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

AHE010-MRI SCAN TECHNICIAN

ONE YEAR EXAMINATION NOVEMBER-2025

AHE010-01 COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

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) I saw a beggar near _____ bus stop

2) Raju _____ the tallest in our class

3) Suresh is sitting _____ Ram and Gopal.

4) He came _____ me.

5) A cat is _____ the table.

6) They _____ playing Cricket.

7) The cat is _____ the wall.

8) The World first Programmer is _____

9) _____ is the most widely used sprea sheet package

10) To draw curved lines _____ is used

11) The speed of computer is measured in _____

12) Rama was _____ ideal student

13) Her uncle lives _____ Chennai.

14) _____ key I also used for checking spellings.

15) _____ apple a day keeps the doctor away.

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

1) Define the formation of Adjectives?
2) What is meant by strong verbs?
3) Degrees of comparison
4) Digital computer
5) Attrib
6) Taskbar
7) What is hardware & Software
8) Write short notes on Super Computer
9) Noun phrase
10) MS Access
11) Web layout
12) Decimal
13) What is RAM?
14) Define WWW in internet.
15) What are Question tags?

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

1) Explain few sentences using "behind, beneath"?
2) Define common conjunctions
3) Explain Cut, Copy and 'Paste'
4) Tool bar
5) Airbrush
6) Windows explorer
7) What are the procedures of merging cells in excel
8) List out classification of nouns and their functions?

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

1) Write a letter to your father asking permission join the N.C.C?
2) Explain structure of computer
3) Functions of Word Processing?
4) Write a mailmerge to invite your friend in your family function what are the procedure of the merge?.
5) Explain 'Mail Merge'

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AHE010-MRI SCAN TECHNICIAN

ONE YEAR EXAMINATION NOVEMBER-2025

AHE010-02 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) Vertebral column is composed of _____

2) The expanded form of CSF is _____

3) The length of large intestine is _____

4) The shortest rib in human body is _____

5) The folding of meninges that seperated the two hemisphere is known as _____

6) Milk is consider as _____ Pathya.

7) Long bone supporting the upper arm is called _____

8) Male and female fertilized cells are called _____

9) _____ are the principal organs of respiration

10) The inner part of kidney is named _____

11) _____ is the inflammation of urinary bladder

12) Ovarian artery is the branch of _____

13) _____ bacteria grows in the absence of oxygen

14) Covering layer of the abdomen is _____

15) Define Bleeding.

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

1) Hydrocephaly
2) Sternum
3) Ovulation
4) Meningitis
5) Nephrone
6) Floating ribs
7) Organs of the human body
8) Composition of urine
9) Define Anatomy.
10) Explain functions of nervous system.
11) Define Pathya.
12) Artery and Vein
13) Tachycardia and Bradycardia
14) Coughing
15) Define cell?

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

1) Diaphragm
2) Cardiac cycle
3) The arches of the foot
4) Pelvic girdle
5) Hormones of anterior pituitary
6) Explain about excretory (urinary) system?
7) Mudra
8) Voluntary muscles

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

1) Describe the urinary system and urine formation with the help of neat diagram
2) Describe the functions of digestive system
3) Describe the skull bone with the help of neat diagram
4) Describe the organs and its functions of the digestive system with the help of diagram
5) Define tissue, types & explain its function?

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AHE010-MRI SCAN TECHNICIAN

ONE YEAR EXAMINATION NOVEMBER-2025

AHE010-03 GENERAL RADIOGRAPHY

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) In the diagnosis of _____ and _____ diseases CT Scan can be applied

2) Grid was invented by _____

3) Positive pole of X-ray tube is _____

4) When the atomic number is increased the binding energy is _____

5) X-ray was invented by _____

6) X-ray therapy tubes operate at _____

7) _____ is the target used in mammography

8) LOG means _____

9) In peadiatrics department CT scan used in the diagnosis of _____ and _____

10) The PH of developers is.

11) In mammography _____ is used as the target

12) In children CT scan is used to diagnose _____ and _____ disease

13) The size of the picture element is the measure of _____

14) Main merit of TLD is _____

15) X-rays was invented in the year _____

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

1) Inverse square law
2) Preservatives
3) Fog
4) Mammography
5) Attenuation
6) Preservatives
7) Semiconductors
8) Absorbed dose
9) Fitter
10) Grids
11) Conductors
12) Emulsion layer
13) Latent image
14) Detectors
15) Contrast media

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

1) MR contrast agents
2) Film badge
3) Contrast media
4) Radiation measurement devices
5) Absorbed dose
6) X-ray tube
7) Full wave rectifiers
8) Mammography

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

1) Describe the double coated X-ray film with diagrams
2) Explain about procedure in CT brain
3) Explain the dark room
4) Explain the principle and working of CT
5) Explain the procedure of CT spiral

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AHE010-MRI SCAN TECHNICIAN

ONE YEAR EXAMINATION NOVEMBER-2025

AHE010-04 MRI SCAN TECHNOLOGY

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 ratio of the amplitude of the signal received to the average amplitude of the noise is known as _____

2) The radiation dose limit is _____

3) All the waves travel with _____

4) _____ is a non invasive imaging procedure with no risk of radiation

5) Frequency of precession is called as _____

6) _____ waves are used in ultra sound scanning

7) The expanded form of MRI is _____

8) For early detection of stroke _____ sequence is used

9) Functional MRI uses in _____

10) The cryogen used in super conductors is _____

11) MRI equipment contains _____, _____ and _____

12) The expanded form of MRI is _____

13) The magnetic field of MRI is _____

14) A gradient system is made up of _____

15) Important pulse sequences are _____, _____, _____ and _____

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

1) Imaging principle
2) Patient area
3) MR signal
4) Fringe field
5) Paramagnet
6) Dimagnet
7) Quench
8) K space
9) MRI room
10) K- space
11) Flip angle
12) CMR
13) Lamer frequency
14) Resonance
15) Super conducting magnet

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

1) Different types of magnets
2) Safety measures before taking a patient in the MRI room
3) Basic principles of MRI
4) Patient area
5) Magnetic field
6) MR
7) 3.0 teals of MRI
8) Instrumentation in MRI safety

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

1) Safety devices and its application in MRI
2) Describe encoding and image formation of MRI
3) Explain pulse sequence of MRI
4) Describe MRI in the application of disease and its diagnosis
5) Explain about MRI equipments