

NATIONAL DEVELOPMENT AGENCY, PROMOTED BY GOVERNMENT OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

AHE010-MRI SCAN TECHNICIAN

ONE YEAR EXAMINATION NOV-2015

AHE010-01 COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

TIME: 3 Hours

INSTRUCTIONS

- * 33 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

- 9) -----is the first computer programmer
- 10) She is B.sc graduate

II. DEFINE THE FOLLOWING

- 1) Define kinds of noun?
- 2) Define what is demonstrative pronoun?
- 3) Define collective noun?
- 4) What is meant by Feminine Gender?
- 5) Del Command
- 6) Explain Header and Footer
- 7) Adjectives
- 8) Adverbs
- 9) Status bar
- 10) What is RAM ?

2 x 10 = 20

Marks: 100

- 1) Explain few sentences using "do/does"?
- 2) Explain few sentences using "may, among, before"?
- 3) Define kinds of participle?
- 4) Define degrees of comparison
- 5) What are the difference between i. COPY , Xcopy , Diskcopy and Move.
- 6) Classification of the computer
- 7) Title bar
- 8) Calculator

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

5 x 5 = 25

- 1) Describe MS Windows
- 2) What are the advantages of using computer in the Modern Field.
- 3) Explain 'Mail Merge'
- 4) Explain the keyboard
- 5) Write briefly about elements of design?



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AHE010-02 ANATOMY & PHYSIOLOGY

3) Cell

6) Liver
 7) Scapula

10) Diffusion

4) Voluntary muscles

8) Define Pancha Kosha9) Autonomic nervous system

5) The membrane of the brain

TIME: 3 Hours Marks: 100 INSTRUCTIONS * 33 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** $1 \times 10 = 10$ 1) The largest cartilage in our body is 2) The lungs are covered by a covering called 3) Total number of bones in human body is 4) Heart's normal weight is 5) Basic functional unit of kidney is 6) Sututres are seeing in between 7) Small sac under the liver which stores bile is known as..... 8) The first cervical vertebrae is called — ____ 9) Each cardiac cycle is completed within sec. 10) Arthritis is consider as disorder. $2 \times 10 = 20$ **II. DEFINE THE FOLLOWING** 1) Stomach 2) Liver cirrohsis

3

- 1) Cardiac cycle
- 2) Brain ?
- 3) Mechanism of Respiration
- 4) Pelvis
- 5) The curves of the vertebral column
- 6) Urinary system
- 7) Composition & functions of blood
- 8) The cells

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Detail about the organs of the digestive system
- 2) Explain about the structure and functions of the liver with the help of neat diagram
- 3) Explain about pituitary gland and its functions
- 4) Describe the process of digestion
- 5) Describe the male reproductive system

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AHE010-03 GENERAL RADIOGRAPHY

3) Spiral CT
 4) Soft X-rays
 5) X-ray tube
 6) Attenuation
 7) Absorbed dose
 8) Conductors
 9) Emulsion layer
 10) Detectors

TIME: 3 Hours	Marks: 100
 INSTRUCTIONS * 33 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	1 x 10 = 10
 The main merit of TLD isradiation Film badge is used toradiation In urology medicine CT Scan is applied for the diagnosis of X-ray therapy tubes operate at The number of electrons in an atom is equal to the number of LOG means In peadiatrics department CT scan used in the diagnosis of and The PH of developers is . In mammography is used as the target X-ray therapy, tubes operate at 	
II. DEFINE THE FOLLOWING	2 x 10 = 20
1) Film density 2) Activator	

5

- 1) Procedure in CT abdomen
- 2) Principles of CT
- 3) Resolution
- 4) Compton effects
- 5) Procedure of CT abdomen
- 6) Attenuation
- 7) Awode types
- 8) Properties of X-ray

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Describe about contrast media
- 2) Explain about USG
- 3) Explain characteristic curve
- 4) Explain about procedure in CT brain
- 5) Explain the procedure of CT spiral

5 x 5 = 25



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AHE010-MRI SCAN TECHNICIAN

ONE YEAR EXAMINATION NOV-2015

AHE010-04 MRI SCAN TECHNOLOGY

TIME: 3 Hours

INSTRUCTIONS

- * 33 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

10) Functional MRI uses technique

II. DEFINE THE FOLLOWING

- 1) Imaging
- 2) Paramagnetism
- 3) Exposure time
- 4) Scatter radiation
- 5) Lamer frequency
- 6) Patient area
- 7) Dimagnet
- 8) K- space
- 9) CMR
- 10) Resonance

Marks: 100

 $2 \times 10 = 20$

- 1) MRI in human diseases
- 2) Spin-Eco sequence
- 3) Super conducting magnets
- 4) Advantages of MRA
- 5) NMR parameters
- 6) Magnetic field
- 7) 3.0 teals of MRI
- 8) Instrumentation in MRI safety

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Explain MR angiography techniqu
- 2) Safety devices and its application in MRI
- 3) Describe encoding and image formation of MRI
- 4) Explain about positioning in MRI, image weighing and contrast in MRI
- 5) Explain the different types of coils used in MRI

5 x 5 = 25