** **3 x 5 = 15**
- 3) Special diet in maxillofacial injury cases.
 - 4) Calcium
 - 5) Vitamin D
 - 6) Polysaccharides

QP CODE 2186, SECTION-B, RADIOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

- I. Write short notes** **4x 5=20**
- 1) Orthopantomogram (OPG)
 - 2) Hazards of radiation and safety
 - 3) Intraoral peri apical X-ray
 - 4) Structure of atom and atomic number

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION FEBRUARY 2019
II YEAR DIPLOMA IN DENTAL HYGIENE, (RS-II SCHEME)

QP CODE 5185

SECTION-A, GENERAL BIOCHEMISTRY
(WRITE IN A SEPARATE ANSWER BOOKLET)

Time: 1.30 Hrs.

Max. Marks: 50

III. Short Notes:

2 x 5 =10

- 12) Discuss the formation of Urea.
- 13) Briefly write about nutrition in relation to oral health.

IV. Write short answers

5 X 3 =15

- 1) Structure of DNA
- 2) Define nucleosides and nucleotides
- 3) Deficiency Mention the abnormal constituents of urine
- 4) of vitamin D
- 5) HDL cholesterol.

QP CODE 5186, SECTION-B, RADIOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

I. Long Essay

2x 5=10

- 1) Write in detail about radiation hazards and protection against radiation.
- 2) Explain structure of atom and atomic number

II. Write short notes

5 x 3 = 15

- 3) Bite wing radiographs
- 4) Processing solutions
- 5) Bisecting angle technique
- 6) Paralleling technique
- 7) OPG

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL LABORATORY TECHNOLOGY

TIME 3 HRS

(RS-1 SCHEME)

MAX.MARKS.90

QP CODE: 3103, MICROBIOLOGY

I. Long Essay (answer any two):

2x10=20

1. Enumerate causes of urinary tract infection. Describe the laboratory diagnosis of urinary tract infection.
2. Describe morphology and laboratory diagnosis of Mycobacterium tuberculosis.
3. Define and classify types of hypersensitivity reactions. Explain in detail about type 1 hypersensitivity.

II. Write Short notes (any TEN)

10x5=50

4. Opportunistic fungi
5. ASLO test
6. Lifecycle of Giardia
7. Coagulase test
8. Candidiasis
9. Antibiotic sensitivity testing
10. Quality control measures in Microbiology
11. Life cycle of ascaris lumbricoides
12. Laboratory diagnosis of Hepatitis B
13. Cholera red reaction
14. Lepromin test
15. Laboratory diagnosis of Typhoid fever

III. Write short answers

10x2=20

16. Name two anaerobic bacteria
17. Name four species of Plasmodium
18. Name two DNA viruses
19. Name two nematodes
20. Name two non bile stained eggs
21. Draw a neat labeled diagram of hook worm ova
22. Name two bacteria causing diarrhea
23. Name two acid fast bacteria
24. Name two transport media
25. Name two intradermal tests

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR

TIME 3 HRS (RS-I SCHEME) MAX.MARKS.90
QP CODE: 3113, COMMUNITY MEDICINE, PAPER-III

I. Long Essay – Answer any TWO

2X10=20

- 1) Define Pneumoconiosis. Mention the types. Discuss any one in detail.
- 2) Discuss Planning Cycle.
- 3) Functions of WHO.

II. Write short notes on any TEN

10 X 5=50

- 4) Rehabilitation of an Alcoholic Addict
- 5) Aims of Food and Agricultural Organization
- 6) Warning Signs of Poor Mental Health
- 7) Millennium Developmental Goals
- 8). Services provided by Indian Red Cross
- 9) Functions of Health Assistant Male
- 10) Sickness Absenteeism
- 11) Uses of Health Information – any five
- 12) Risk groups at risk of Health hazards due to Health care waste
- 13) Discuss Nutritional problems in India – as one of the major Health problems
- 14) Services provided in Sub Centre.
- 15) Causes of Accidents in industries

III. Write short answers

10X2=20

- 16) Maternity Benefit under ESI Act
- 17) Notifiable diseases - any two
- 18) Duties of ASHA – any two
- 19) Passive smoking
- 20) Census
- 21) Rural development - advantages
- 22) Importance of Pre-placement Examination in Occupational Health
- 23) Enumerate the basic Resources required to meet the health needs
- 24) Common Genetic disorders – any two
- 25) Voluntary Health Agencies – any two

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY

TIME 3 HRS (RS-I SCHEME) MAX.MARKS.90

**QP CODE: 3123, RADIOGRAPHY INCLUDING NEWER IMAGING
TECHNOLOGY, R-III**

I.LONG ESSAY – ANSWER ANY TWO 2 X 10 =20

- 1) Describe the basic principles of MRI
- 2) Basic principles of computed tomography? What is Hounsfield unit?
- 3) Write in detail about cassettes and intensifying tubes.

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

- 4) Write about characteristics of semi conductor and diode
- 5) Types of anode in X ray tube
- 6) Generations of CT
- 7) Artefacts in MRI
- 8) Applications of DSA
- 9) Myelography
- 10) Potentiometre
- 11) Foreign body localization
- 12) Maintenance of X- ray units
- 13) Galvanometer
- 14) Intensifying screens
- 15) Fluoroscopy applications

III.SHORT ANSWERS 10X2=20

- 16) Bowel preparation
- 17) Contraindications for MRI scanning
- 18) Function of glass envelope in X -ray tube
- 19) Ohms law
- 20) Cholecystography
- 21) Macro radiography
- 22) CT guided biopsy
- 23) Zero radiography
- 24) Temperature coefficient of a conductor
- 25) Cassette holders

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY
TIME 1.30 HRS (RS-I SCHEME) MAX.MARKS.40
QP CODE: 3143 COMPUTER SCIENCE

I. LONG ESSAY – ANSWER ANY ONE

10 X 1 = 10

1. Define software? Explain in detail System Software & Application Software?
2. Explain in detail the use of computers in Medical Records Department?

II. WRITE SHORT NOTES ON ANY FOUR.

5 X 4 = 20

3. Health Information Management System (HMIS)
4. M.S. WORD
5. Memory Unit
6. Dot Matrix printer
7. ROM & RAM

III. WRITE SHORT ANSWERS

5 X 2 = 10

8. Name any five file formats?
9. Write the uses of C.D. ROM?
10. Name any two External Storage Devices?
11. Explain in brief Visual Display Unit?
12. Explain in brief the Task Bar?

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
DENTAL HYGIENE

TIME 1.30 HRS

(RS-I SCHEME)

MAX.MARKS.45

QP CODE: 3183

**OPERATING ROOM TECHNIQUE, CHAIR SIDE ASSTS, & DENTAL MATERIALS,
ETHICS & JURISPRUDENCE**

I. LONG ESSAY **1 X 10 = 10**

- 1) Describe in detail dentist act 1948 and its relation to registration of dental hygienist and dentist

II. WRITE SHORT NOTES **5 X 5 = 25**

- 2) Dental specialties
- 3) Material maintenance and supply
- 4) Appointment and recall system
- 5) Sterilization and disinfection
- 6) Medico legal issues in dental practice

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

- 7) Materials used for making impression
- 8) Billing
- 9) Manipulation of periodontal dressing
- 10) Four handed dentistry
- 11) Dental auxiliary

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR CERTIFICATE COURSES

TIME 1.30 HRS

MAX.MARKS.45

QP CODE: 1103, BIOLOGY
(RS-I SCHEME)

I. Long Essay- Answer any ONE

1 x10 =10

1. Explain the mechanism of working of human heart.
2. Define hormones. Name the hormones of pancreas and write a note on their function.

II. Write short notes on any FIVE

5 x5 =25

3. Structure of eukaryotic animal cell
4. Kreb's cycle
5. Structure of Nephron
6. Classification of enzymes
7. Placenta- structure and function
8. Functions of blood
9. Double helix model of DNA

III. Write short answers

5 x2 = 10

10. Name two viruses
11. Name the types of cell division
12. Types of RNA
13. Types of fertilization
14. Name two bacterial diseases

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019, I YEAR DIPLOMA COURSES
TIME 3 HRS (RS-2 SCHEME) MAX.MARKS. 100
QP CODE: 4105, BIOLOGY, SECTION –A

I. Short notes. Answer any FOUR questions **4 x5 =20**

1. Write the structure and functions of DNA
2. Describe epithelial tissue
3. Write a neat labeled diagram of Neuron
4. Define process of fertilization

5. Match the following: A

- i. Pancreas
- ii. Testes
- iii. Hypothyroidism
- iv. Glucocorticoids
- v. Hyperpituitarism

B

- a. Carbohydrate metabolism
- b. Acromegaly
- c. Insulin
- d. Endemic goiter
- e. Androgen

II. Short answers

10 x3=30

6. Types of fertilization
7. Mitochondria
8. Uses of gene cloning
9. Functions of Aerolar tissue
10. Functions of placenta
11. Example of water borne infections
12. Bar bodies
13. Types and Functions of RNA
14. Applications of Biotechnology

15. Fill in the blanks:

- a) Metabolism involvesand
- b) Organs are grouped together to form.....
- c) Zygote is formed from the fusion ofand

QP CODE: 4106, BIOLOGY, SECTION –B

I. Short notes. Answer any FOUR questions **4 x5 =20**

1. Explain the mechanism of breathing
2. Explain salivary glands and mention the functions of saliva
3. Write the structure of eye ball
4. Name the anterior pituitary gland hormones and mention their functions

5. Multiple choice questions

- i) The master endocrine gland among the following is
A) Thyroid gland B) Hypothalamus C) Pituitary gland D) Adrenal gland
- ii) The normal volume of urine output per day is A) 1-1.5litre B) 3-4 Litre C) 2 –3 Litre D) 200-800ml
- iii) Beta cells of the pancreas secretes A) Insulin B) Glucagon C) Somatostatin D) Growth hormone
- iv) The composition of gastric juice include A) water B) mucus C) HCl D) All of the above
- v) The brain is present within the A) Cranial cavity B) Pelvic cavity C) Thoracic cavity D) Orbital cavity

II. Short answers

10 x3=30

6. Functions of CSF
7. Structure of Sperm
8. Nephron
9. Functions of Liver
10. Gastric juice
11. Functions of skin

12. Tidal volume

13. Functions of thyroid hormones

14. Electrocardiogram (ECG)

15. Answer in one word/sentence

- a) Name the gland which secretes Oxytocin and vasopressin hormones
- b) Mention the pH of blood
- c) Mention the total number of spinal nerves in the human body

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA IN / II YEAR CERTIFICATE COURSE IN MEDICAL
LABORATORY TECHNOLOGY

TIME 3 HRS

(RS-I SCHEME)

MAX.MARKS.90

QP CODE: 2105, MICROBIOLOGY

Long Essay (answer any two):

2x10=20

1. Define sterilization? Classify different methods of sterilization. Write in detail about Hot air oven.
2. Draw a neat labeled diagram of Microscope. Describe in detail about handling and care of microscope.
3. Define immunity. Write in detail about active immunity.

Write Short notes (any ten)

10x5=50

4. Louise Pasteur
5. Bacterial cell wall
6. Fumigation
7. Enriched media
8. Bacterial growth curve
9. Bacterial spore
10. Vaccines
11. Antibiotic sensitivity testing
12. IgM
13. Inoculation methods of culture
14. Indole test
15. Acid fast staining

Write short answers

10x2=20

16. Name two motile bacteria
17. Name two selective media
18. Name two disinfectants
19. Name two sterilization controls used in autoclave
20. Name two Gram positive bacteria
21. Name two catalase positive bacteria
22. Ingredients of Nutrient agar
23. Name two uses of bacterial filter
24. Name two methods of demonstrating bacterial capsule
25. Name two uses of dark ground microscopy.

SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
TIME 3 HRS (RS-II SCHEME) MAX.MARKS.100
QP CODE: 5107, SECTION-A, MICROBIOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

I. Write Short notes (any FOUR) 5x4=20

1. Koch's postulates
2. Fluorescent microscopy
3. Hot air oven
4. Enriched media
5. Coagulase test

II. Write short answers 10x3=30

6. Capsule
7. Sterilization controls
8. Pasteurization
9. Name three motile bacteria
10. Name three spore bearers
11. Name three anaerobic culture media
12. Lawn culture
13. Name three citrate positive bacteria
14. Name any three Gram negative bacteria
15. Cold sterilization

QP CODE: 5108, SECTION-B, MICROBIOLOGY
(WRITE IN A SEPARATE ANSWER BOOKLET)

I. Write Short notes (any FOUR) 5x4=20

1. Passive immunity
2. Antigen
3. Type 4 hypersensitivity reaction
4. Preparation of ZN stain
5. ELISA

II. Write short answers 10x3=30

6. Name any three Gram positive bacteria
7. Name three hospital acquired infections
8. Name three antibodies
9. List the route of infection
10. List the ingredients of Gram stain
11. Name 3 secondary stains
12. Give an example for simple, differential and special stains
13. Define antibody, buffers and stain
14. Name three agglutination tests.
15. Draw a neat labeled diagram of IgG

PARAMEDICAL BOARD, BANGALORE
1ST YEAR DIPLOMA/ II YEAR CERTIFICATE COURSE IN
HEALTH INSPECTOR (RS-1 SCHEME)
QP CODE-2113

Subject: COMMUNITY MEDICINE, Paper III

Time: 3 hrs

Max. Marks: 90

I. Answer Any TWO.

2X10=20

1. Define epidemiology, write in detail about the modes of transmission of diseases?
2. Define epidemic, enumerate the steps in the investigation of epidemic?
3. Write a note on mosquito control measures?

II. Short notes on any TEN.

10X5=50

4. Epidemiological triad
5. Herd immunity
6. Maternal mortality rate
7. Cyclops
8. Cold chain
9. Role of health inspectors
10. Types of carriers
11. Quarantine
12. Measures of morbidity
13. Normal distribution
14. Fly control
15. Reservoir of infection

III. Write short answers.

2X10=20

16. Bar charts
17. Flea indices
18. Secondary attack rate
19. Birth registration
20. Pentavalent vaccine
21. Live vaccine
22. Types of disinfection
23. Isolation
24. Mean
25. Chandler's index.

PARAMEDICAL BOARD, BANGALORE
II YEAR DIPLOMA IN HEALTH INSPECTOR (RS-2 SCHEME)
QP CODE-5115, SECTION-A
Subject: COMMUNITY MEDICINE, Paper III
(WRITE IN A SEPARATE ANSWER BOOKLET)

TIME: 3 HRS

Max. Marks: 100

I SHORT ESSAY (ANSWER ANY FOUR)

4X5=20

- 1) Cold chain system
- 2) Levels of Prevention with an example each
- 3) Types of Screening
- 4) Define Epidemiology. Classify of Epidemiological Studies
- 5) Carriers-Classify and give suitable examples

II SHORT ANSWERS (ANSWER ALL)

10X3=30

- 6) Define Sensitivity and Specificity
- 7) Endemic
- 8) Adverse Events Following Immunization-any three
- 9) Incubation Period
- 10) Reservoir
- 11) Incidence rate
- 12) Uses of Screening
- 13) Chemical Agents of Disinfection-any three
- 14) Measles Vaccine-Dosage and Route of administration
- 15) Name any three Live and Killed Vaccines

QP CODE-5116, SECTION-B
(WRITE IN A SEPARATE ANSWER BOOKLET)

I. SHORT ESSAY (ANSWER ANY FOUR)

4X5=20

1. Vitamin A deficiency, prevention and control
2. Food fortification
3. Census
4. Stages in Demography cycle
5. Endemic fluorosis

II SHORT ANSWERS (ANSWER ALL)

10X3=30

6. Uses of Health information
7. Name some foods rich in fats
8. Give examples for pulses
9. Iodized salt
10. Food additives
11. Parboiling of rice
12. Age pyramid
13. Classify Vitamins
14. Sources of Vitamin B12
15. Mid-day School Meal

PARAMEDICAL BOARD, BANGALORE
1ST YEAR DIPLOMA/ II YEAR CERTIFICATE COURSE IN
MEDICAL X-RAY TECHNOLOGY (RS-1 SCHEME)
QP CODE-2124
Subject: PATHOLOGY

Time : 1. ½ Hrs

Max marks: 45

I Long Essay – answer any ONE

1x10=10

1. Mention the cardinal signs of inflammation. Briefly describe vascular events in acute inflammation.
2. Mention types of pulmonary tuberculosis. Write about the morphology of tuberculosis with a note on fate of Primary pulmonary tuberculosis.

II.Short Notes – answer any FIVE.

5x5=25

3. Morphology of Renal cell carcinoma.
4. Marasmus
5. Vitamin D deficiency.
6. Define gangrene and describe types of gangrene with examples.
7. Describe process of Fracture healing.
8. Fatty liver
9. Pleural Effusion

III.Short answers

5x2=10

10. Mention two causes of Epistaxis.
11. Mention two causes of Esophageal stenosis.
12. Mention two types of Renal calculi.
13. Mention two causes of thyrotoxicosis.
14. Mention two differences between Benign and malignant tumor.

PARAMEDICAL BOARD, BANGALORE
II YEAR DIPLOMA IN
MEDICAL IMAGING TECHNOLOGY (RS-2 SCHEME)
QP CODE-5125
Subject: PATHOLOGY

TIME : 1.30 HRS

MAX.MARKS. 50

V. Short Notes: Answer any FOUR questions

4x5=20

1. Define acute inflammation. Write briefly about fracture healing.
2. What is emphysema. Write about the types of emphysema with a note on its morphology.
3. Osteochondroma.
4. Mention causes of carcinoma stomach. Write briefly morphology of linitis plastica.
5. Chronic cholecystitis.

II. Short Answers

10x3=30

6. Risk factors for myocardial infarction.
7. Achalasia cardia.
8. Stages of lobar pneumonia.
9. Phyllodes tumor of breast.
10. Fibroid uterus.
11. Write about types of carcinoma of thyroid
12. Vitamin C deficiency.
13. Causes of epistaxis.
14. Morphology of carcinoma of colon.
15. Write about differences between dry and wet gangrene.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR CERTIFICATE COURSES

TIME 1.30 HRS

MAX.MARKS.45

QP CODE: 1104, ENGLISH
(RS-I SCHEME)

IV. WRITE AN ESSAY ON ANY ONE OF THE FOLLOWING **1 x15 =15**

1. Growing up in poverty
2. Stress impact on health

V. Answer any ONE **1 x10 =10**

3. Write an application for the post of Lab instructor in a firm
4. Write a letter to your brother inviting for college day function

VI. Write the opposite Gender of **5 x 1=5**

5. Wife
6. King
7. Madam,
8. Tiger
9. Gentleman

VII. Write the opposite of the following **5 x 1 =5**

10. Calm
11. Post pone
12. Believe
13. Move
14. Mad

V. Make sentences using the following **5 x1 =5**

15. Asked
16. Everyone
17. Helps
18. Looked
19. Hopeful

VI. Fill in the blanks **5 x1 =5**

20. Sun rises in.....East
21. It isElephant
22. He is.....good student
23. The cup is.....the table
24. He deliveredgood speech

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
I YEAR DIPLOMA COURSES, QP CODE: 4107, ENGLISH
TIME 3.0 HRS (RS-II SCHEME) MAX.MARKS.100
(Question paper contains TWO printed pages)

I. Write an essay on any ONE of the following in about 300 words **15 X1 =15**

1. Health Check up camp
2. Role of Technicians in Hospital

II. Use the following idioms/phrases in sentence of your own **5 x 1 =5**

3. Kill two birds with one stone
4. Go through
5. Burn the midnight oil
6. For a while
7. Zip your lip

III. Change the following into indirect speech **5 x1=5**

8. She says, "I am little bit nervous"
9. He says " I am ill"
10. Ranjitha says "she sang a song"
11. He said " I have finished"
12. They said, "they have taken exercise"

IV. Change the voice of the following **5x1 =5**

13. Mom read the novel in one day
14. The entire house was painted by Hari
15. The Director will give you instruction
16. Beautiful Giraffes roam the Savanna
17. All the reservation are being made by wedding planner

V. Write the opposite of the following **5 x1 =5**

18. Increase
19. Fat
20. Tough
21. Below
22. External

VI. Fill in the blanks with the suitable prepositions **5 x1 =5**

23. He drove from Maharashtra Karnataka without stopping to rest.
24. She was hidingthe table
25. We have been workingthis morning
26. The fireman manages to put..... the fire
27. The telephone kept..... ..ringing but no one attended

VII. Fill in the blanks with articles **5 x1=5**

28. I checked..... ..mailbox again
29. I was born into.....poor family
30. What.....amazing views!
31. I want.....apple from that Basket.

32. Please bring me cup of coffee

VIII. Give the synonyms of the following

5 x1=5

33) Honest 34) Slim 35) Beautiful 36) Rich 37) Big

QP CODE: 4108, ENGLISH

I. Answer any one (Letter writing)

1 x 10 =10

1. Write a letter to your principal requesting him/her to issue transfer certificate.
2. Write a letter to your friend asking him to join for a trip.

{P.T.O}

II. Read the following passage carefully and answer the questions that follow.

Mangalore dates back to the 3rd centuries B.C. and has been ruled by a number of rulers like Kadambas and Virahariraya. It was later conquered by the Portuguese who lost it to Hyder Ali.

The Mangalore city got its name from, the temple known as Mangaladevi. The suffix 'uru' mean town or city. During British rule from 1799 it became Mangalore.

Surathkal beach another pristine beach in Mangalore and is located 12kms from the main city. The beach is known for its unique powdery sand which is really comforting while walking barefoot.

Mangalore is called Rome of the east because it celebrates Christmas with traditional gaiety. The city is also known as Gateway of Karnataka.

i) On the basis of your reading of the above passage, answer the following.

3. First Ruler of Mangalore a) Chalukyas b) Kadamba c) Yadavas
4. During which period Mangalore is established
5. Which famous temple is situated in Mangalore?
6. Which famous beach is situated near Mangalore?
7. In which year Mangalore name was established?
8. Which place is known as Gateway of Karnataka.

ii) Find the words from the passage which means the same as the follows.

9. End (para-2) **1 x2 =2**
10. Famous (para-4)

III. Write the correct medical term

10 x1 =10

11. Haem 12. ICU 13. Lab 14. Micr 15. Med 16. Radi 17. Phy 18. Rhem 19. Neph
20. Orth

IV. E-mail writing

1 x5 =5

21. Write an email to submit an application for a job in the diagnostic centre or hospital

22. Fill in the blank with appropriate articles and preposition given in the bracket.

(a, the, by, for, an)

1 x5 = 5

In organizing.....small scale Industry is that of ownership, represented the right of.....individual or a group of individuals to acquire legal title to assets..... the purpose of controlling an Industrial operation and enjoying Gain or profits flowing from such activities.

V. Re-arrange the jumbled segments to form a sentence.

1 x6 =6

23. her house/street to/I walked/across the

24. that work/he wanted/her to finish/him when/she asked

25. Nature active/and the rest of/as a place where/may be defined/A sanctuary

26. food chain/themselves/the pests/are part of

27. Natural environment /not intervene in/man should not/In the view of author

28. Court of law/a speech/delivered in a

VII. Complete the following dialogue (situation based conversation)

4 x1 =4

At a Clinic

29. Doctor : greets and enquires about problem

30. Patient: expresses

31. Doctor Sure, Rs.500 consultation (replies)

32. Patient: agree

33. Doctor: okay I can start the treatment today.

PARAMEDICAL BOARD, BENGALURU
SUPPLEMENTARY EXAMINATION, FEBRUARY 2019
II YEAR DIPLOMA IN / III YEAR CERTIFICATE COURSE IN
MEDICAL RECORDS TECHNOLOGY

TIME 1 HRS

(RS-I SCHEME)
QP CODE: 3144

MAX.MARKS.20

MEDICAL SURGICAL CODING

I. Answer any THREE of the following Questions. 3 x5 = 15

1. What are the purposes of coding and indexing of diseases?
2. What are the special points that coder should remember while coding?
3. Explain the basic rules of coding.
4. Define coding and write the procedure of coding Diabetes Mellitus & its complications.

II. Expand the following abbreviations. 1 X 5 =5

5. U R T I
6. R H D
7. L S C S
8. D K A
9. L M L E
