CENTRAL BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVT. OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

AHE078-BSS DIPLOMA IN X RAY & IMAGING TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE078-11 SPECIAL INVESTIGATION

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) The _____ should be qualified by education, training, and experience to assume responsibility for the proper conduct of the trial
2) The investigator should follow the trial's _____, if any, and should ensure that the code is broken only in accordance with the protocol.
3) _____ on the CRF, that are derived from source documents, should be consistent with the source documents
4) The sponsor is responsible for the ongoing _____ evaluation of the investigational product(s).
5) The sponsor should appoint individuals, who are _____ of the clinical trials/systems, to conduct audits.
6) The observations and findings of the auditor(s) should be _____
7) Communication between investigators is _____
8) Maintenance of trial treatment randomization codes and procedures for _____
9) Specification of the _____ parameters.
10) _____ should be used whenever possible to enhance the clarity of the presentation.
11) _____ including metabolism, as appropriate, and absorption, plasma protein binding, distribution, and elimination.
12) Where the protocol indicates that prior consent of the trial subject or the subject's _____ acceptable representative is not possible.
13) An IRB/IEC may invite _____ with expertise in special areas for assistance.
14) The trial treatment(s) and the _____ for random assignment to each treatment.
15) The _____ impact on the subject's well-being is minimized and low.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Give Short Notes Of Records From (IRB/IEC)?
2) What is the Communication with IRB/IEC?
3) Define Trial Design?
4) How should ensure the Multicentre Trials?
5) Short notes on Treatment of Subjects?
6) Define Statistics?
7) How to ensure the Direct Access to Source Data/Documents?
8) Short notes on General Considerations on IB?
9) What is the Toxicology?
10) Write about Marketing Experience?
11) Who is the Medical Care of Trial Subjects?
12) Write short notes onCompliance with Protocol?
13) Short notes on Contract Research Organization (CRO)?
14) Short notes on Extent and Nature of Monitoring?
15) What is the purpose of audit?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain about audits at five points?
2) Write about Selection and Withdrawal of Subjects?
3) What is the General Considerations Investigator's Brochure?
4) Explain about Nonclinical Studies?
5) Explain about Responsibilities Of Institutional Review Board/Independent Ethics Committee (IRB/IEC)?
6) Describe Compliance with Protocol?
7) What was the Safety Reporting?
8) Describe Compensation to Subjects and Investigators?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Describe about Institutional Review Board/Independent Ethics Committee (IRB/IEC)?
2) Explain detail about Informed Consent of Trial Subjects?
3) Describe Records and Reports?
4) Explain about Trial Design?
5) Describe investigator's brochure?

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AHE078-BSS DIPLOMA IN X RAY & IMAGING TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE078-12 RADIOGRAPHIC PHYSICS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) States _____ safety rules vary widely.
2) At some institutions the radiation safety officer may need _____ due to availability or the extensiveness of the program.
3) The _____ may include other members the licensee considers appropriate."
4) Radiation safety related to _____ is regulated by state or local radiation safety control agencies in which it is registered.
5) Radiation dose limits are specified by individual states but are generally _____
6) _____ likely to receive 10 % of any annual regulatory limit;
7) _____ and procedures are required for protection of staff as well as patients, including monitoring of X-ray utilization.
8) Registrants must have certain tests of equipment performed and/or allow _____ to perform tests of X-ray equipment.
9) The RSO has to ensure outside service providers are properly _____
10) The _____ must declare her pregnancy in writing for this to be in effect.
11) _____ support or restraining devices should be utilized for holding either the patient or image receptor whenever possible
12) Annual testing of _____ to meet requirements of the Mammography Quality Standards Act and the facility's accrediting body.
13) _____ to others should always be as low as reasonably achievable.
14) The licensee should possess _____ sufficiently sensitive to measure the type and energy of radiation used.
15) Determine and record the activity of the _____ or radiation dose before medical use.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What is the Setting Facility ALARA Limits?
2) Short notes on Radiation Dose Limits?
3) Give short detail about X-ray Equipment Servicing and Services?
4) Review of Radiation Doses of Users and Workers with table?
5) What are the Monitored Individual?
6) What is the Ambient Radiation Exposure Rate?
7) Short notes on Patient Consults for Therapeutic, Breastfeeding?
8) What is Sealed Source Inventory?
9) Definition of Restricted Areas
10) What is the Linearity?
11) How to Adding or Removing Authorized Use Areas?
12) How to Adding or Changing Areas of Use?
13) Write scope for X-RAY SAFETY PROGRAM?
14) What is the Monitoring of Patient Skin Doses?
15) What are RSO Education and Training Requirements?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Detail about Sample Policy: Occupational Dose Limits?
2) Explain about Model Emergency Procedures?
3) Detail about Dose to an Embryo, Fetus, or Nursing Child?
4) Sample Procedure: Radiation Safety During Inpatient Iodine-131 (I-131) Therapy?
5) What is the Calibrating Survey Instruments?
6) What is a General Requirements of Hot Lab Quality Control - Well Counters?
7) Detail about Adding or Removing Authorized Users or Authorized Medical Physicists?
8) Describe about Efficiency of Hot Lab Quality Control - Well Counters?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Describe X-ray Safety Activities?
2) Write any five Sample Policies and Forms?
3) Explain License Maintenance Procedures?
4) Details about Patient Consults (Therapeutic, Breastfeeding) and Patient Release?
5) Explain Hot Lab Quality Control - Dose Calibrators and Hot Lab Quality Control - (Thyroid) Uptake Probes?

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AHE078-BSS DIPLOMA IN X RAY & IMAGING TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE078-13 HOSPITAL PRACTICE, CARE OF PATIENTS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) _____ A partial or complete loss of sensation, with or without loss of consciousness, as a result of a disease, an injury, or administration of a drug.
2) unconsciousness; used to allay pain. Narcotics are regulated by federal laws.
3) _____ an artificial organ or part; for example, an artificial limb, eyeglasses, or dentures.
4) Each patient may express his _____ in different ways.
5) The _____ must sign the form in the presence of a witness to consent for a surgical procedure
6) _____ should be removed for safekeeping
7) _____ is given not only verbally, but also by facial expression, manner, and a touch or warm grasp of the hand
8) Each surgical procedure will dictate the number of members on the _____
9) The _____ must be constantly aware of the surgeon's actions
10) _____ is essential for health, such as the removal of an inflamed appendix.
11) A state in which there is a decreased or reduced volume of air taken into the lungs is _____
12) A decrease on the supply of oxygen to cells of the body is _____
13) The airway is left in place until the _____ is conscious
14) Disruption of sutures and insecure ligation of blood vessels can cause _____
15) The first sign of wound infection is _____ pain in the incision

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What are the Preoperative Phase?
2) Write short notes on Anesthesiologist
3) Write short notes on surgeon
4) Which are the following factors are important in selecting an anesthetic agent?
5) What are the terms and definitions Recovery Room Care Of The Surgical Patient?
6) Short notes on Facts Concerning Respiratory Distress
7) When the patient is cleared by the surgeon, call the receiving nursing unit and give the report?
8) What is the Endotracheal suctioning?
9) Define Cardiovascular System
10) What is the general Effects Of Surgial?
11) Which is the factor that Impair Wound Healing?
12) How to precaution for coughing?
13) Write about Scrub Nurse
14) Define Local Anesthetic.
15) How should be recovery room for patients?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Point out the Nursing Implications to Prevent Respiratory Distress
2) Write about Nursing Implications for the Early Detection of Pending Hypovolemic Shock.
3) When suctioning is unavoidable, sterile technique (aseptic)?
4) Write briefly about Possible negative effects
5) What are the types Of Wound Healing?explain
6) Explain the facts about wound drains
7) Describe and diagram of Respiratory system
8) Write notes on Gastrointestinal System

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Write brief notes on the morning of surgery
2) Describe about Operating room care of the surgical patient
3) Explain about Recovery room care of the surgical patient
4) Explain about Postoperative care of the surgical patient
5) Write detail about General nursing implications of the postoperative patient

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AHE078-BSS DIPLOMA IN X RAY & IMAGING TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE078-14 RADIATION HAZARDS & MEASURES

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) A Primer on Ionizing Radiation invented by _____
2) _____ is produced by unstable atoms or high-voltage devices
3) Three fundamental radiation protection principles apply to radiation sources and to _____, in all cases where the exposure is controllable.
4) The Energy Reorganization Act of 1974 created the U.S. _____
5) _____ are continuously irradiated by sources outside and inside our bodies.
6) Radiation from outer space is called _____
7) Radiation that originates on earth is called _____
8) Uranium and thorium (and their decay products), as well as _____, are the main radionuclides in our bodies
9) Use of one special type of x-ray exam, _____ has increased considerably over the past three decades
10) The _____ sends electronic signals to a computer that creates an image of the internal structures of the body
11) Managing _____ l radiation exposure to the public focuses on minimizing radiation exposure within the bounds essential to public health.
12) _____ and production, when not done properly, can harm aquifers
13) _____ in developing countries from burning biomass to heat or cook not only destroys ecosystems
14) The world's most serious nuclear accident ever, _____, caused significant ecological disturbance from radioactive materials within 10 km or so of the reactor
15) Radiation protection was primarily a non-governmental function until the late _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What are the three fundamental radiation protection principles apply to radiation sources and to exposed individuals?
2) Short notes on the Environmental Protection Agency (EPA)
3) How to protect Current radiation dose limits?
4) Draw the diagram and label it for Source distribution for all radiation dose
5) Define Radiation from Space.
6) Short notes on Medical Sources (48 percent).
7) Define Dose from Terrestrial Radiation
8) In 2000 which concluded that exposure to varying levels of background radiation? How
9) Short notes on Epidemiological studies
10) In medicine, who is the direct beneficiary? Some examples
11) Short notes on Deforestation
12) What is a Spent nuclear fuel?
13) How did the Nuclear plant operates?
14) What are an half-Life of Some Radionuclides?
15) What is the principle of optimization?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) What is the Facility Design and Safety?
2) Preparedness/Withstanding Natural Disasters
3) What is Emergency Planning Zones and Sheltering in Place?
4) Why Learning from Events Is Integral to Safety at Nuclear Power Plants?
5) What was the Background Radiation Exposure?
6) Explain Radioactive Waste from Nuclear Power Plants?
7) Define Decommissioning?
8) Table for Radiation Units and Measurements?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Brief about Nuclear Energy: The Environmental Context?
2) Describe for Radiation Risk: Used Nuclear Fuel and Radioactive Waste Disposal?
3) Radiation Risk: Communicating to the PublicAfter Fukushima: Implications for Public Policy and Communications?
4) Half-Life of Some Radionuclides?
5) Discuss a long note on Continuous Learning?

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AHE078-BSS DIPLOMA IN X RAY & IMAGING TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE078-15 ECG & IMAGING SERVICES

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) _____ are acquired while the patient is translated through the gantry in a smooth continuous motion rather than stopping for each image.
2) The distance between the _____ shall be held constant through the experiment
3) An experiment will be designed to allow for the collection of well-conditioned _____
4) The distance between the camera and stage will be held _____
5) The _____ shall be place at equally spaced points on the circle surrounding the stage
6) _____ will be used to provide a simple method for a user to observe the rendered 3D object.
7) Display online video (such as YouTube or Vimeo videos) using _____
8) _____ determines the center CT number value displayed by the gray scale range
9) By improving the visibility of specific organs, blood vessels or tissues, _____ help physicians diagnose medical conditions.
10) Contrast materials can have a chemical structure that includes _____ a naturally occurring chemical element
11) Certified Medical Assistant The medical assistant plays a valuable role in a robust _____
12) _____ of medical decision making can be categorized into one of 4 levels of increasing complexity of care.
13) Protons and neutrons that make up a _____ have an intrinsic angular momentum or spin.
14) _____ is not instantaneous following an excitation.
15) _____ is the most common contrast material taken by mouth, or orally

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What is the invention of computed tomography considered?
2) What is the Spiral/Helical Scanning?
3) Short notes on Office and PDF files
4) What is the Barium-sulfate?
5) Write short notes on Certified Medical Assistant
6) What is meant by Radiation exposures?
7) Write five pints for Critical aspects of Evaluation And Management
8) What is the standard display of MRI images is to represent fluid characteristics in black and white images, where different tissues turn out?
9) Write short notes on Shim Coils
10) Write about 3D display
11) Which are the majority of MRI contrast agents?
12) What are two types of iron oxide contrast agents?
13) Write about Mechanical Integrity
14) What is General Ultrasound Imaging?
15) Write short notes on Multimedia files

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain about Non-physician Practitioner
2) Describe about Registered Radiologist Assistant
3) What are the Facilities and their responsible staff?
4) Explain about Radiation Dose Quality Assurance
5) Write the History of The Spinning Proton
6) Describe about Radio Frequency Energy
7) Explain about Superconducting electromagnets
8) Explain about Gradient Coils

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) What is the Data Presentation Image Reconstruction2 D And 3 D Images?explain
2) Describe about Basic Diagnostic Aspects Interventional C.T. Guided Procedures Documentation
3) Discuss about Safety Consideration of C.T? and explain Radiation Dose Quality Assurance?
4) Discuss about Resonance, Free Induction Decay, Relaxation, T-L & T-2 Instrumentation
5) Write detaily about Radio Frequency Transmitter And Receiver Coils

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AHE078-BSS DIPLOMA IN X RAY & IMAGING TECHNOLOGY

TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE078-02 ANATOMY & PHYSIOLOGY

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Largest Gland in our body is _____

2) The covering membrane of the heart is called _____

3) _____ is the main artery of our body.

4) Cranial nerves are _____ in number.

5) The largest cartilage in our body is _____

6) Adult kidney weighs about _____ gm

7) The length of large intestine is _____

8) The lower surface of skull is known as _____

9) Growth hormone is secreted by _____

10) Movable bone in the Human shull is _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Thyroid Gland
2) Micturation
3) Anatomy
4) Clavicle
5) Pulmonary Circulation
6) functions of saliva
7) Heart Chambers
8) Bones of the Hip joint
9) Thorax
10) Neurons

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Cardiac cycle
2) Sternum
3) gall bladder
4) Ribs
5) Pancreas
6) functions of blood
7) Eye

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Explain female reproductive system
2) Describe urinary system with help of neat diagram.
3) Describe central nervous system.
4) Describe Humerous with the help of neat diagram.

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TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE078-03 RADIOLOGY PHYSICS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) x ray travel at the speed of _____ m/sec

2) A magnet has _____ poles

3) X-Ray travels in _____ line

4) A film badge is used to _____

5) The negative terminal X-Ray tube is _____

6) _____ converts the direct current into alternate current

7) The melting point of tungsten is _____

8) X-Ray tube is a type of _____

9) Grids are made up of narrow strips of _____

10) A magnet has _____ poles

11) X-Ray travels in _____ line

12) A film badge is used to _____

13) The negative terminal of X-Ray tube is _____

14) _____ converts the direct current into alternate current

15) Grids are made up of narrow strips of _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Energy
2) Gas x ray tube
3) Grid
4) Cathode structure
5) filaments structure
6) Rectification
7) Ionization
8) Insulators
9) Absorbed dose?
10) Radiation
11) Scattered radiation?
12) Dynamo?
13) MAS & KVP?
14) Names the electromagnetic waves?
15) Light intensity?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Collimator
2) Cleaning of intesifying screens
3) What is DC and Ac current give examples?
4) What are the good conductor are give examples?
5) Electromagnetic radiation?
6) X-Ray Filter?
7) Components of an electric circuit?
8) Magnetism?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Fundamentals of x rays and its soursces.
2) Describe Modren x ray tubes.
3) Describe modern X-Ray tube?
4) Explain the X-Ray tube with diagram?
5) Describe the properties of alpha, beta and gamma rays?

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TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE078-04 DARK ROOM TECHNIQUES

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Dark room is also known as _____

2) Rinsing is used in _____

3) _____ Is the restainer used in develpor.

4) Color of the safe light is _____

5) _____ is commonly used for hardner

6) The outer most covering of films is _____

7) The basic view of shoulder is _____

8) The centering line of para nasal sinus is _____

9) The base of X-ray film made up of _____

10) The center of the elbow AP is _____

11) Sodium sulphate is using as a _____

12) The emission of light by this phosphor is known as _____

13) _____ is known as the heart of X-Ray film

14) The center of the wrist AP view is _____

15) Buffer is using to maintain _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Marking of film
2) Rinsing
3) Light fog
4) Screens
5) Wet side
6) Developing Tank
7) Dyring
8) Developer?
9) X-Ray film?
10) Pathology?
11) Grid?
12) The routine view of cervical spine?
13) Hardener?
14) Position and center of chest PA view?
15) Storing of X-Ray cassette?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Contrast
2) Fixer Composition
3) Effects of tempratureon developing
4) Five steps o film processing?
5) The position of towns view of skull?
6) Radiography?
7) Different kinds of bog in X-Ray film?
8) Position of X-Ray abdomen erect view?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Difference between manual processing and automatic processing with any one diagram?
2) Component and function of developer and fixer?
3) Explain intensifying screen?
4) Explain dark room?
5) Explain X-Ray cassette (type, function & care)?

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TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE078-05 ELECTRICITY PHYSICS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Conductors can _____

2) The cathode of x ray tube is _____

3) The potential difference between two points is measured with _____

4) The substance which have large number of free electrons are known as _____

5) Alternating current numbers of cycles per second is _____

6) To measure the radiation exposure _____ is used

7) Filament current is known as _____

8) Anode rotates at the speed of _____ rpm

9) Machine used to generate AC is known as _____

10) Alternating current numbers of cycles per second is _____

11) X-Ray travels at the same speed of _____

12) The cathode X-Ray tube is _____

13) 1 kilometer in equal to _____ watt

14) Amphere can be donated by the symbol _____

15) Dynamo is based on the principal of _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Cathode
2) Work
3) Ionization
4) Light Intensity
5) X-Ray
6) Resistance
7) Conductors
8) Transformer
9) Anode
10) Power
11) Electrons
12) Types of transformers
13) AC current
14) Capacitor
15) Focal spot

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Power voltage rating
2) A C Generator
3) Properties of generetor
4) fluorescent Screen
5) Electroscope
6) Electric Capacitor
7) Electrolysis
8) Cathode

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Describe the Basic x ray machine.
2) Describe in detail the structure of atom
3) Explain the production of electric charges and gases in the discharge tube.
4) Describe about the laws of electromagnetic induction?
5) Explain about conductors and insulators give example?