

Notations :

- Options shown in **green** color and with ✓ icon are correct.
- Options shown in **red** color and with ✖ icon are incorrect.

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Actual Answer Key:	Yes
Calculator:	Scientific
Magnifying Glass Required?:	No
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Eraser Required?:	No
Scratch Pad Required?:	No
Rough Sketch/Notepad Required?:	No
Protractor Required?:	No
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Highlighter:	No
Auto Save on Console?:	No

Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 231098151 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3 Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

An ideal operational amplifier has:

Options :

- ✖ infinite input offset voltage
- ✓ zero input offset voltage
- ✖ negative input offset voltage

Question Number : 2 Question Id : 231098152 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The operational amplifier bandwidth is the frequency range over which the voltage gain of the amplifier is above:

Options :

1. ✖ -2 db

2. ✖ 20 db

3. ✔ -3 db

4. ✖ +3 db

Question Number : 3 Question Id : 231098153 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The sensitivity of an electrocardiograph is typically set at:

Options :

1. ✔ 10 mm/mV

2. ✖ 20 mm/mV

3. ✖ 30 mm/mV

4. ✖ 50 mm/mV

Question Number : 4 Question Id : 231098154 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The frequency range of delta brain waves is _____

Options :

1. ✖ 0.1-10 Hz

2. ✖ 0.8-12 Hz

3. ✖ 0.5-2 Hz

4. ✔ 0.5-4 Hz

Question Number : 5 Question Id : 231098155 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The material used in the most common types of electrodes that are routinely used for recording ECG is _____

Options :

1. ✖ copper

2. ✔ German silver

3. ✖ gold

4. ✖ platinum

Question Number : 6 Question Id : 231098156 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The maximum pressure reached during cardiac ejection is called _____

Options :

1. ✖ haemodynamic pressure

2. ✖ diastolic pressure

3. ✖ blood pressure

Question Number : 7 Question Id : 231098157 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The volume of gas remaining in the lungs after normal expiration is called _____

Options :

1. ✗ total lung capacity

2. ✓ functional residual capacity

3. ✗ vital capacity

4. ✗ inspiratory capacity

Question Number : 8 Question Id : 231098158 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The instrument that isolates monochromatic radiation in a more efficient and versatile manner than simple photometers is called _____

Options :

1. ✓ spectrophotometer

2. ✗ colorimeter

3. ✗ flame photometer

4. ✗ photomultiplier detector

Question Number : 9 Question Id : 231098159 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Pure tone audiometers usually generate test tones in octave steps from _____ to _____ Hz

Options :

1. ✖ 25 ; 9,000

2. ✖ 125 ; 7,000

3. ✔ 125 ; 8,000

4. ✖ 100 ; 8,000

Question Number : 10 Question Id : 231098160 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The sound intensity is proportional to the _____ of sound pressure.

Options :

1. ✔ square

2. ✖ cube

3. ✖ half

4. ✖ one third

Question Number : 11 Question Id : 231098161 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The operational wavelength of the Nd-YAG laser is _____

Options :

1. ✖ 490 nm

2. ✖ 350 nm

3. ✖ 2,070 nm

4. ✔ 1,064 nm

Question Number : 12 Question Id : 231098162 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The gas supplied in the hospitals is regulated and maintained at __ at the wall outlet.

Options :

1. ✖ 50-60 psi

2. ✖ 46- 56 psi

3. ✖ 40-80 psi

4. ✔ 40-50 psi

Question Number : 13 Question Id : 231098163 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The standardised system used to prevent accidental fitting of a wrong cylinder to the yoke is:

Options :

1. ✖ labelling

2. ✔ pin index safety system

3. ✖ colour coding

4. ✖ barcode system

Question Number : 14 Question Id : 231098164 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

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Options :

1. ✖ pericardium
2. ✖ cell membrane
3. ✔ pleura
4. ✖ epicardium

Question Number : 15 Question Id : 231098165 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The American National Standard for safe use of lasers in health care facilities is:

Options :

1. ✖ ANSI-Z136.1
2. ✖ ANSI-Z136.2
3. ✔ ANSI-Z136.3
4. ✖ ANSI-Z136.4

Question Number : 16 Question Id : 231098166 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which is the most successful biosensor in use to date in the home for use by people suffering from diabetes ?

Options :

1. ✖ Implanted biosensor
2. ✖ Blood pressure monitor

4. ✔ Blood glucose monitor

Question Number : 17 Question Id : 231098167 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The thermocouples are _____ transducers.

Options :

1. ✔ active

2. ✖ passive

3. ✖ inverse

4. ✖ digital

Question Number : 18 Question Id : 231098168 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The metals used in a K-type thermocouple are:

Options :

1. ✖ Copper and Constantan

2. ✖ Iron and Constantan

3. ✔ Chromel and Alumel

4. ✖ Chromel and Constantan

Question Number : 19 Question Id : 231098169 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

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Which LED consume power that is less than _____

Options :

1. ✖ 3 W

2. ✔ 1 W

3. ✖ 5 W

4. ✖ 6 W

Question Number : 20 Question Id : 231098170 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The permittivity of Quartz is _____

Options :

1. ✔ 40.6×10^{-12} F/m

2. ✖ 42.6×10^{-12} F/m

3. ✖ 60.6×10^{-12} F/m

4. ✖ 49.9×10^{-12} F/m

Question Number : 21 Question Id : 231098171 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The dynamic behaviour of capacitive transducers is similar to those of:

Options :

1. ✖ low pass filters

2. ✔ high pass filters

4. ✖ band stop filters

Question Number : 22 Question Id : 231098172 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Quartz and rochelle salt belong to the category of:

Options :

1. ✖ natural and synthetic group of piezoelectric materials

2. ✔ natural group of piezoelectric materials

3. ✖ synthetic group of piezoelectric materials

4. ✖ electro-resistive material

Question Number : 23 Question Id : 231098173 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The bonded metal wire strain gauges are used for the _____ analysis.

Options :

1. ✔ stress

2. ✖ strain

3. ✖ frequency

4. ✖ loading

Question Number : 24 Question Id : 231098174 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Options :

1. ✖ 60 KHz

2. ✖ 70 KHz

3. ✖ 55 KHz

4. ✔ 50 KHz

Question Number : 25 Question Id : 231098175 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In case of gross shock, the current flows through the _____ of the subject.

Options :

1. ✖ heart

2. ✖ lungs

3. ✔ body

4. ✖ legs

Question Number : 26 Question Id : 231098176 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In case of micro current shock, the current passes directly through the _____.

Options :

1. ✔ heart wall

2. ✖ skin

3. ✖ arms

4. ✖ legs

Question Number : 27 Question Id : 231098177 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The safe upper limit value of microcurrent shock is _____.

Options :

1. ✖ 18 μ A

2. ✖ 20 μ A

3. ✖ 10 mA

4. ✔ 10 μ A

Question Number : 28 Question Id : 231098178 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Gross shock hazards are usually caused by _____.

Options :

1. ✖ electrical faults

2. ✔ electrical wiring failures

3. ✖ extension cords

4. ✖ dielectric loss

Question Number : 29 Question Id : 231098179 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Options :

1. ✖ Atrial fibrillation
2. ✖ Heart attack
3. ✔ Ventricular fibrillation
4. ✖ Paroxysmal fibrillation

Question Number : 30 Question Id : 231098180 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

When current enters the body at one point and leaves at some other point, three phenomena can occur. Which of the following is NOT one of them?

Options :

1. ✖ Electrical stimulation of the excitable tissues
2. ✖ Resistive heating of tissue
3. ✔ Coagulation
4. ✖ Electro-chemical burns and tissue damage

Question Number : 31 Question Id : 231098181 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

For a given voltage present on the surface of the body, the value of current passing through it would depend upon the _____.

Options :

1. ✔ contact impedance

3. ✖ capacitance value

4. ✖ let-go current

Question Number : 32 Question Id : 231098182 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which of the following is NOT a type of leakage current?

Options :

1. ✖ Enclosure leakage current

2. ✔ Instrument leakage current

3. ✖ Patient leakage current

4. ✖ Earth leakage current

Question Number : 33 Question Id : 231098183 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The BIS standard for electrocardiograph equipment is _____.

Options :

1. ✔ IS:8048

2. ✖ IS:8058

3. ✖ IS:7048

Question Number : 34 Question Id : 231098184 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The IEC60601 is a ground continuity test conducted using a 50 Hz current between 10 A and 25 A for a period of at least ____ seconds.

Options :

1. ✖ 3

2. ✖ 12

3. ✔ 5

4. ✖ 20

Question Number : 35 Question Id : 231098185 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The resistance of the protective earth conductor is measured between the earth pin on the mains plug and a protectively earthed point on the equipment enclosure, and the reading should not normally exceed _____ Ω at any such point.

Options :

1. ✖ 0.4

2. ✖ 0.6

3. ✖ 2.2

4. ✔ 0.2

Question Number : 36 Question Id : 231098186 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The resistance between the ground pin of the plug and the equipment chassis/exposed metal objects should not exceed _____ Ω during the life of the equipment.

Options :

1. ✓ 0.15

2. ✗ 0.25

3. ✗ 1.45

4. ✗ 2.35

Question Number : 37 Question Id : 231098187 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

For all electrocardiographs, the _____ is connected to the ground.

Options :

1. ✗ right hand

2. ✗ left hand

3. ✓ right leg

4. ✗ left leg

Question Number : 38 Question Id : 231098188 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The paper recording speed in an ECG machine is _____.

Options :

1. ✓ 25 mm/sec

2. ✗ 30 mm/sec

Question Number : 39 Question Id : 231098189 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

If an external stimulus is applied to a sensory area of the brain, it responds by producing the _____.

Options :

1. ✖ action potential

2. ✔ evoked potential

3. ✖ resting potential

4. ✖ after potential

Question Number : 40 Question Id : 231098190 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Each action potential in the heart originates near the top of the right atrium at a point called _____

Options :

1. ✖ Bundle of His

2. ✔ Sinoatrial node

3. ✖ AV node

4. ✖ Purkinje fibres

Question Number : 41 Question Id : 231098191 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The amplitude of R wave in an ECG waveform is _____.

Options :

1. ✖ 3.6 mv

2. ✖ 1.9 mv

3. ✔ 1.6 mv

4. ✖ 2.8 mv

Question Number : 42 Question Id : 231098192 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The _____ pacemakers have sensors that automatically adjust to changes in a person's physical activity.

Options :

1. ✔ rate responsive

2. ✖ single chamber

3. ✖ dual chamber

4. ✖ current

Question Number : 43 Question Id : 231098193 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The voltages in the range of _____ are required for the production of X-rays for diagnostic purposes.

Options :

1. ✔ 30–200 kV

2. ✖ 30–220 kV

4. ✖ 30–2000 kV

Question Number : 44 Question Id : 231098194 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The velocity of ultrasound in human soft tissue is _____.

Options :

1. ✔ 1,540 m/sec

2. ✖ 1,550 m/sec

3. ✖ 1,640 m/sec

4. ✖ 2,540 m/sec

Question Number : 45 Question Id : 231098195 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The human body absorbs infrared radiation almost without reflection, and at the same time, emits part of its own thermal energy in the form of _____ radiation.

Options :

1. ✖ electromagnetic

2. ✔ infrared

3. ✖ visible

4. ✖ microwave

Question Number : 46 Question Id : 231098196 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

The NMR frequency of hydrogen is:

Options :

1. ✖ 52.67 MHz/T

2. ✖ 42.47 MHz/T

3. ✖ 72.57 MHz/T

4. ✔ 42.57 MHz/T

Question Number : 47 Question Id : 231098197 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In a typical 1.5 T magnetic field, the current required by the superconducting coils is of the order of:

Options :

1. ✔ 200 A

2. ✖ 100 A

3. ✖ 50 A

4. ✖ 90 A

Question Number : 48 Question Id : 231098198 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The lead zirconate titanate (PZT) crystals, which are used in ultrasound transducers, are much better than quartz crystals upto a frequency of about:

Options :

1. ✖ 15 KHz

2. ✖ 25 MHz

3. ✔ 15 MHz

4. ✖ 17 MHz

Question Number : 49 Question Id : 231098199 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

A gap separates the axon terminals in a nerve cell from dendrites, and is called as _____.

Options :

1. ✖ soma

2. ✖ axon branch

3. ✔ synapse

4. ✖ cell body

Question Number : 50 Question Id : 231098200 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The process by which the ingestion of material by the cells is done through the plasma membrane is called _____.

Options :

1. ✖ digestion

2. ✔ endocytosis

3. ✖ osmosis

Question Number : 51 Question Id : 231098201 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The _____ speeds up the heart, causes secretion of some glands and inhibits other body functions.

Options :

1. ✓ sympathetic nervous system
2. ✗ parasympathetic nervous system
3. ✗ autonomic nervous system
4. ✗ somatic sensory nervous system

Question Number : 52 Question Id : 231098202 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which of the following functions is NOT carried out by the plasma membrane?

Options :

1. ✗ Energy transduction
2. ✗ Intercellular interactions
3. ✓ Assisting in chromosome segregation
4. ✗ Responding to external stimuli

Question Number : 53 Question Id : 231098203 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

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A differential amplifier, if the two amplifier inputs are connected to the same input source, the resulting common-mode gain should be _____.

Options :

1. ✖ infinity

2. ✖ one

3. ✔ zero

4. ✖ finite

Question Number : 54 Question Id : 231098204 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In the _____ position, the electrocardiogram is recorded from two electrodes connected to left arm and right arm.

Options :

1. ✔ Lead I

2. ✖ Lead II

3. ✖ Lead III

4. ✖ Lead IV

Question Number : 55 Question Id : 231098205 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Einthoven postulated that at any given instant of the cardiac cycle, the frontal plane representation of the electrical axis of the heart is a/an _____.

Options :

1. ✖ one-dimensional vector

3. ✗ three-dimensional vector

4. ✗ four-dimensional vector

Question Number : 56 Question Id : 231098206 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which of the following is NOT a type of glial cell?

Options :

1. ✓ Neuron

2. ✗ Microglia

3. ✗ Astrocytes

4. ✗ Oligodendroglia

Question Number : 57 Question Id : 231098207 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Irregular trembling of the ECG trace without wandering of the baseline occurs in _____.

Options :

1. ✓ older patients

2. ✗ young patients

3. ✗ children

Question Number : 58 Question Id : 231098208 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The sensitivity of an electrocardiograph is typically set at:

Options :

1. ✖ 15 mm/mv

2. ✖ 20 mm/mv

3. ✔ 10 mm/mv

4. ✖ 34 mm/mv

Question Number : 59 Question Id : 231098209 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The human hand model, which mimics the electrostatic discharge of a human touching a device, uses a _____ resistor and a series 100 pF capacitor that limit the current that can be discharged through the human hand.

Options :

1. ✖ 1,800 Ω

2. ✖ 1,560 Ω

3. ✖ 1,000 Ω

4. ✔ 1,500 Ω

Question Number : 60 Question Id : 231098210 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The basic functional unit of the kidney is the _____.

Options :

1. ✖ neuron
2. ✖ glial cell
3. ✔ nephron
4. ✖ nerve cell

Question Number : 61 Question Id : 231098211 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which of the following is NOT an ear ossicle bone?

Options :

1. ✖ Malleus
2. ✖ Incus
3. ✖ Stapes
4. ✔ Femur

Question Number : 62 Question Id : 231098212 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The normal value of the residual lung volume is _____.

Options :

1. ✔ 1,200 ml
2. ✖ 1,300 ml

3. ✖ 1,000 ml

4. ✖ 1,160 ml

Question Number : 63 Question Id : 231098213 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The volume of air breathed in and out of lungs during quiet respiration is called _____.

Options :

1. ✖ inspiratory reserve volume

2. ✔ tidal volume

3. ✖ expiratory reserve volume

4. ✖ residual volume

Question Number : 64 Question Id : 231098214 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The composition of O₂ in dry air is approximately ____.

Options :

1. ✖ 25%

2. ✖ 18%

3. ✔ 21%

4. ✖ 15%

Question Number : 65 Question Id : 231098215 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

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Options :

1. ✖ first heart sound
2. ✖ second heart sound
3. ✖ third heart sound
4. ✔ fourth heart sound

Question Number : 66 Question Id : 231098216 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

The thickness of the plasma membrane is around _____.

Options :

1. ✔ 7-10 nm
2. ✖ 7-15 nm
3. ✖ 17-25 nm
4. ✖ 17-110 nm

Question Number : 67 Question Id : 231098217 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

Fibrinogen is manufactured solely in the _____.

Options :

1. ✖ spleen
2. ✔ liver

3. ✖ stomach

4. ✖ bone marrow

Question Number : 68 Question Id : 231098218 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The primary receptor of hearing is the:

Options :

1. ✖ tympanic membrane

2. ✔ organ of corti

3. ✖ tectorial membrane

4. ✖ hair cells

Question Number : 69 Question Id : 231098219 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Sound travels in air at a speed of approximately_____.

Options :

1. ✖ 370 m/sec

2. ✖ 230 m/sec

3. ✔ 330 m/sec

4. ✖ 380 m/sec

Question Number : 70 Question Id : 231098220 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

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Short sightedness is otherwise called as _____.

Options :

1. ✖ presbyopia
2. ✖ astigmatism
3. ✔ myopia
4. ✖ hypermetropia

Question Number : 71 Question Id : 231098221 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

_____ is a sensation of white vision, and no colour is assigned to it.

Options :

1. ✖ Chromatic
2. ✔ Acromatic
3. ✖ Spectral colour vision
4. ✖ Extra spectral colour vision

Question Number : 72 Question Id : 231098222 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The mean platelet volume is the ratio of the integrated platelet volume to the platelet count, and is expressed in _____.

Options :

1. ✖ microlitre
2. ✖ millilitre

4. ✗ litres

Question Number : 73 Question Id : 231098223 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

The percentage of nitrogen in atmospheric air and alveolar air, respectively, is:

Options :

1. ✗ 79% and 88.5%

2. ✓ 79% and 80.5%

3. ✗ 69% and 88.5%

4. ✗ 77% and 80.5%

Question Number : 74 Question Id : 231098224 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

The outermost layer of the gastrointestinal wall is _____.

Options :

1. ✗ submucosa

2. ✗ mucosa

3. ✓ serosa

4. ✗ circular smooth muscle layer

Question Number : 75 Question Id : 231098225 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

www.prepp.in In the gastrointestinal system, the smooth muscle contraction occurs in response to entry of

ions into the muscle fiber.

Options :

1. ✓ calcium
2. ✗ potassium
3. ✗ sodium
4. ✗ hydrogen

Question Number : 76 Question Id : 231098226 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

_____ is NOT monitored in a coronary care unit.

Options :

1. ✗ Blood pressure
2. ✗ Heart rate
3. ✓ EEG
4. ✗ ECG

Question Number : 77 Question Id : 231098227 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

What is the full form of ICU?

Options :

1. ✗ Intermediate Care Unit

3. ✗ Intermittent Care Unit

4. ✗ Impermeable Coronary Unit

Question Number : 78 Question Id : 231098228 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In diathermy, the subject's body becomes a part of the _____.

Options :

1. ✗ system

2. ✓ electrical circuit

3. ✗ instrument

4. ✗ patient

Question Number : 79 Question Id : 231098229 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

_____ frequencies are used in diathermy.

Options :

1. ✓ High

2. ✗ Low

3. ✗ Zero

Question Number : 80 Question Id : 231098230 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Microwave diathermy uses frequencies in the range _____.

Options :

1. ✖ 30 - 300 MHz

2. ✔ 300 - 30,000 MHz

3. ✖ 30 - 300 KHz

4. ✖ 300 - 30,000 KHz

Question Number : 81 Question Id : 231098231 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

To have maximum benefit, the waste product concentration in the dialysate should be _____.

Options :

1. ✖ high

2. ✖ low

3. ✖ infinity

4. ✔ zero

Question Number : 82 Question Id : 231098232 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

_____ is not a dialyzer type.

Options :

1. ✖ Parallel flow
2. ✖ Hollow - Fiber
3. ✖ Coil type
4. ✔ Perpendicular flow

Question Number : 83 Question Id : 231098233 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The volume of blood within the dialyzer is called _____ volume.

Options :

1. ✔ priming
2. ✖ closed
3. ✖ enclosed
4. ✖ pricing

Question Number : 84 Question Id : 231098234 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The functional value of the *Cuprophane membrane* used with dialyzers depends on:

Options :

1. ✖ blood count
2. ✔ water content

4. ✖ blood thickness

Question Number : 85 Question Id : 231098235 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The safety cut-out ensures that the heaters are switched off if the temperature of the dialysate exceeds _____.

Options :

1. ✖ 30°C

2. ✖ 100°C

3. ✔ 43°C

4. ✖ 60°C

Question Number : 86 Question Id : 231098236 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Another name for heart lung machine is:

Options :

1. ✔ Cardio pulmonary bypass

2. ✖ Cardioverter

3. ✖ Cardio aortic bypass

4. ✖ Cardioneuro bypass

Question Number : 87 Question Id : 231098237 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

www.prepp.in is taken from the body and pumped through the oxygenator in a heart lung machine.

Options :

1. ✓ Venous

2. ✗ Arterial

3. ✗ Thrombus

4. ✗ Embolus

Question Number : 88 Question Id : 231098238 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

One type of oxygenator used in a heart lung machine that has a sponge-like filter is:

Options :

1. ✗ Membrane

2. ✗ Triple

3. ✓ Bubble

4. ✗ Spongy

Question Number : 89 Question Id : 231098239 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Normal blood clotting is restored by administration of protamine to neutralise _____.

Options :

1. ✓ Heparin

2. ✗ Acetone

Question Number : 90 Question Id : 231098240 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

A prosthetic heart valve is a device that is implanted in the heart of a patient with _____ heart disease.

Options :

1. ✖ Vascular

2. ✔ Valvular

3. ✖ Asynchronous

4. ✖ Synchronous

Question Number : 91 Question Id : 231098241 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Prosthetic heart valves can be broadly classified as biological and _____.

Options :

1. ✔ mechanical

2. ✖ electrical

3. ✖ chemical

4. ✖ medical

Question Number : 92 Question Id : 231098242 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

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Cuspid prosthetic valve has one advantage and that is _____.

Options :

1. ✓ durability
2. ✗ high haemolysis
3. ✗ thrombogenicity
4. ✗ high profile

Question Number : 93 Question Id : 231098243 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

An advantage of the tilting disc valve is that it permits central _____ flow.

Options :

1. ✗ lateral
2. ✓ laminar
3. ✗ labelled
4. ✗ lowered

Question Number : 94 Question Id : 231098244 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

_____ valves are obtained from the patient's own pulmonic valve.

Options :

1. ✓ Autograft
2. ✗ Homograft

3. ✖ Heterograft

Question Number : 95 Question Id : 231098245 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

An implantable pacemaker is a miniaturised _____.

Options :

1. ✖ oscillator

2. ✖ transformer

3. ✔ pulse generator

4. ✖ rectifier

Question Number : 96 Question Id : 231098246 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

For implantable pacemaker _____ is NOT a requirement.

Options :

1. ✖ component reliability

2. ✖ being powered for long periods of time

3. ✔ nano circuitry

4. ✖ biocompatibility

Question Number : 97 Question Id : 231098247 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

The implantable pacemaker is placed in the _____ region

Options :

1. ✓ pectoral

2. ✗ cephalic

3. ✗ pelvic

4. ✗ peritoneal

Question Number : 98 Question Id : 231098248 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Implantable pacemakers are mostly _____ controlled units.

Options :

1. ✓ R wave

2. ✗ S wave

3. ✗ T wave

4. ✗ F wave

Question Number : 99 Question Id : 231098249 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Both, atria and ventricles are sensed and stimulated in a/an _____ pacemaker.

Options :

1. ✗ ventricular inhibited

2. ✗ trial triggered

4. ✗ R wave blocked

Question Number : 100 Question Id : 231098250 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In ventricular synchronous demand pacemaker, pulse generator has functions of pacing and _____.

Options :

1. ✗ pulsating

2. ✗ stimulating

3. ✗ plotting

4. ✓ sensing

Question Number : 101 Question Id : 231098251 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

A normal pacemaker will have pulse rates in the range _____ pulses/minute.

Options :

1. ✗ 20-50

2. ✓ 50-150

3. ✗ 90-100

4. ✗ 30-80

Question Number : 102 Question Id : 231098252 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

External pacemakers are used when the heart block is expected to be present

Options :

1. ✓ for a short time
2. ✗ for a long term
3. ✗ now and then
4. ✗ always

Question Number : 103 Question Id : 231098253 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which is NOT a disadvantage of external pacemaker?

Options :

1. ✗ Skin burns
2. ✗ Painful
3. ✗ Uncomfortable contraction of thoracic muscles
4. ✓ Surgical procedure involved to use the pacemaker

Question Number : 104 Question Id : 231098254 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The most common temporary pacemaker used for short-term pacing is _____.

Options :

1. ✗ Fixed rate type
2. ✓ Demand type

4. ✖ Continuous type

Question Number : 105 Question Id : 231098255 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Synchronised mode of defibrillator enables to automatically sense the _____.

Options :

1. ✖ pulse

2. ✔ QRS complex

3. ✖ T wave

4. ✖ P wave

Question Number : 106 Question Id : 231098256 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which of the following is NOT a cause of failure of a defibrillator?

Options :

1. ✖ Operator errors

2. ✖ Inadequate defibrillator maintenance

3. ✖ Defibrillator component failure

4. ✔ Ambience

Question Number : 107 Question Id : 231098257 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

During thoracic defibrillation, the energy stored in the _____ is delivered to the chest.

Options :

1. ✖ inductor

2. ✖ transformer

3. ✔ capacitor

4. ✖ inverter

Question Number : 108 Question Id : 231098258 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

While using a defibrillator, an enormous voltage of approximately _____ is applied to the patient.

Options :

1. ✖ 500 V

2. ✔ 4000 V

3. ✖ 2000 V

4. ✖ 5000 V

Question Number : 109 Question Id : 231098259 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The application of shock pulse during Vulnerable _____ wave is avoided to prevent ventricular fibrillation.

Options :

1. ✖ R

2. ✖ P

3. ✓
4. ✗ Q

Question Number : 110 Question Id : 231098260 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

For a somewhat larger ratio between duration of shock to time constant of delay of exponential waveform, pulse of current appears _____.

Options :

1. ✗ rectangular

2. ✗ circular

3. ✓ trapezoidal

4. ✗ triangular

Question Number : 111 Question Id : 231098261 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Portable defibrillators operate on rechargeable batteries and therefore make use of _____ converters stepping up the voltage to charge capacitor.

Options :

1. ✓ DC-DC

2. ✗ AC-AC

3. ✗ DC-AC

4. ✗ AC-DC

Correct Marks : 2 Wrong Marks : 0.66

_____ is a defibrillator that offers integrated ventricular demand pacemaker function.

Options :

1. ✖ Pacer
2. ✔ Cardioverter
3. ✖ Inverter
4. ✖ Synchroniser

Question Number : 113 Question Id : 231098263 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Medical thermography uses _____ rays.

Options :

1. ✖ ultraviolet
2. ✔ infrared
3. ✖ visible light
4. ✖ X

Question Number : 114 Question Id : 231098264 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Two most important parameters for a thermal sensor are _____ and resolution.

Options :

1. ✖ simplicity

2. ✓ sensitivity

3. ✗ specificity

4. ✗ selectivity

Question Number : 115 Question Id : 231098265 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Thermography indicates _____ process while radiography provides information on anatomical structure.

Options :

1. ✗ physiological

2. ✗ chemical

3. ✓ metabolic

4. ✗ complicated

Question Number : 116 Question Id : 231098266 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Diagnosing _____ cancer is the best known application of thermography.

Options :

1. ✗ blood

2. ✗ bone

3. ✗ lung

4. ✓ breast

Question Number : 117 Question Id : 231098267 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In order to obtain maximum value of NETD (Noise equivalent temperature difference) the _____ with maximum value of integration should be used.

Options :

1. ✖ filter

2. ✖ amplifier

3. ✔ detector

4. ✖ preamplifier

Question Number : 118 Question Id : 231098268 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

If a body has _____ that is less than one, and constant whatever the wavelength, it is called a 'gray body'.

Options :

1. ✖ spontaneity

2. ✖ efficiency

3. ✔ emissivity

4. ✖ selectivity

Question Number : 119 Question Id : 231098269 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In thermography equipment, for normal medical use, _____ degree lens is recommended.

Options :

1. ✖ 5

3. ✖ <1

4. ✖ ≥ 30

Question Number : 120 Question Id : 231098270 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The two photons emitted in PET (positron-emission tomography) are emitted _____ from each other.

Options :

1. ✖ 240°

2. ✔ 180°

3. ✖ 300°

4. ✖ 90°

Question Number : 121 Question Id : 231098271 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

SPECT uses the same radioactive isotope as _____ imaging.

Options :

1. ✖ CT

2. ✖ MR

3. ✔ Nuclear

4. ✖ Infrared

Question Number : 122 Question Id : 231098272 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In PET (positron-emission tomography), after slowing down, the positron interacts with an electron resulting in emission of _____ KeV.

Options :

1. ✖ 221

2. ✔ 511

3. ✖ 820

4. ✖ 432

Question Number : 123 Question Id : 231098273 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

One or more rings of discrete _____ are used to detect the two photons in PET (positron-emission tomography).

Options :

1. ✖ converters

2. ✖ inverters

3. ✔ scintillates

4. ✖ diffusers

Question Number : 124 Question Id : 231098274 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Presently most SPECT systems are based on the _____ approach.

Options :

1. ✖ Opponent camera

2. ✓ Parallel camera

3. ✗ Perfect camera

4. ✗ Resolved camera

Question Number : 125 Question Id : 231098275 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

For SPECT brain imaging to increase sensitivity, the _____ collimators are used.

Options :

1. ✓ fan beam

2. ✗ parallel hole

3. ✗ perpendicular

4. ✗ back projected

Question Number : 126 Question Id : 231098276 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

A threshold of _____ keV is maintained to allow detection of gamma rays that have been scattered within a detector and escaped.

Options :

1. ✗ 511

2. ✓ 200

3. ✗ 320

Question Number : 127 Question Id : 231098277 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Which emission has the least penetrating properties?

Options :

1. ✓ Alpha

2. ✗ Beta

3. ✗ Gamma

4. ✗ Theta

Question Number : 128 Question Id : 231098278 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Beta emissions have an energy range of _____.

Options :

1. ✗ 2-10 MeV

2. ✗ 0-5 keV

3. ✓ 0-3 MeV

4. ✗ 10-20 KeV

Question Number : 129 Question Id : 231098279 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The unit of radioactivity is _____.

Options :

1. ✓ curie

2. ✗ second

3. ✗ volt

4. ✗ ampere

Question Number : 130 Question Id : 231098280 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

A flood source can be used to check ____ of gamma cameras.

Options :

1. ✗ maximum count rate

2. ✗ collimator focus

3. ✓ uniformity

4. ✗ spatial distortion

Question Number : 131 Question Id : 231098281 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

MRI uses the nuclear magnetic resonance properties of the _____ of the hydrogen atom.

Options :

1. ✓ proton

2. ✗ neutron

3. ✖ electron

4. ✖ photon

Question Number : 132 Question Id : 231098282 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In MRI _____ tesla of magnetic field is used.

Options :

1. ✖ 2.5

2. ✔ 1.5

3. ✖ 2.0

4. ✖ 0.5

Question Number : 133 Question Id : 231098283 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In MRI, the hydrogen atoms absorb the ___ waves from coils.

Options :

1. ✖ ultraviolet

2. ✖ infrared

3. ✔ radio

4. ✖ gamma

Question Number : 134 Question Id : 231098284 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

www.prepp.in NOT be used with patients having _____.

Options :

1. ✖ high blood pressure
2. ✔ cardiac pacemakers
3. ✖ aneurysms
4. ✖ tumours

Question Number : 135 Question Id : 231098285 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

CT uses large number of absorption profiles taken at regular _____ intervals around a slice.

Options :

1. ✖ time
2. ✖ magnitude
3. ✔ angular
4. ✖ frequency

Question Number : 136 Question Id : 231098286 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In a CT scan, the CT number of water is:

Options :

1. ✖ -1000
2. ✖ 1000

3. ✓ 0

4. ✗ -500

Question Number : 137 Question Id : 231098287 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

Electron beam computed tomography differs from conventional CT in terms of ____ and method of X ray generation.

Options :

1. ✗ selectivity

2. ✗ comfort

3. ✗ space

4. ✓ speed

Question Number : 138 Question Id : 231098288 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

When combined with _____ triggering electron beam computed tomography can be used for cardiac imaging.

Options :

1. ✗ pulse

2. ✓ ECG

3. ✗ EEG

4. ✗ respiration

Question Number : 139 Question Id : 231098289 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0.66

Options :

1. ✖ Superior

2. ✖ Inferior

3. ✖ Eliminated

4. ✔ Filtered

Question Number : 140 Question Id : 231098290 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Ultrasound has serious restriction in investigation of _____.

Options :

1. ✖ eyes

2. ✖ breasts

3. ✖ thyroid glands

4. ✔ lungs

Question Number : 141 Question Id : 231098291 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The approximate value of acoustic impedance for most organs is _____ $\times 10^5 / \text{g cm}^2 \text{ s}$.

Options :

1. ✖ 42.3

2. ✔ 1.6

3. ✖ 10.8

4. ✖ 10.8

Question Number : 142 Question Id : 231098292 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Lateral resolution of ultrasound imaging is determined by _____ of the ultrasound beam.

Options :

1. ✖ convergence

2. ✔ divergence

3. ✖ thickness

4. ✖ penetration powder

Question Number : 143 Question Id : 231098293 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

10-15 MHz frequencies of ultrasound are used to image:

Options :

1. ✔ eyes

2. ✖ liver

3. ✖ uterus

4. ✖ heart

Question Number : 144 Question Id : 231098294 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

To overcome 'after ringing' effect, ultrasonic transducers must have good _____ response.

Options :

1. ✗ transfer
2. ✓ transient
3. ✗ time
4. ✗ trigger

Question Number : 145 Question Id : 231098295 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

X rays used for medical diagnostics have wavelength of the order of _____ m.

Options :

1. ✗ 10^{10}
2. ✓ 10^{-10}
3. ✗ 10^5
4. ✗ 10^{-5}

Question Number : 146 Question Id : 231098296 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The wavelength of X rays is directly dependent on the _____ with which radiation is produced.

Options :

1. ✗ frequency
2. ✗ speed

3. ✖ accuracy

4. ✔ voltage

Question Number : 147 Question Id : 231098297 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

In x-ray machine, a _____ compensates for mains supply voltage variations

Options :

1. ✖ Voltage Compensator

2. ✖ kV selector

3. ✖ mA control

4. ✔ Rectifier

Question Number : 148 Question Id : 231098298 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

Dental X ray tube employs _____ between anode and cathode.

Options :

1. ✖ amplifier

2. ✖ target

3. ✖ attenuator

4. ✔ grid

Question Number : 149 Question Id : 231098299 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The input screen of an image intensifier converts an X ray image into a _____ image.

Options :

1. ✖ blurred

2. ✔ light

3. ✖ clear

4. ✖ resolved

Question Number : 150 Question Id : 231098300 Question Type : MCQ Option Shuffling : Yes Negative Marks Display Text : 2/3
Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0.66

The introduction of _____ facilitates the image to be obtained directly in digital format.

Options :

1. ✔ selenium

2. ✖ caesium

3. ✖ titanium

4. ✖ platinum