

PARAMEDICAL BOARD, BENGALURU
Medical Imaging Technology

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.

Time: 3.00 HRS

Subject: Radiation Physics

Max Marks:100
Q P CODE: 5121

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. PHOTOELECTRIC EFFECT
2. BREMSSTRAHLUNG.
3. HIGH KVP TECHNIQUE.
4. PHOTODISINTEGRATION.
5. AUTOMATIC EXPOSURE CONTROL DEVICES.

II. Short answers

10 X 3 = 30 marks

6. COOLING AGENTS
7. DICOM
8. ANODE
9. FLUOROSCOPY
10. MOVING GRID
11. AUTOMATIC BRIGHTNESS CONTROL IN FLUROSCOPY
12. HEEL EFFECT
13. ULTRASOUND TRANSDUSERS
14. COMPTON EFFECT.
15. CHARACTERISTIC RADIATION

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. ATOM.
2. RADIOISOTOPE
3. LEAKAGE RADIATION.
4. IONISATION
5. FACTORS AFFECTING THE EMISSION SPECTRA

II. Short answers

10 X 3 = 30 marks

6. GAMMA EMISSION
7. PROPERTIES OF ELECTROMAGNETIC RADIATION
8. VALENCE SHELL
9. HALF LIFE OF A RADIOISOTOPE
10. BINDING ENERGY OF ELECTRON SHELL
11. ALPHA EMISSION.
12. WAVE PARTICLE DUALITY.
13. ATOMIC NUMBER
14. ELECTROMAGNETIC RADIATION.
15. DIFFERENCE BETWEEN IONISING AND NON IONIZING RADIATION

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Time: 3.00 HRS

Subject: Radiation Physics

Max Marks:100
Q P CODE: 5121

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. WHAT IS COMPTON 'S SCATTERING.
2. DISCUSS THE VARIOUS COMPONENTS OF X RAY MACHINE.
3. WHAT ARE THE EFFECTS OF KVP AND MAS ON IMAGE QUALITY.
4. WHAT ARE RECTIFIERS. DISCUSS THE PURPOSE AND MECHANISM.
5. DISCUSS BRIEFLY ABOUT COLLIMATORS.

II. Short answers 10 X 3 = 30 marks

6. DISCUSS BRIEFLY ABOUT T2 WEIGHED IMAGE
7. AUTO TRANSFORMER
8. ANODE HEAL EFFECT
9. WRITE BRIEFLY THE PROPERTIES AND USES OF TUNGSTEN.
10. IONIZATION CHAMBER
11. PHOTODISINTEGRATION
12. WHAT IS BREMSSTRAHLUNG RADIATION.
13. CATHODE
14. INDICATIONS OF DIGITAL FLUOROSCOPY
15. COMPONENTS OF MOBILE UNIT

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. DISCUSS THE PROPERTIES OF ELECTROMAGNETIC RADIATION
2. RADIOISOTOPE
3. IONISATION
4. WHAT IS GAMMA EMMISION.DISCUSS BRIEFLY ITS USES.
5. ATOMIC WEIGHT

II. Short answers 10 X 3 = 30 marks

6. DIFFERENCE BETWEEN IONISING AND NON IONIZING RADIATION
7. DISCUSS ABOUT THE BINDING ENERGY OF ATOM
8. MECHANISM OF ALPHA DECAY
9. GEIGER MULLER COUNTER
10. VALENCY OF ATOM
11. USES OF TECHNICIUM 99
12. DRAW A NEAT LABELLED DIAGRAM OF THE STRUCTURE OF AN ATOM. DISCUSS BRIEFLY THE COMPONENTS.
13. BETA EMISSION
14. HALF LIFE OF A RADIOISOTOPE
15. ISOMER

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I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. WHAT ARE RECTIFIERS. DISCUSS THE PURPOSE AND MECHANISM.
2. MAMMOGRAPHY TUBE
3. PHOTODISINTEGRATION.
4. WHAT ARE THE EFFECTS OF KVP AND MAS ON IMAGE QUALITY.
5. COMPTON SCATTERING.

II. Short answers 10 X 3 = 30 marks

6. ULTRASOUND TRANSDUCER
7. INDICATIONS OF DIGITAL FLUOROSCOPY
8. ANODE HEEL EFFECT
9. MOVING GRID
10. IONIZATION CHAMBER
11. K EDGE
12. SPACE CHARGE EFFECT
13. STEP UP TRANSFORMER
14. TYPES OF MRI MACHINE

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. DEFINE ATOM. DESCRIBE THE COMPONENTS OF AN ATOM WITH DIAGRAM
2. LEAKAGE RADIATION.
3. FACTORS AFFECTING THE EMISSION SPECTRA
4. ATOMIC WEIGHT
5. RADIOISOTOPE

II. Short answers 10 X 3 = 30 marks

6. BINDING ENERGY OF ELECTRON SHELL
7. DRAW A NEAT LABELLED DIAGRAM OF THE STRUCTURE OF AN ATOM. DISCUSS BRIEFLY THE COMPONENTS.
8. ISOMER
9. GAMMA EMISSION
10. USES OF TECHNICIUM 99
11. COBALT THERAPY
12. ALPHA DECAY
13. GEIGER MULLER COUNTER
14. USE OF IODINE 131
15. WAVE PARTICLE DUALITY.

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2. BREMSSTRAHLUNG.
3. HIGH KVP TECHNIQUE.
4. PHOTODISINTEGRATION.
5. AUTOMATIC EXPOSURE CONTROL DEVICES.

II. Short answers

10 X 3 = 30 marks

6. AUTOMATIC BRIGHTNESS CONTROL IN FLUROSCOPY
7. HEEL EFFECT
8. ULTRASOUND TRANSDUCERS
9. COMPTON EFFECT.
10. CHARACTERISTIC RADIATION
11. COOLING AGENTS
12. DICOM
13. ANODE
14. FLUOROSCOPY
15. MOVING GRID

Subject: Radiation Physics

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I. Short notes, answer any FOUR questions.

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1. ATOM.
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3. LEAKAGE RADIATION.
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5. FACTORS AFFECTING THE EMISSION SPECTRA

II. Short answers

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6. ALPHA EMISSION.
7. WAVE PARTICLE DUALITY.
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9. ELECTROMAGNETIC RADIATION.
10. DIFFERENCE BETWEEN IONISING AND NON IONIZING RADIATION
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Time: 3.00 HRS

Subject: Radiation Physics

Max Marks:100
Q P CODE: 5121

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. COLLIMATORS
2. X-RAY TUBE
3. CT SCAN
4. MAMMOGRAPHY TUBE
5. TYPES OF GENERATORS

II. Short answers

10 X 3 = 30 marks

6. AUTOMATIC BRIGHTNESS CONTROL
7. STEP UP TRANSFORMER
8. TYPES OF ANODE.
9. PHOTODISINTERGRATION
10. TYPES OF MRI MACHINE
11. ULTRASOUND TRANSDUCER
12. APPLICATION OF PHOTOELECTRIC EFFECT
13. ANODE HEEL EFFECT
14. DIGITAL FLUOROSCOPYTECHNIQUE
15. COOLING AGENTS

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. PROPERTIES OF ELECTROMAGNETIC RADIATION
2. HALF LIFE OF A RADIOISOTOPE
3. DEFINE ATOM. DESCRIBE THE COMPONENTS OF AN ATOM WITH DIAGRAM
4. IODINE 131
5. ATOMIC NUMBER

10 Short answers

10 X 3 = 30 marks

6. BINDING ENERGY OF ATOM
7. BETA EMISSION
8. COBALT THERAPY
9. GEIGER MULLER COUNTER
10. IONISING RADIATION
11. GAMMA EMISSION
12. ALPHA DECAY
13. WAVE PARTICLE DUALITY
14. RADIOISOTOPE
15. MASS NUMBER

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Time: 3.00 HRS

Subject: Radiation Physics

Max Marks:100
Q P CODE: 5121

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Construction of stationary anode tube
2. Working principle, merits and demerits of Digital fluoroscopy
3. Construction & working of step up transformer
4. Construction, merit and demerit of a half wave rectifier
5. Working principle of an ionization chamber

II. Short answers 10 X 3 = 30 marks

6. Define potential, current and resistance
7. State ohms law with equation.
8. List different types of current with their wave forms
9. State the importance of earthing of an electrical device
10. Differentiate single and three phase AC
11. How do you classify materials based on their resistances
12. Discuss the merits of solid state detectors over ionization chamber
13. Write note on overloading of an X-ray tube
14. Write note on cooling techniques used in X-ray tube
15. Write note on Fuses

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Write note on Atom
2. Give electromagnetic spectrum and their uses
3. Give the production and properties of beta rays
4. Explain with fig. the spectral distribution of X-ray emitted by an XRT
5. State the working principle of MRI

II. Short answers 10 X 3 = 30 marks

6. Define: BE of an atom, Ionization, Excitation
7. Define with examples: elements, Isotopes & Isomers
8. Define : Radioactivity, half life period and mean life
9. Define the 2 different processes of X-ray production
10. Define : Primary, Secondary and Scattered radiation
11. Define: Inherent filter , Added filter & Total filter
12. Write note on Bone densitometry
13. List the important parts data acquisition scheme of CT
14. List the internal components of a CT gantry
15. List the functions of a CT collimator

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Time: 3.00 HRS

Max Marks:100

Subject: Radiation Physics

Q P CODE: 5121

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Difference between stationary and rotating anode tube
2. Construction & working of transformer
3. Working principle, merits and demerits of Image intensifier
4. Working principle of an ionization chamber
5. Purpose of rectification & working of diode as a rectifier

II. Short answers 10 X 3 = 30 marks

6. Control panel of an X-ray machine
7. Thermionic emitter
8. Multi field magnifiers used in radiology
9. Unsharpness
10. Thermal relay
11. Viewing systems used in Image intensified fluoroscopy
12. Solid state detectors
13. Self rectification
14. Rectifier
15. Contrast media

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. What are Particulate radiations. Give the production & properties of alpha ray.
2. List the differences between stationary and rotating anode tubes
3. Explain with fig. various process of production of X-ray
4. State the factors affecting an X-ray spectrum. Also explain how they can alter the spectrum
5. Explain how a CT works

II. Short answers 10 X 3 = 30 marks

6. Define : Primary, Secondary and Scattered radiation
7. Photo electric effect and its application in radio diagnosis
8. Compton scattering and its application in radiotherapy
9. Define with equation: Attenuation coefficient, HVT, TVT
10. Define: Thoreus Filter, X-ray Filters & Recommended filters
11. Different beam geometry used in CT
12. Different beam Detectors used in CT
13. Different methods of CT data acquisition
14. Define: Hounsfield number, Window & Window width
15. Define : Matrix size, Pixel & Voxels

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Time: 3.00 HRS

Subject: Radiation Physics

Max Marks:100
Q P CODE: 5121

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Construction of stationary anode tube
2. Working principle, merits and demerits of Digital fluoroscopy
3. Different forms of tube rating and their uses
4. Working, merits & demerits of different types of screen monitors
5. Working principle of a Solid state detectors

II. Short answers 10 X 3 = 30 marks

6. Cooling techniques used in X-ray tube
7. X-ray tube mountings
8. Automatic brightness control
9. Radiographic contrast
10. Contrast media
11. Reed switches
12. Automatic exposure control devices.
13. Thermionic emitter
14. Rectifier
15. Ionization chamber

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Write note on atom and their constituents
2. Describe the production & properties of gamma rays
3. Construction of Stationary anode tube
4. Explain with fig. the spectral distribution of X-ray emitted by an XRT
5. Explain how a ultrasound scanner works

II. Short answers 10 X 3 = 30 marks

6. Define with equation: Attenuation coefficient, HVT , TVT
7. Define: Thoreus Filter, X-ray Filters & Recommended filters
8. Define: Inherent filter , Added filter & Total filter
9. Bone densitometry
10. List the important parts data acquisition scheme of CT
11. List the internal components of a CT gantry
12. List the functions of a CT collimator
13. Different beam geometry used in CT
14. Different beam Detectors used in CT
15. Different methods of CT data acquisition

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Subject: Radiation Physics

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I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Working principle and applications of auto transformer
2. Construction, merit and demerit of a full wave rectifier
3. Difference between stationary and rotating anode tube
4. Working principle, merits and demerits of Image intensifier
5. Working, merits & demerits of different types of screen monitors

II. Short answers 10 X 3 = 30 marks

6. Overloading of an X-ray tube
7. Fuses
8. Types of X-ray machines used in practice
9. Self rectification of an X-ray tube works
10. Unsharpness
11. Viewing systems used in Image intensified fluoroscopy
12. Solid state detectors
13. Automatic exposure control devices.
14. Valve rectifiers
15. Contrast media

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Write note on Atom
2. List the properties and uses of different EMR
3. Write note on radioactive isotope scanning.
4. Explain the process of Compton scattering and its application
5. Account for the factors affecting an X-ray spectrum

II. Short answers 10 X 3 = 30 marks

6. Define: BE of an atom, Ionization, Excitation
7. Define : Radioactivity, half life period and mean life
8. Define : Primary, Secondary and Scattered radiation
9. Compton scattering and its application in radiotherapy
10. Define: Thoreus Filter, X-ray Filters & Recommended filters
11. Write note on Bone densitometry
12. List the internal components of a CT gantry
13. Different beam geometry used in CT
14. Different methods of CT data acquisition
15. Define: Hounsfield number, Window level & Window width

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I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Construction of stationary anode tube
2. Working principle, merits and demerits of Digital fluoroscopy
3. Construction & working of step up transformer
4. Construction, merit and demerit of a half wave rectifier
5. Working principle of an ionization chamber

II. Short answers 10 X 3 = 30 marks

6. Collimators
7. Contrast spoilers (Noise, Fog & scattered radiation)
8. Video camera tube
9. Contrast media
10. Magnetic relay
11. Automatic exposure control devices.
12. Ionization chamber
13. Ohms law
14. Thermionic emitter
15. Unsharpness

Subject: Radiation Physics

Q P CODE: 5122

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Write note on Atom
2. List the properties and uses of different EMR
3. Explain the processes of Photoelectric effect and its applications.
4. Explain with fig. the spectral distribution of X-ray emitted by an XRT
5. State the factors affecting an X-ray spectrum. Also explain how they can alter the spectrum

II. Short answers 10 X 3 = 30 marks

6. Define with examples: elements, Isotopes & Isomers
7. Define the 2 different processes of X-ray production
8. Photo electric effect and its application in radio diagnosis
9. Define with equation: Attenuation coefficient, HVT , TVT
10. Bone densitometry
11. Different beam geometry used in CT
12. Different methods of CT data acquisition
13. Define: Hounsfield number, Window & Window width
14. Define : Matrix size, Pixel & Voxels
15. Define : Spatial resolution, Distortion & Artifacts

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GENERAL INSTRUCTIONS:

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Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions. 4 X 5 = 20 marks

1. Describe shoulder joint
2. Describe the anatomy of eye ball
3. Describe the popliteal fossa
4. Describe deltoid muscle
5. Describe the muscles of anterior abdominal wall

II. Short answers 10 X 3 = 30 marks

6. Classify connective tissue with examples
7. Give examples for long bones
8. Name the muscles in gluteal region
9. Give examples for synovial joints
10. Classify vertebrae
11. Name the extra ocular muscles
12. Name any 6 bones of skull
13. Name the contents of anterior triangle of neck
14. Name the carpal bones
15. Name the muscles in leg

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Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Describe hip joint
2. Describe the anatomy nose
3. Describe the cubital fossa
4. Describe scapula bone
5. Describe the muscles of intercostal space

II. Short answers

10 X 3 = 30 marks

6. Give examples of cartilagenous joints
7. Give examples for flat bones
8. Name the muscles in front of arm
9. Name any 6 muscles of face
10. Name the muscles supplied by musculocutaneous nerve
11. Name the nerve supply of skin of hand
12. Name any 6 muscles attached to mandible
13. Name the contents of posterior triangle of neck
14. Name the tarsal bones
15. Name the branches of femoral artery

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Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Write definition and classification of joints
2. Describe the anatomy of tongue
3. Describe the anatomy of breast
4. Describe the arteries of upper extremity
5. Describe the mandible bone

II. Short answers

10 X 3 = 30 marks

6. Name the muscles of thigh
7. Name the muscles in neck
8. Name the arteries in lower extremity
9. Name any 6 muscles attached to scapula
10. Name the muscles supplied by radial nerve
11. Name the nerve supply of skin of foot
12. Name layers of eyeball
13. Name the muscles of anterior abdominal wall
14. Definition of anatomical position
15. Name the contents of femoral triangle

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Subject: Anatomy

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I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Describe the anatomy of inguinal canal
2. Describe the knee joint
3. Describe the sternocleidomastoid muscle
4. Describe the veins of lower extremity
5. Describe the femur bone

II. Short answers

10 X 3 = 30 marks

6. Name the nerves of upper extremity
7. Name the muscles in arm
8. Write about femoral canal
9. Name the joints of upper extremity
10. Name the muscles supplied by obturator nerve
11. Name the contents of popliteal fossa
12. Name the muscles of tongue
13. Write about elbow joint
14. Name the muscles of pectoral region
15. Name the contents of axilla

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Subject: Anatomy

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I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Classify bones with examples
2. Write about the ear
3. Describe the gluteus maximus muscle
4. Describe the veins of upper extremity
5. Describe the humerus bone

II. Short answers

10 X 3 = 30 marks

6. Name the nerves of brachial plexus
7. Name the muscles in hand
8. Name parts of hip bone
9. Name the joints of lower extremity
10. Name the muscles supplied by femoral nerve
11. Name the contents of cubital fossa
12. Name the bones and cartilages of nose
13. Write about adductor canal
14. Name the contents of femoral sheath
15. Name the nerves of tongue

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I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Blood supply of long bone.
2. Hyaline Cartilage.
3. Coronary arteries.
4. Stomach.
5. Kidneys.

II. Short answers

10 X 3 = 30 marks

6. Anatomical position.
7. Mention different types of Epithelia.
8. Tendon.
9. Triceps Muscle.
10. Name Hamstring Muscles.
11. Mitochondria.
12. X - Rays.
13. Intercostal space.
14. Name Three cranial nerves.
15. Name Three branches of Arch of Aorta.

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Subject: Anatomy

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I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Heart.
2. Urinary Bladder
3. Lung
4. Elbow Joint.
5. Uterus.

II. Short answers

10 X 3 = 30 marks

6. Flexion and Extension.
7. Cardiac muscle.
8. Neuron.
9. Deltoid Muscle.
10. Knee Joint.
11. Lysosomes.
12. X - Rays.
13. Name the parts of Sternum Bone.
14. Name Three branches of Arch of Aorta.
15. Name Branches of Facial Artery.

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Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Elastic cartilage.
2. Stomach.
3. Hip Joint.
4. Parotid Gland.
5. Testis.

II. Short answers

10 X 3 = 30 marks

6. Lithotomy Position.
7. Skeletal Muscle.
8. Aponeurosis.
9. Deltoid Muscle.
10. Name the bones forming Knee Joint.
11. Ribosomes.
12. X – Rays.
13. Name the bones forming Skull.
14. Name chambers of Heart.
15. Mention the Hormones secreted by Pituitary Gland.

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Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Radial Nerve.
2. Shoulder Joint.
3. Intercostal Space.
4. Pancreas.
5. Ovary.

II. Short answers

10 X 3 = 30 marks

6. Pronation.
7. Elastic Cartilage.
8. Fascia.
9. Biceps brachii muscle.
10. Ankle Joint.
11. Golgi Apparatus.
12. X - Rays.
13. Functions of Cerebellum.
14. Functions of Liver.
15. Functions of Spleen.

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Subject: Anatomy

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I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Kidney
2. Median Nerve.
3. Shoulder Joint.
4. Heart.
5. Diaphragm Muscle.

II. Short answers

10 X 3 = 30 marks

6. Supination.
7. Smooth Muscle.
8. Functions of Bone.
9. Mention the parts of Uterus.
10. Functions of Liver.
11. Cell Organelles.
12. X - Rays.
13. Name Intercostal muscles.
14. Name joints of Thorax.
15. Branches of Abdominal Aorta.

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Medical Imaging Technology

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.

Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Classify bones with examples
2. Diaphragm
3. Arch of Aorta
4. Spleen
5. Stomach

II. Short answers

10 X 3 = 30 marks

6. Simple epithelium
7. Name 3 muscles of upper limb
8. Branches of celiac trunk
9. Parts of pharynx
10. Hormones secreted by Thyroid gland
11. Parts of female reproductive system
12. Functions of cerebellum
13. Synovial joint
14. Name 3 salivary glands
15. Name 3 nerves of lower limb

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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.

Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Pericardium
2. Cartilage
3. Lymph Node
4. Classify joints with example
5. Liver

II. Short answers

10 X 3 = 30 marks

6. Transitional epithelium
7. Name 3 paranasal air sinus
8. Branches of femoral artery
9. Internal jugular vein
10. Name 3 muscles of lower limb
11. Parts of spinal cord
12. Hormones secreted by pancreas
13. Functions of gall bladder
14. Neuron
15. Parts of respiratory system

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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.

Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Pleura
2. Thyroid gland
3. Cells of connective tissue
4. Intercostals space
5. Uterus

II. Short answers

10 X 3 = 30 marks

6. Stratified epithelium
7. Parts of young long bone
8. Name 3 cell organelles
9. Name 3 Nerves of lower limb
10. Type of vertebrae
11. Name 3 muscles of larynx
12. Maxillary air sinus
13. External jugular vein
14. Branches of brachial artery
15. Synovial joint

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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.

Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Heart
2. Pituitary gland
3. Long bones
4. Thymus
5. Urinary bladder

II. Short answers

10 X 3 = 30 marks

6. Types of Cartilage with example
7. Name 3 arteries of upper limb
8. Branches of Abdominal aorta
9. Parts of brain stem
10. Functions of Liver
11. Portal vein
12. Muscles of Larynx
13. Name 3 appendicular bones
14. Trachea
15. Parts of female reproductive system

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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.

Time: 1.30 HRS

Subject: Anatomy

Max Marks:50
Q P CODE: 5123

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Kidney
2. Mediastinum
3. Ossification
4. Salivary glands
5. Male Urethra

II. Short answers

10 X 3 = 30 marks

6. Parts of female reproductive system
7. Epididymus
8. Parts of spinal cord
9. Mitochondria
10. Name 4 basic tissue
11. Sesamoid bone
12. Inferior Venacava
13. Parts of Hip bone
14. Name ear ossicles
15. Root of lungs

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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.

Time: 1.30 HRS

Subject: Physiology

Max Marks:50

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Negative and positive homeostatic mechanism.
2. Composition and functions of plasma proteins.
3. Draw a neat labeled diagram of nerve and explain its functions.
4. Explain movements of GIT
5. Explain O₂ -Hb dissociation curve, with neat diagramm

II. Short answers

10 X 3 = 30 marks

6. Explain secretion and functions of pancreatic juice.
7. Define Bp. Explain factors affecting Bp.
8. Explain heart sound with sound with cause for each.
9. Define thyphoxia. Name the types.
10. Mechanism of urine formation.
11. Action of adrenourtical hormones.
12. Write a note on menstrual cycle
13. Write composition and functions of CSF
14. Errors of refraction
15. Write about artificial respiration.

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Explain in detail the intracellular junctions
2. RBCs -Explain their morphology, physiological variations in their count and function.
3. Define receptor. Explain types of sensor receptors in detail
4. Name salivary glands. Explain composition and functions of saliva
5. Define surfactants. Explain its functions.

II. Short answers

10 X 3 = 30 marks

6. Write types of muscle with functions of each
7. Synapse definition and types
8. Audiometry
9. Composition of bile
10. Abnormalities of taste sensations.
11. Explain ventilation-perfusion in lungs
12. Action and abnormalities of parathyroid hormones
13. Spermatogenesis.
14. Types of neuroglial cells with diagram.
15. Function of bones.

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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.

Time: 1.30 HRS

Subject: Physiology

Max Marks:50

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Explain in detail active and passive mechanisms of transport across cell membrane
2. Mechanism of formation of hemopoietic cells
3. Explain reflex arc with a neat labelled diagram
4. Explain Secretion and functions of gastric juice
5. With neat diagram explain lung volumes and capacities

II. Short answers

10 X 3 = 30 marks

6. Explain blood indices
7. Write a note on lung compliance
8. Renal clearance tests
9. Write actions of posterior pituitary hormones
10. Explain oogenesis
11. Name structures of middle ear
12. Write events of cardiac cycle
13. Small intestine secretion and functions
14. Types of bones
15. Write different types of reflexes

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Explain functions of each intracellular organelles with neat diagram
2. Formation and functions of hemoglobin
3. Explain events at neuromuscular junction
4. Explain systemic and pulmonary circulation
5. GFR Definition, Regulation and its measurement

II. Short answers

10 X 3 = 30 marks

6. Draw a neat diagram of eyeball and write its functions
7. Contraceptive methods in male and female
8. Write a note on fertilization and parturition
9. Write about negative and positive feedback mechanism of hormonal regulation
10. Renal blood flow
11. Static lung volumes and capacities
12. Muscles of respiration
13. Define BP. Write about its regulation
14. Difference between skeletal and cardiac muscles
15. Name all the cranial nerves.

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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.

Time: 1.30 HRS

Subject: Physiology

Max Marks:50

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Explain body fluid compartments and their measurements
2. Fate of destruction of RBC's
3. Explain organization and functions of autonomic nervous system
4. Define ECG. Explain method of recording ECG
5. Explain in action and abnormalities of thyroid hormones in detail

II. Short answers

10 X 3 = 30 marks

6. Differences between smooth and cardiac muscles
7. Functions of GIT
8. Properties of nerves
9. Write about PCV
10. Applied aspects in GIT
11. Conducting System of heart
12. Define heart rate, stroke volume and cardiac out put
13. Transport of CO₂ across cell membrane
14. Female reproductive hormones and its functions
15. Properties of reflexes.

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Lung Compliance
2. Renal regulation of Acid Base Balance
3. Conducting system of the Heart
4. Erythropoiesis
5. Composition and functions of Saliva

II. Short answers

10 X 3 = 30 marks

6. Diffusion
7. Name all the muscles of Ventilation
8. Contraindications of Blood transfusion
9. Types of Neuroglial cells
10. Effects of radiation on bone
11. Differences between skeletal and smooth muscles
12. Cryptorchidism
13. Define Pulse and BP. Give their normal values
14. Non-renal functions of Kidney
15. Name all Hypothalamic hormones

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Composition and functions of CSF
2. Contraceptive methods in females
3. Define Hypoxia. What are different types of Hypoxia.
4. Structure and functions of Cardiac muscle
5. Effects of radiation on Haemopoietic system

II. Short answers

10 X 3 = 30 marks

6. Osmosis
7. Define Landsteiner's law. Name different blood group system
8. Functions of surfactant
9. Functions of Bile
10. Functions of parathyroid hormone
11. AV Node
12. Artificial respiration
13. Define GFR. Give their normal values
14. Errors of Refraction and their correction
15. Pregnancy tests

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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.

Time: 1.30 HRS

Subject: Physiology

Max Marks:50

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Mechanism of transport across cell membrane
2. Composition and functions of Blood
3. Structure and functions of Middle ear
4. Functions of Respiratory system
5. Composition and functions of pancreatic juice

II. Short answers

10 X 3 = 30 marks

6. Functions of Hemoglobin
7. Active Transport
8. What are different types of Bone
9. Define Stroke Volume, Cardiac Output. Give their normal values.
10. List all Pulmonary volumes and capacities
11. Reflex arc
12. Peristalsis
13. Draw a neat labeled diagram of Nephron
14. Name adrenal cortical hormones
15. Functions of Testosterone

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Define GFR. Explain Auto regulation of GFR
2. Actions of insulin
3. Storage of blood in blood bank
4. Transport of Oxygen in blood
5. Composition and functions of CSF

II. Short answers

10 X 3 = 30 marks

6. What are Taste buds. Mention different types of taste buds.
7. Functions of Estrogen
8. SAN
9. Movements of Large intestine
10. Functions of Endoplasmic Reticulum
11. Types of sensory receptors
12. Functions of Bones
13. Name any six cranial nerves
14. Name all anterior pituitary hormones
15. Diffusion

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Name different body fluid compartments and Describe the methods for measurement of ECF
2. Structure and functions of Nerve
3. Transport of carbon dioxide from tissues to lungs
4. Similarities and differences between systemic and pulmonary circulation
5. Functions of thyroid hormones

II. Short answers

10 X 3 = 30 marks

6. Differences between smooth and cardiac muscle
7. Functions of intestinal secretion
8. Name primary taste sensations and taste buds for the same
9. Functions of hemoglobin
10. Effects of radiation on Bone
11. Non renal functions of kidney
12. Functions of Glucagon
13. Name different phases of menstrual cycle and hormones involved
14. Cell aging
15. Draw a neat labeled diagram of ECG Waves. What is PR interval.

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. What is the difference between of diffusion and osmosis. Give an example for each.
2. Explain the basis for classification of blood groups.
3. Define vital capacity. Give its normal value. Name two physiological conditions where it is decreased.
4. Define arterial blood pressure. give its normal values
5. Describe the taste pathways with neat diagram.

II. Short answers

10 X 3 = 30 marks

6. Explain the actions of insulin on carbohydrate metabolism.
7. Fluid mosaic model of cell membrane.
8. What is the ICF volume and ECF volume.
9. List the types of B lymphocytes.
10. Coagulation factors.
11. Name the muscles taking part in quiet respiration
12. Bohr's effect
13. How are heart sounds produced.
14. List the methods of contraception in female.
15. Asphyxia.

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Medical Imaging Technology

GENERAL INSTRUCTIONS:

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- ii) Write neat diagrams wherever necessary, Handwriting should be legible.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. What is the ICF volume and ECF volume. Mention any two methods for the determination of the same.
2. What is erythropoiesis. Describe the erythropoiesis with a neat diagram.
3. What is vital capacity give its normal values and its significance.
4. Define arterial blood pressure give its normal values.
5. Describe the effects of hypersecretion of growth hormone.

II. Short answers

10 X 3 = 30 marks

6. Transport across the cell membrane.
7. Name the contractile proteins present in muscle.
8. List the types of B lymphocytes.
9. functions of Hemoglobin
10. Draw and label pathway of impulse conduction in heart.
11. What is the normal calcium level in blood.
12. Four actions of thyroxin.
13. Draw and label a synapse.
14. Name functions of rods and cones.
15. List six functions of kidneys.

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GENERAL INSTRUCTIONS:

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- ii) Write neat diagrams wherever necessary, Handwriting should be legible.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Glomerular filtration rate give its normal value, factors influencing, measurement
2. Enumerate the hormones secreted by anterior pituitary gland. Describe the actions of growth hormone.
3. Draw the visual pathway. Explain homonymous hemianopia
4. Describe hypoxia. Classify hypoxias
5. What is anemia. Describe different types of anemia

II. Short answers

10 X 3 = 30 marks

6. List six functions of kidneys.
7. Two actions of oxytocin which increases uterine contraction
8. Name the tests for detecting hearing loss
9. Draw a diagram of reflex arc
10. List the steps of spermatogenesis.
11. Tests for pregnancy.
12. Draw the waves of ECG and label them.
13. List lung volumes and capacities.
14. State Landsteiner`s law.
15. Muscle proteins & their functions

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GENERAL INSTRUCTIONS:

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- ii) Write neat diagrams wherever necessary, Handwriting should be legible.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Describe the structure of neuromuscular junction with neat diagram
2. What is anemia. Describe different types of anemia
3. Name all lung volumes and capacities with a Spiro graph
4. Define systolic and diastolic blood pressure and give their normal values.
5. Name the errors of refraction and their correction with the help of diagram.

II. Short answers

10 X 3 = 30 marks

6. List the types of B lymphocytes.
7. Types of breathing.
8. Asphyxia.
9. waves of ECG.
10. Tests for pregnancy.
11. List the steps of spermatogenesis.
12. Name functions of rods and cones
13. Draw and label a synapse.
14. Name the hormones secreted by anterior pituitary.
15. List six functions of kidneys.

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Physiology

Q P CODE: 5124

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Enumerate plasma proteins. Describe the functions of plasma proteins
2. What is erythropoiesis. Name the sites of erythropoiesis in an adult.
3. What is anemia. Describe different types of anemia with their physiological causes
4. What is ECG. Enumerate the various various ECG leads with a suitable diagram
5. Glomerular filtration rate (normal value, factors influencing)

II. Short answers

10 X 3 = 30 marks

6. Buffer mechanism of kidney.
7. Diuretics
8. Diabetes insipidus (basis, lesion, features).
9. Plasma cells.
10. Describe classical hemophilia.
11. Stroke volume
12. SA node as pacemaker
13. Properties of cardiac muscle.
14. Functions of lymphocytes.
15. What is apoptosis

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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.

Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Inflammation
2. Difference between benign and malignant tumours
3. Healing of Fractures
4. Myocardial Infarction
5. Cirrhosis of liver

II. Short answers

10 X 3 = 30 marks

6. Involucrum
7. Osteochondroma
8. Emphysema
9. Renal Calculi
10. Rheumatic heart disease
11. Carcinoma Cervix
12. Gall stones
13. Necrosis
14. Obesity
15. Carcinoma Esophagus

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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.

Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Fracture healing
2. Tuberculosis of Lung
3. Types of necrosis with examples
4. Myocardial Infarction
5. Cirrhosis of Liver

II. Short answers

10 X 3 = 30 marks

6. Edema
7. Callus
8. Marasmus
9. Pleural effusion
10. Renal calculi
11. Aneurysm of aorta
12. Fibroadenoma breast
13. Carcinoma Cervix
14. Fatty Liver
15. Primary complex

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Difference between benign and malignant tumours.
2. Osteomyelitis
3. Embolism
4. Causes and Types of inflammation
5. Tuberculosis lung

II. Short answers

10 X 3 = 30 marks

6. Obesity
7. Hypoplasia
8. Hydronephrosis
9. Hiatus Hernia
10. Cirrhosis of liver
11. Myocardial infarction
12. Define metaplasia
13. Fibroid uterus
14. Goitre
15. Nasal polyps

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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.

Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Tumours of Kidney
2. Gall stones
3. Breast Carcinoma
4. Tuberculosis of Bone
5. Healing of fracture

II. Short answers

10 X 3 = 30 marks

6. Hyperplasia
7. Define metaplasia
8. Marasmus
9. Pneumonia
10. Renal calculi
11. Pericardial effusion
12. Carcinoma Cervix
13. Fatty liver
14. Types and examples of sequestrum
15. Primary complex lung

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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.

Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Healing of fracture
2. Difference between benign and malignant tumours
3. Define Goitre. Write the causes
4. Causes of thrombosis
5. Tuberculosis of lung

II. Short answers

10 X 3 = 30 marks

6. Necrosis
7. Kwashiorkor
8. Pleural effusion
9. Rheumatic heart disease
10. Callus
11. Hydronephrosis
12. Primary complex
13. Rheumatoid arthritis
14. Fatty liver
15. Ovarian tumour

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Write in detail about edema.
2. Define neoplasia. Classify and describe the characteristics of malignant tumors.
3. Marasmus
4. Classify bone tumors and add a note on osteosarcoma.
5. Define pneumonia and write briefly about their stages.

II. Short answers

10 X 3 = 30 marks

6. Hydronephrosis
7. Gastric ulcer
8. Gall stones
9. Rheumatic heart disease
10. Goitre
11. Phyllodes tumour
12. Carcinoma cervix
13. Thrombosis
14. Hypertrophy
15. Callus

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Classify tumors of thyroid and add a note on papillary carcinoma thyroid.
2. Atherosclerosis.
3. Emphysema
4. Define peptic ulcer. Discuss their morphology.
5. Renal tumor classification and add a note on renal cell carcinoma.

II. Short answers

10 X 3 = 30 marks

6. Embolism
7. Dysplasia
8. Rickets
9. Osteomyelitis
10. Achalasia cardia
11. Fatty liver
12. Pericardial effusion
13. Fibroadenoma
14. Name oncogenic viruses
15. Teratoma

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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.

Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Renal calculus.
2. Obesity
3. Wound healing
4. Carcinoma stomach.
5. Myocardial infarction.

II. Short answers

10 X 3 = 30 marks

6. Atrophy
7. Necrosis
8. Adenoma
9. Scurvy
10. Tuberculosis- Lung
11. Hydronephrosis
12. Nasal polyp
13. Fibroid uterus
14. Pleural effusion
15. Sequestrum

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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.

Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Endometrial carcinoma
2. Pneumonia
3. Fracture and its healing
4. Gangrene- definition and write about its types and examples.
5. Define embolism and name the types with examples.

II. Short answers

10 X 3 = 30 marks

6. Metaplasia
7. Vitamin A
8. Osteomyelitis
9. Osteochondroma
10. Thyrotoxicosis
11. Lobar pneumonia
12. Atherosclerosis
13. Pyloric stenosis
14. Necrosis
15. Nasal polyp

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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.

Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Define necrosis. Name the types with examples.
2. Name bone tumors and add a detailed account on osteochondroma
3. Rheumatic heart disease
4. Emphysema and its types
5. Protein energy malnutrition

II. Short answers

10 X 3 = 30 marks

6. Bronchogenic carcinoma
7. Cystic lesions of kidney
8. Cholecystitis
9. Goitre
10. Cardiomegaly
11. Carcinoma cervix
12. Atrophy
13. Callus
14. Wet gangrene
15. Characteristics of benign tumors

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Medical Imaging Technology

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.

Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Define necrosis. Write types of necrosis with examples.
2. What is neoplasia. Write characteristics of benign & malignant tumors.
3. What is pneumonia. Write causes & stages of pneumonia.
4. Write causes of Osteomyelitis with types & complications.
5. Write etiology of thyrotoxicosis with morphology of cells.

II. Short answers

10 X 3 = 30 marks

6. Fibroid uterus.
7. Types of gall stones.
8. Hydronephrosis.
9. Tuberculosis of bone.
10. Night blindness.
11. Type of gangrene with examples.
12. Types of necrosis.
13. Hyperplasia definition & examples.
14. Morphology of gastric ulcer.
15. Causes of cirrhosis.

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Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Classify ovarian tumors & write in detail about Dermoid tumor (teratoma).
2. What is Fibroadenoma. write microscopic features.
3. Types of inflammation. Write cellular events of acute inflammation.
4. Define embolism write in detail about amniotic fluid embolism.
5. What is rickets. Write clinical features of rickets.

II. Short answers

10 X 3 = 30 marks

6. Types of infarction with example.
7. Types of carcinoma breast.
8. Types of renal stones.
9. Goitre definition & causes.
10. Features of Rheumatic heart diseases.
11. Causes of Cirrhosis.
12. Leather bottle stomach.
13. Write morphology of tuberculosis of lung.
14. Sequestrum.
15. what is Scurry. Write clinical features.

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Time: 1.30 HRS

Subject: Pathology

Max Marks:50

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Write etiology of carcinoma cervix. Add a note on screening test for carcinoma cervix.
2. What is leiomyoma. Describe gross & microscopy.
3. Causes of Kwashiorkor with clinical features.
4. Define gangrene. Write types with example.
5. Types of healing with examples.

II. Short answers

10 X 3 = 30 marks

6. Define atrophy with example.
7. Types of infarction
8. Causes of Rheumatoid arthritis
9. Emphysema definition & types.
10. Laboratory diagnosis TB lung.
11. Types of sinusitis with examples.
12. Morphology of carcinoma stomach.
13. Morphology of fatty liver.
14. Types of carcinoma thyroid.
15. Phylloides tumor.

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Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Causes of cell injury
2. Define emphysema. Write morphologic features
3. Fatty liver
4. Thyrotoxicosis causes & types
5. Write morphology of carcinoma breast

II. Short answers

10 X 3 = 30 marks

6. Callus.
7. Types of ovarian tumors
8. Screening test carcinoma cervix
9. Osteochondroma
10. Types of aneurysm of aorta
11. Polycystic kidney disease
12. Gohn's complex
13. Cold abscess.
14. Night blindness causes & clinical features.
15. Characteristic of malignant tumors (any 3).

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- ii) Write neat diagrams wherever necessary, Handwriting should be legible.

Time: 1.30 HRS

Max Marks:50

Subject: Pathology

Q P CODE: 5125

I. Short notes, answer any FOUR questions.

4 X 5 = 20 marks

1. Etiology of myocardial infarction. Add a note on lab diagnosis.
2. Types of cholecystitis & clinical features.
3. Tubercular Osteomyelitis.
4. What is hyperplasia. Write types of hyperplasia with examples.
5. Types of gangrene with example.

II. Short answers

10 X 3 = 30 marks

6. Hiatus hernia
7. causes of pleural effusion.
8. causes of obesity.
9. Types of wound healing.
10. Name tumors of kidney.
11. Granulation tissue.
12. Causes of hydronephrosis.
13. Fibroadenoma.
14. Causes of Thyrotoxicosis.
15. Characteristic of Benign tumors (any 3).