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# **NRSC Technician B**

**Previous Year Paper  
(Electronic Mechanic)  
02 Mar, 2024**





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Indian Space Research Organisation  
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|                  |                                  |
|------------------|----------------------------------|
| Participant ID   |                                  |
| Participant Name |                                  |
| Test Center Name |                                  |
| Test Date        | 02/03/2024                       |
| Test Time        | 12:30 PM - 2:00 PM               |
| Subject          | Technician B Electronic Mechanic |

Section : Technical Domain

Q.1 Which of the following statement is NOT correct regarding shell type transformer?

- Ans ☒ A. It has one magnetic path only
- ☐ B. It is used for low voltage and high output
- ☐ C. The average length of core is less as compared to core type
- ☐ D. Here core encloses the copper (winding) so the cooling is good for core

Question ID : 630680505948  
Option 1 ID : 6306801977314  
Option 2 ID : 6306801977313  
Option 3 ID : 6306801977316  
Option 4 ID : 6306801977315

Status : Not Answered  
Chosen Option : --

Q.2 The process of changing the characteristics such as amplitude, frequency or phase of a wave in accordance with the instantaneous value of some other signal voltage is called

- Ans ☐ A. demodulation
- ☐ B. multiplexer
- ☒ C. modulation
- ☐ D. detecting

Question ID : 630680506195  
Option 1 ID : 6306801978298  
Option 2 ID : 6306801978299  
Option 3 ID : 6306801978297  
Option 4 ID : 6306801978300

Status : Answered  
Chosen Option : C

Q.3 Which of the following PC is shown in the below picture?



- Ans ☒ A. Tablet PC  
☐ B. Workstation  
☐ C. Laptop  
☐ D. Desktop

Question ID : 630680506661  
Option 1 ID : 6306801980152  
Option 2 ID : 6306801980149  
Option 3 ID : 6306801980151  
Option 4 ID : 6306801980150

Status : Answered  
Chosen Option : A

Q.4 '5-pin DIN connector' is the connector of the conventional keyboard having 5 pins i.e. \_\_\_\_\_, used for synchronization and transfer.

- Ans ☐ A. 3 IN, 1 OUT and one ground pin  
☒ B. 2 IN, 2 OUT and one ground pin  
☐ C. 1 IN, 1 OUT and three ground pin  
☐ D. 1 IN, 3 OUT and one ground pin

Question ID : 630680506192  
Option 1 ID : 6306801978286  
Option 2 ID : 6306801978285  
Option 3 ID : 6306801978288  
Option 4 ID : 6306801978287

Status : Answered  
Chosen Option : D

Q.5 Which of the following is the SI unit of capacitance?

- Ans ☐ A. N  
☒ B. Farad  
☐ C. Coulomb  
☐ D.  $\text{Nm}^{-1}$

Question ID : 630680505817  
Option 1 ID : 6306801976794  
Option 2 ID : 6306801976793  
Option 3 ID : 6306801976795  
Option 4 ID : 6306801976796

Status : Answered  
Chosen Option : B

Q.6 According to shell type transformer most of the winding is enclosed by the \_\_\_\_\_, so difficulty is experienced in repairs.

- Ans ☒ A. aluminium  
☒ B. germanium  
☒ C. silicon  
☒ D. iron

Question ID : 630680505951  
Option 1 ID : 6306801977328  
Option 2 ID : 6306801977327  
Option 3 ID : 6306801977326  
Option 4 ID : 6306801977325  
Status : Answered  
Chosen Option : D

Q.7 Which of the following statement is correct regarding the propagation of waves?  
I. The high frequency, high power electric signals generated by the transmitter are fed to the transmitting antenna.  
II. The travel of the electromagnetic waves from the transmitting antenna to the receiving antenna is known as propagation of waves.

- Ans ☒ A. Only II  
☒ B. Both I and II  
☒ C. Only I  
☒ D. Neither I nor II

Question ID : 630680506194  
Option 1 ID : 6306801978294  
Option 2 ID : 6306801978295  
Option 3 ID : 6306801978293  
Option 4 ID : 6306801978296  
Status : Answered  
Chosen Option : B

Q.8 Which of the following Ethernet refers to 10 Base 2 Ethernet and is also called Thinnet?

- Ans ☒ A. Thin Ethernet  
☒ B. Thick Ethernet  
☒ C. Gigabit Ethernet  
☒ D. Fast Ethernet

Question ID : 630680506188  
Option 1 ID : 6306801978270  
Option 2 ID : 6306801978269  
Option 3 ID : 6306801978272  
Option 4 ID : 6306801978271  
Status : Not Answered  
Chosen Option : --

Q.9 Which of the following statement is correct about resistance?

- Ans ☒ A. It depends upon the nature of material
- ☐ B. It is inversely proportional to its length
- ☐ C. It is directly proportional to its area of X-section
- ☐ D. It depends upon pressure

Question ID : 630680504722  
Option 1 ID : 6306801972443  
Option 2 ID : 6306801972441  
Option 3 ID : 6306801972442  
Option 4 ID : 6306801972444  
Status : Answered  
Chosen Option : A

Q.10 The ability of a dielectric material to concentrate electric lines of force between the plates of a capacitor is called \_\_\_\_.

- Ans ☐ A. potential gradient
- ☐ B. breakdown voltage
- ☐ C. dielectric strength
- ☒ D. relative permittivity

Question ID : 630680505939  
Option 1 ID : 6306801977277  
Option 2 ID : 6306801977278  
Option 3 ID : 6306801977279  
Option 4 ID : 6306801977280  
Status : Answered  
Chosen Option : C

Q.11 'HDD header' is the part of a motherboard in a computer. What is the full form of 'HDD'?

- Ans ☐ A. Hand Disk Drive
- ☒ B. Hard Disk Drive
- ☐ C. Hand Debug Drive
- ☐ D. Hard Data Drive

Question ID : 630680506662  
Option 1 ID : 6306801980153  
Option 2 ID : 6306801980154  
Option 3 ID : 6306801980156  
Option 4 ID : 6306801980155  
Status : Answered  
Chosen Option : B

Q.12 Which of the following is NOT a type of primary cell?

- Ans ☒ A. Daniel cell  
☒ B. Lachlanche cell  
☒ C. Lead-acid cell  
☒ D. Voltaic cell

Question ID : 630680505581  
Option 1 ID : 6306801975853  
Option 2 ID : 6306801975854  
Option 3 ID : 6306801975855  
Option 4 ID : 6306801975856  
Status : Answered  
Chosen Option : C

Q.13 Which of the following statement is correct about moving coil instrument?

- I. It is used only on D.C supply.  
II. They have high power consumption.

- Ans ☒ A. Only I  
☒ B. Only II  
☒ C. Both I and II  
☒ D. Neither I nor II

Question ID : 630680505708  
Option 1 ID : 6306801976357  
Option 2 ID : 6306801976358  
Option 3 ID : 6306801976359  
Option 4 ID : 6306801976360  
Status : Answered  
Chosen Option : C

Q.14 STP cables employ a type of shielding, giving the highest immunity to all interference types.  
What does "T" stand for in "STP"?

- Ans ☒ A. Twisted  
☒ B. Triode  
☒ C. Turns  
☒ D. Thermostat

Question ID : 630680506190  
Option 1 ID : 6306801978279  
Option 2 ID : 6306801978280  
Option 3 ID : 6306801978277  
Option 4 ID : 6306801978278  
Status : Answered  
Chosen Option : A

Q.15 Which of the following cable consists of a hollow outer cylindrical conductor which surrounds a single inner conductor, kept separated from it by an insulator?

- Ans ☒ A. Paper Insulated Cable  
☒ B. XLPE Cable  
☒ C. Coaxial Cable  
☒ D. Aerial Bunched Cable

Question ID : 630680506185  
Option 1 ID : 6306801978258  
Option 2 ID : 6306801978260  
Option 3 ID : 6306801978257  
Option 4 ID : 6306801978259  
Status : Answered  
Chosen Option : C

Q.16 Which of the following statement is correct regarding moving iron instrument?  
I. Their power consumption is slightly higher.  
II. These meters can be used on AC as well as on DC.

- Ans ☒ A. Neither I nor II  
☒ B. Only II  
☒ C. Only I  
☒ D. Both I and II

Question ID : 630680505709  
Option 1 ID : 6306801976364  
Option 2 ID : 6306801976362  
Option 3 ID : 6306801976361  
Option 4 ID : 6306801976363  
Status : Answered  
Chosen Option : D

Q.17 Which of the following statement is correct regarding the Step Index Single Mode (SI SM) fiber, a type of optical fiber?  
I. It has uniform refractive indices for both core ( $n_1$ ) and cladding ( $n_2$ ) with  $n_1 > n_2$ .  
II. This type of fiber has very broad bandwidth.

- Ans ☒ A. Both I and II  
☒ B. Only I  
☒ C. Only II  
☒ D. Neither I nor II

Question ID : 630680506261  
Option 1 ID : 6306801978563  
Option 2 ID : 6306801978561  
Option 3 ID : 6306801978562  
Option 4 ID : 6306801978564  
Status : Answered  
Chosen Option : A



Q.18 Which of the statement is correct about current?

I. It is flow of electrons and electrons are the constituents of matter.

II. The actual direction of current is from negative terminal to the positive terminal through that part of the circuit external to the cell.

Ans ☒ A. Both I and II

☐ B. Only II

☐ C. Neither I nor II

☐ D. Only I

Question ID : 630680504724

Option 1 ID : 6306801972451

Option 2 ID : 6306801972450

Option 3 ID : 6306801972452

Option 4 ID : 6306801972449

Status : Answered

Chosen Option : A

Q.19 What is the Boolean expression for the OR gate?

Ans ☐ A.  $Y = A \times B$

☐ B.  $Y = A / B$

☐ C.  $Y = A - B$

☒ D.  $Y = A + B$

Question ID : 630680506059

Option 1 ID : 6306801977757

Option 2 ID : 6306801977760

Option 3 ID : 6306801977758

Option 4 ID : 6306801977759

Status : Answered

Chosen Option : D

Q.20 How much work will be done by an electric energy source with a potential difference of 4kV that delivers a current of 2A for 2 minutes?

Ans ☒ A. 960 kJ

☐ B. 775 kJ

☐ C. 860 kJ

☐ D. 640 kJ

Question ID : 630680504503

Option 1 ID : 6306801971574

Option 2 ID : 6306801971575

Option 3 ID : 6306801971573

Option 4 ID : 6306801971576

Status : Answered

Chosen Option : A

Q.21 The opposition offered by a substance to the flow of electric current is called its \_\_\_\_\_.

- Ans ☒ A. electric power  
☒ B. resistance  
☒ C. voltage  
☒ D. conductance

Question ID : 630680504723  
Option 1 ID : 6306801972448  
Option 2 ID : 6306801972446  
Option 3 ID : 6306801972445  
Option 4 ID : 6306801972447  
Status : Answered  
Chosen Option : B

Q.22 Microcontrollers are \_\_\_\_\_ chip processor, which contains all the basic components of a digital computer like CPU, Read and Write Memory (RAM), Read Only Memory (ROM), etc.

- Ans ☒ A. double  
☒ B. single  
☒ C. triple  
☒ D. quadruple

Question ID : 630680506250  
Option 1 ID : 6306801978518  
Option 2 ID : 6306801978519  
Option 3 ID : 6306801978517  
Option 4 ID : 6306801978520  
Status : Answered  
Chosen Option : B

Q.23 Which of the following is NOT the safety precaution regarding multimeter?

- Ans ☒ A. Avoid touching the bare metal clips or tips of the test probes  
☒ B. When connecting the meter test leads to live circuits work with one hand hanging at your side to lessen the danger of accidental shock  
☒ C. Use the ohmmeter section on a live circuit  
☒ D. Never connect the ammeter section in parallel with a voltage source

Question ID : 630680505710  
Option 1 ID : 6306801976367  
Option 2 ID : 6306801976368  
Option 3 ID : 6306801976366  
Option 4 ID : 6306801976365  
Status : Answered  
Chosen Option : A

Q.24 Which of the following losses is in the category of 'Extrinsic losses' in optical fiber?

- Ans ☒ A. Rayleigh scattering loss  
☒ B. Losses due to imperfection of fiber structure  
☒ C. Losses in quartz glass  
☒ D. Fiber bending losses

Question ID : 630680506262  
Option 1 ID : 6306801978567  
Option 2 ID : 6306801978565  
Option 3 ID : 6306801978566  
Option 4 ID : 6306801978568  
Status : Answered  
Chosen Option : B

Q.25 Which of the following is NOT an example of indicating instrument?

- Ans ☒ A. Voltmeter  
☒ B. Rectifier  
☒ C. Wattmeter  
☒ D. Ammeter

Question ID : 630680505585  
Option 1 ID : 6306801975870  
Option 2 ID : 6306801975871  
Option 3 ID : 6306801975869  
Option 4 ID : 6306801975872  
Status : Answered  
Chosen Option : B

Q.26 Which of the following is correct about primary cell?

- Ans ☒ A. If discharged can be recharged  
☒ B. These are heavy in weight  
☒ C. It can be easily charged by giving D.C supply  
☒ D. Mostly used for intermittent work with low current rate

Question ID : 630680505577  
Option 1 ID : 6306801975837  
Option 2 ID : 6306801975840  
Option 3 ID : 6306801975838  
Option 4 ID : 6306801975839  
Status : Answered  
Chosen Option : D



Q.27 Which of the following statement is correct regarding the proximity sensors?

- I. Proximity sensor refers to a non-contact sensor that works on the principle of inducing changes in an electromagnetic field.  
II. The proximity sensors most commonly used in the manufacturing environment are the inductive proximity switch and the capacitive proximity switch.

Ans ☒ A. Only I  
☒ B. Neither I nor II  
☒ C. Only II  
☒ D. Both I and II

Question ID : 630680506255  
Option 1 ID : 6306801978537  
Option 2 ID : 6306801978540  
Option 3 ID : 6306801978538  
Option 4 ID : 6306801978539  
Status : Answered  
Chosen Option : D

Q.28 Which of the following is an application of electrolysis?

- I. Extractions and purification of metals  
II. Electro-refining of metals

Ans ☒ A. Only I  
☒ B. Only II  
☒ C. Neither I nor II  
☒ D. Both I and II

Question ID : 630680505579  
Option 1 ID : 6306801975845  
Option 2 ID : 6306801975846  
Option 3 ID : 6306801975848  
Option 4 ID : 6306801975847  
Status : Answered  
Chosen Option : D

Q.29 Which of the following statement is correct about lead-acid battery?

- I. In lead acid batteries the high specific gravity indicates the discharging of the cell.  
II. The low specific gravity indicates that cell is in charged condition.

Ans ☒ A. Both I and II  
☒ B. Neither I nor II  
☒ C. Only I  
☒ D. Only II

Question ID : 630680505580  
Option 1 ID : 6306801975851  
Option 2 ID : 6306801975852  
Option 3 ID : 6306801975849  
Option 4 ID : 6306801975850  
Status : Answered  
Chosen Option : A

Q.30 Which of the following statement is correct regarding electrostatic voltmeters?  
I. These instruments are based on the fact that an electric force exists between charged plates or objects.  
II. The deflecting torque is very small for low voltages.

- Ans ☒ A. Only I  
☒ B. Neither I nor II  
☒ C. Only II  
☒ D. Both I and II

Question ID : 630680505812  
Option 1 ID : 6306801976773  
Option 2 ID : 6306801976776  
Option 3 ID : 6306801976774  
Option 4 ID : 6306801976775  
Status : Answered  
Chosen Option : D

Q.31 A 150 V lamp has a hot resistance of 300  $\Omega$ .  
Find the current taken by the lamp.

- Ans ☒ A. 0.5 A  
☒ B. 2.5 A  
☒ C. 1.5 A  
☒ D. 1 A

Question ID : 630680505573  
Option 1 ID : 6306801975823  
Option 2 ID : 6306801975824  
Option 3 ID : 6306801975821  
Option 4 ID : 6306801975822  
Status : Answered  
Chosen Option : A

Q.32 As per the context of 'secondary cell' which of the following statement is correct?  
I. These are light in weight  
II. It can be easily charged by giving D.C supply

- Ans ☒ A. Only I  
☒ B. Only II  
☒ C. Neither I nor II  
☒ D. Both I and II

Question ID : 630680505578  
Option 1 ID : 6306801975841  
Option 2 ID : 6306801975842  
Option 3 ID : 6306801975844  
Option 4 ID : 6306801975843  
Status : Answered  
Chosen Option : B

Q.33 The device that measures the resistance directly is called \_\_\_\_\_.

- Ans ☐ A. wattmeter  
☒ B. ohmmeter  
☐ C. voltmeter  
☐ D. ammeter

Question ID : 630680505586  
Option 1 ID : 6306801975876  
Option 2 ID : 6306801975874  
Option 3 ID : 6306801975875  
Option 4 ID : 6306801975873  
Status : Answered  
Chosen Option : B

Q.34 Which of the following is a structure that is capable of radiating electromagnetic wave or receiving them and is used to convert high frequency current into electromagnetic wave and vice-versa?

- Ans ☐ A. Diode  
☐ B. Receiver  
☒ C. Antenna  
☐ D. Triode

Question ID : 630680506193  
Option 1 ID : 6306801978290  
Option 2 ID : 6306801978291  
Option 3 ID : 6306801978289  
Option 4 ID : 6306801978292  
Status : Answered  
Chosen Option : C

Q.35 Which of the following is an electronic version of the mechanical rotary switch and also called data selector?

- Ans ☐ A. Decoder  
☒ B. Multiplexer  
☐ C. Flip-Flop  
☐ D. Optical Cable

Question ID : 630680506062  
Option 1 ID : 6306801977769  
Option 2 ID : 6306801977770  
Option 3 ID : 6306801977772  
Option 4 ID : 6306801977771  
Status : Answered  
Chosen Option : B

Q.36 Which of the following characteristic is correct regarding electrostatic voltmeters?

I. They are free from hysteresis and eddy current losses as no iron is used in their construction.

II. Their readings are independent of waveform and frequency.

- Ans ☒ A. Only II  
☒ B. Both I and II  
☒ C. Only I  
☒ D. Neither I nor II

Question ID : 630680505814

Option 1 ID : 6306801976782

Option 2 ID : 6306801976783

Option 3 ID : 6306801976781

Option 4 ID : 6306801976784

Status : Answered

Chosen Option : B

Q.37 As per the "Kirchhoff's law" which of the following statements is correct?

I. According to the mesh law : the algebraic sum of currents flowing towards a point is equal to the total current flowing away from it.

II. According to the current law : the algebraic sum of potential drops is equal to the sum of the impressed e.m.f.

- Ans ☒ A. Neither I nor II  
☒ B. Only I  
☒ C. Both I and II  
☒ D. Only II

Question ID : 630680505816

Option 1 ID : 6306801976792

Option 2 ID : 6306801976789

Option 3 ID : 6306801976791

Option 4 ID : 6306801976790

Status : Answered

Chosen Option : A

Q.38 The ability of a resistor to dissipate power as heat without destructive temperature build up is called \_\_\_\_\_ of the resistor.

- Ans ☒ A. capacitor rating  
☒ B. power rating  
☒ C. current rating  
☒ D. resistance rating

Question ID : 630680505943

Option 1 ID : 6306801977296

Option 2 ID : 6306801977295

Option 3 ID : 6306801977294

Option 4 ID : 6306801977293

Status : Answered

Chosen Option : B

Q.39 A relay has coil of many turns of insulated \_\_\_\_\_ wire wound around a piece of iron called the core.

- Ans ☒ A. copper  
☐ B. glass  
☐ C. plastic  
☐ D. aluminum

Question ID : 630680506386  
Option 1 ID : 6306801979058  
Option 2 ID : 6306801979059  
Option 3 ID : 6306801979060  
Option 4 ID : 6306801979057  
Status : Answered  
Chosen Option : A

Q.40 Which of the following statement is correct regarding the FTP and ScTP cables?  
I. FTP and ScTP cables employ only the outer foil or braided-conductor shielding, giving them enhanced immunity against external EMI and RFI.  
II. These cables give no more protection against crosstalk than an equally-constructed UTP cable.

- Ans ☐ A. Neither I nor II  
☐ B. Only I  
☐ C. Only II  
☒ D. Both I and II

Question ID : 630680506191  
Option 1 ID : 6306801978284  
Option 2 ID : 6306801978281  
Option 3 ID : 6306801978282  
Option 4 ID : 6306801978283  
Status : Not Answered  
Chosen Option : --

Q.41 In Windows Operating System, which of the following is a temporary folder that holds files and folders before it is permanently deleted from the storage devices?

- Ans ☐ A. My Documents  
☐ B. Settings  
☐ C. My Computer  
☒ D. Recycle Bin

Question ID : 630680506769  
Option 1 ID : 6306801980582  
Option 2 ID : 6306801980584  
Option 3 ID : 6306801980581  
Option 4 ID : 6306801980583  
Status : Answered  
Chosen Option : D



Q.42 Which of the following statement is correct about silver-zinc batteries?  
I. Its specific capacity is 4 to 5 times greater than that of other types of cells.  
II. The efficiencies of a silver-zinc cell are very low.

- Ans ☒ A. Only II  
☒ B. Only I  
☒ C. Neither I nor II  
☒ D. Both I and II

Question ID : 630680505584  
Option 1 ID : 6306801975866  
Option 2 ID : 6306801975865  
Option 3 ID : 6306801975868  
Option 4 ID : 6306801975867  
Status : Not Answered  
Chosen Option : --

Q.43 The transformer consists of laminated core of special alloy steel of \_\_\_\_\_ resistance and \_\_\_\_\_ hysteresis loss to reduce eddy current losses.

- Ans ☒ A. high, high  
☒ B. low, low  
☒ C. low, high  
☒ D. high, low

Question ID : 630680505950  
Option 1 ID : 6306801977324  
Option 2 ID : 6306801977323  
Option 3 ID : 6306801977322  
Option 4 ID : 6306801977321  
Status : Answered  
Chosen Option : B

Q.44 In the optical fiber, most of the incoming light is contained within the boundaries of the medium (glass or plastic) due to which phenomenon?

- Ans ☒ A. Magnetic flux  
☒ B. Interference  
☒ C. Total Internal Reflection  
☒ D. Diffraction

Question ID : 630680506258  
Option 1 ID : 6306801978551  
Option 2 ID : 6306801978549  
Option 3 ID : 6306801978552  
Option 4 ID : 6306801978550  
Status : Answered  
Chosen Option : C

Q.45 Which of the following statement is correct regarding the active and passive sensors?  
I. An active sensor is a modulator and can therefore deliver more energy to the next stage than it draws from the measurand.  
II. Passive sensors are also known as self-generating sensors.

- Ans ☒ A. Neither I nor II  
☒ B. Both I and II  
☒ C. Only I  
☒ D. Only II

Question ID : 630680506254  
Option 1 ID : 6306801978536  
Option 2 ID : 6306801978535  
Option 3 ID : 6306801978533  
Option 4 ID : 6306801978534  
Status : Answered  
Chosen Option : B

Q.46 Which of the following statement is NOT correct about the magnetic effect of electric current?

- Ans ☒ A. The magnetic lines of force around the conductor will be either clockwise or anticlockwise  
☒ B. The magnetic field near the conductor is stronger and becomes weaker  
☒ C. The shape of the magnetic field does not depends upon the shape of the conductor  
☒ D. The greater the current through the conductor, the stronger the magnetic field and vice-versa

Question ID : 630680505944  
Option 1 ID : 6306801977298  
Option 2 ID : 6306801977297  
Option 3 ID : 6306801977299  
Option 4 ID : 6306801977300  
Status : Answered  
Chosen Option : A

Q.47 Which of the following statement is correct regarding carbon composition resistors?  
I. It is made with a mixture of finely ground carbon, insulating filler and a resin binder.  
II. These are available in power ratings ranging from 1/8 to 2W.

- Ans ☒ A. Only I  
☒ B. Only II  
☒ C. Neither I nor II  
☒ D. Both I and II

Question ID : 630680505941  
Option 1 ID : 6306801977285  
Option 2 ID : 6306801977286  
Option 3 ID : 6306801977288  
Option 4 ID : 6306801977287  
Status : Answered  
Chosen Option : D

Q.48 The basic function of an inverter is to convert the \_\_\_\_\_ to enable us to run generally \_\_\_\_\_ appliances.

- Ans ☒ A. AC power into DC power, AC  
☒ B. DC power into AC power, DC  
☒ C. DC power into AC power, AC  
☒ D. AC power into DC power, DC

Question ID : 630680506263  
Option 1 ID : 6306801978571  
Option 2 ID : 6306801978570  
Option 3 ID : 6306801978569  
Option 4 ID : 6306801978572

Status : Answered  
Chosen Option : C

Q.49 'Potentiometers' are classified into which type of transducer?

- Ans ☒ A. Temperature Transducers  
☒ B. Velocity Transducers  
☒ C. Position Transducers  
☒ D. Pressure Transducers

Question ID : 630680506252  
Option 1 ID : 6306801978525  
Option 2 ID : 6306801978527  
Option 3 ID : 6306801978528  
Option 4 ID : 6306801978526

Status : Answered  
Chosen Option : C

Q.50 Which of the following statement is correct about instantaneous power of the circuit?

- I. It is simply the product of the instantaneous voltage and instantaneous current.  
II. It is always expressed in watts.

- Ans ☒ A. Both I and II  
☒ B. Only I  
☒ C. Only II  
☒ D. Neither I nor II

Question ID : 630680505576  
Option 1 ID : 6306801975835  
Option 2 ID : 6306801975833  
Option 3 ID : 6306801975834  
Option 4 ID : 6306801975836

Status : Answered  
Chosen Option : A

Q.51 Regarding the thermistors, the molecular structure of a semiconductor is such that \_\_\_\_\_ its temperature \_\_\_\_\_ its resistance.

- Ans ☒ A. decreasing, reduces  
☒ B. increasing, increases  
☒ C. increasing, makes no effect on  
☒ D. increasing, reduces

Question ID : 630680506256  
Option 1 ID : 6306801978543  
Option 2 ID : 6306801978541  
Option 3 ID : 6306801978544  
Option 4 ID : 6306801978542  
Status : Answered  
Chosen Option : D

Q.52 \_\_\_\_\_ is that phenomenon whereby a change in the current in a conductor induces an e.m.f. in the conductor itself.

- Ans ☒ A. Self-induction  
☒ B. Conductance  
☒ C. Convection  
☒ D. Mutual induction

Question ID : 630680505940  
Option 1 ID : 6306801977282  
Option 2 ID : 6306801977283  
Option 3 ID : 6306801977284  
Option 4 ID : 6306801977281  
Status : Answered  
Chosen Option : D

Q.53 Which of the following statement is correct about series generator?  
I. The magnetic saturation occurs so that the increased current causes only a very small increase in flux.  
II. The increase of armature current causes an increase of armature reaction which reduces the flux, therefore generated e.m.f.

- Ans ☒ A. Neither I nor II  
☒ B. Both I and II  
☒ C. Only II  
☒ D. Only I

Question ID : 630680505811  
Option 1 ID : 6306801976772  
Option 2 ID : 6306801976771  
Option 3 ID : 6306801976770  
Option 4 ID : 6306801976769  
Status : Not Answered  
Chosen Option : --

Q.54 Which of the following statement is correct about auto-transformer?  
I. The principle of operation is same as that of two winding transformer.  
II. It is used where only small variation in the supply is required.

- Ans ☒ A. Only II  
☒ B. Neither I nor II  
☒ C. Both I and II  
☒ D. Only I

Question ID : 630680505953  
Option 1 ID : 6306801977334  
Option 2 ID : 6306801977336  
Option 3 ID : 6306801977335  
Option 4 ID : 6306801977333  
Status : Answered  
Chosen Option : C

Q.55 Which of the following gate is shown in the below picture?



- Ans ☒ A. NOT Gate  
☒ B. OR Gate  
☒ C. NAND Gate  
☒ D. AND Gate

Question ID : 630680506058  
Option 1 ID : 6306801977755  
Option 2 ID : 6306801977753  
Option 3 ID : 6306801977756  
Option 4 ID : 6306801977754  
Status : Answered  
Chosen Option : D

Q.56 Data is transmitted with a signal and it can take any form either digital signal or analog signal. Analog signals are \_\_\_\_\_ where digital signals are \_\_\_\_\_.

- Ans ☒ A. discrete, continuous  
☒ B. continuous, discrete  
☒ C. discrete, also discrete  
☒ D. continuous, also continuous

Question ID : 630680505954  
Option 1 ID : 6306801977340  
Option 2 ID : 6306801977337  
Option 3 ID : 6306801977339  
Option 4 ID : 6306801977338  
Status : Answered  
Chosen Option : B

Q.57 Which of the following statement is correct regarding the Computers?

I. Computers accept data as input.

II. Computer performs operations on the data and generates the desired output to the user.

Ans ☒ A. Both I and II

☐ B. Neither I nor II

☐ C. Only II

☐ D. Only I

Question ID : 630680506472

Option 1 ID : 6306801979403

Option 2 ID : 6306801979404

Option 3 ID : 6306801979402

Option 4 ID : 6306801979401

Status : Answered

Chosen Option : A

Q.58 Generally, the optical fiber consists of two concentric glass (silica) cylinders. The inner cylinder is called the core, while the outer is known as \_\_\_\_\_.

Ans ☒ A. cladding

☐ B. thermostat

☐ C. transducer

☐ D. splicing

Question ID : 630680506260

Option 1 ID : 6306801978558

Option 2 ID : 6306801978560

Option 3 ID : 6306801978559

Option 4 ID : 6306801978557

Status : Answered

Chosen Option : A

Q.59 The transformer works on the principle of \_\_\_\_\_.

Ans ☐ A. dynamic induction

☐ B. self-induction

☒ C. mutual induction

☐ D. static induction

Question ID : 630680505945

Option 1 ID : 6306801977303

Option 2 ID : 6306801977301

Option 3 ID : 6306801977302

Option 4 ID : 6306801977304

Status : Answered

Chosen Option : C

Q.60 Which of the following device is NOT an input device of a computer?

- Ans ☐ A. Joy-stick  
☒ B. Printer  
☐ C. Keyboard  
☐ D. Mouse

Question ID : 630680506771  
Option 1 ID : 6306801980591  
Option 2 ID : 6306801980592  
Option 3 ID : 6306801980589  
Option 4 ID : 6306801980590  
Status : Answered  
Chosen Option : B

Q.61 As per the "ohm's law", the current is \_\_\_\_\_.  
I. directly proportional to the voltage applied  
II. inversely proportional to the resistance of the circuit

- Ans ☒ A. Both I and II  
☐ B. Neither I nor II  
☐ C. Only I  
☐ D. Only II

Question ID : 630680505815  
Option 1 ID : 6306801976787  
Option 2 ID : 6306801976788  
Option 3 ID : 6306801976785  
Option 4 ID : 6306801976786  
Status : Answered  
Chosen Option : A

Q.62 For a particular antenna dimensions, \_\_\_\_\_ the frequency, the \_\_\_\_\_ would be the gain and there would be greater effective radiated power by the antenna.

- Ans ☐ A. higher, minor  
☐ B. lower, minor  
☐ C. lower, greater  
☒ D. higher, greater

Question ID : 630680506197  
Option 1 ID : 6306801978306  
Option 2 ID : 6306801978308  
Option 3 ID : 6306801978307  
Option 4 ID : 6306801978305  
Status : Answered  
Chosen Option : C

Q.63 Which of the following statement is correct regarding core type transformer?

- I. It has one magnetic path only.  
II. Average length of core is more as compared to shell type.

Ans ☒ A. Only II  
☒ B. Neither I nor II  
☒ C. Only I  
☒ D. Both I and II

Question ID : 630680505947  
Option 1 ID : 6306801977310  
Option 2 ID : 6306801977312  
Option 3 ID : 6306801977309  
Option 4 ID : 6306801977311  
Status : Answered  
Chosen Option : D

Q.64 Which of the following are combinational circuits used to identify the combinations of binary code presented at their inputs?

Ans ☒ A. Voltmeters  
☒ B. Shift Registers  
☒ C. Multiplexers  
☒ D. Decoders

Question ID : 630680506063  
Option 1 ID : 6306801977776  
Option 2 ID : 6306801977775  
Option 3 ID : 6306801977773  
Option 4 ID : 6306801977774  
Status : Answered  
Chosen Option : C

Q.65 As per the Faraday's laws of electrolysis which of the following statement is correct?  
I. First law: The amount of the material deposited or liberated at an electrode is inversely proportional to the quantity of electricity which has passed through it.  
II. Second law: The amount of masses, liberated of different substances, when same amount of current is passed through the different substances for the same time proportional to their chemical equivalent weight.

Ans ☒ A. Only I  
☒ B. Neither I nor II  
☒ C. Only II  
☒ D. Both I and II

Question ID : 630680505574  
Option 1 ID : 6306801975825  
Option 2 ID : 6306801975828  
Option 3 ID : 6306801975826  
Option 4 ID : 6306801975827  
Status : Not Answered  
Chosen Option : --



Q.66 A desktop is a part of 'GUI' and a place which holds icons, files, folders etc. What does 'U' stands for in 'GUI'?

- Ans
- ☒ A. Utility
  - ☒ B. Update
  - ☒ C. User
  - ☒ D. Upload

Question ID : 630680506668  
Option 1 ID : 6306801980178  
Option 2 ID : 6306801980180  
Option 3 ID : 6306801980177  
Option 4 ID : 6306801980179  
Status : Not Answered  
Chosen Option : --

Q.67 Clock speed is the speed at which a microprocessor executes instructions. Clock speeds are measured in \_\_\_\_\_.

- Ans
- ☒ A. Megahertz or Gigahertz
  - ☒ B. Weber
  - ☒ C. Watt
  - ☒ D. Maxwell

Question ID : 630680506473  
Option 1 ID : 6306801979408  
Option 2 ID : 6306801979406  
Option 3 ID : 6306801979405  
Option 4 ID : 6306801979407  
Status : Answered  
Chosen Option : D

Q.68 The LVDT is high-resolution contact transducers. What does "L" stand for in "LVDT"?

- Ans
- ☒ A. Lagging
  - ☒ B. Live
  - ☒ C. Linear
  - ☒ D. Load

Question ID : 630680506253  
Option 1 ID : 6306801978531  
Option 2 ID : 6306801978532  
Option 3 ID : 6306801978530  
Option 4 ID : 6306801978529  
Status : Answered  
Chosen Option : C

Q.69 In the optical fiber, the diameter of the core can be in the range of 2-50 \_\_\_\_\_.

- Ans ☒ A. cm  
☒ B. mm  
☒ C.  $\mu\text{m}$   
☒ D. m

Question ID : 630680506471  
Option 1 ID : 6306801979400  
Option 2 ID : 6306801979398  
Option 3 ID : 6306801979399  
Option 4 ID : 6306801979397  
Status : Answered  
Chosen Option : C

Q.70 A logic gate is a circuit with one or more input voltages but \_\_\_\_\_ output voltage.

- Ans ☒ A. only one  
☒ B. two  
☒ C. three  
☒ D. four

Question ID : 630680505955  
Option 1 ID : 6306801977341  
Option 2 ID : 6306801977342  
Option 3 ID : 6306801977343  
Option 4 ID : 6306801977344  
Status : Answered  
Chosen Option : A

Q.71 Which of the following is the type of secondary cell?

- Ans ☒ A. Lachlanche cell  
☒ B. Edison cell  
☒ C. Voltaic cell  
☒ D. Dry cell

Question ID : 630680505582  
Option 1 ID : 6306801975860  
Option 2 ID : 6306801975859  
Option 3 ID : 6306801975858  
Option 4 ID : 6306801975857  
Status : Not Answered  
Chosen Option : --

Q.72 \_\_\_\_\_ is a logic circuit comprising an AND gate and a XOR gate, which is used for the binary addition of two 1-bit binary numbers.

- Ans
- ☒ A. A full adder
  - ☒ B. A binary adder-subtractor
  - ☒ C. A half adder
  - ☒ D. A binary adder

Question ID : 630680506061  
Option 1 ID : 6306801977767  
Option 2 ID : 6306801977766  
Option 3 ID : 6306801977768  
Option 4 ID : 6306801977765

Status : Answered  
Chosen Option : C

Q.73 The SI unit of current is \_\_\_\_\_.

- Ans
- ☒ A. ohm
  - ☒ B. volt
  - ☒ C. coulomb
  - ☒ D. ampere

Question ID : 630680505572  
Option 1 ID : 6306801975820  
Option 2 ID : 6306801975819  
Option 3 ID : 6306801975817  
Option 4 ID : 6306801975818

Status : Answered  
Chosen Option : D

Q.74 If  $f_m$  = Frequency of modulating wave,  $\Delta f$  = Maximum frequency deviation, then what is the Modulation Index of the frequency modulated signal  $m_f$ ?

- Ans
- ☒ A.  $m_f = \frac{(\Delta f)^2}{f_m}$
  - ☒ B.  $m_f = \frac{\Delta f}{f_m}$
  - ☒ C.  $m_f = \frac{\sqrt{\Delta f}}{f_m}$
  - ☒ D.  $m_f = \frac{f_m}{\Delta f}$

Question ID : 630680506249  
Option 1 ID : 6306801978515  
Option 2 ID : 6306801978514  
Option 3 ID : 6306801978513  
Option 4 ID : 6306801978516

Status : Answered  
Chosen Option : B

Q.75 Which of the following statement is correct regarding the System Software?  
I. It is set of programs which are used to run the system.  
II. One important system software is Operating System (OS).

- Ans ☒ A. Neither I nor II  
☒ B. Only I  
☒ C. Both I and II  
☒ D. Only II

Question ID : 630680506665  
Option 1 ID : 6306801980168  
Option 2 ID : 6306801980165  
Option 3 ID : 6306801980167  
Option 4 ID : 6306801980166  
Status : Answered  
Chosen Option : C

Q.76 Optical fibers have \_\_\_\_\_ weight and \_\_\_\_\_ size as comparable to electrical cables.

- Ans ☒ A. heavier, bigger  
☒ B. lighter, smaller  
☒ C. heavier, smaller  
☒ D. lighter, bigger

Question ID : 630680506186  
Option 1 ID : 6306801978264  
Option 2 ID : 6306801978261  
Option 3 ID : 6306801978262  
Option 4 ID : 6306801978263  
Status : Answered  
Chosen Option : A

Q.77 PIC Microcontroller Architecture was developed for supporting PDP computers to control its peripheral devices. What does "I" stand for in "PIC"?

- Ans ☒ A. Interlude  
☒ B. Interface  
☒ C. Insulation  
☒ D. Identification

Question ID : 630680506251  
Option 1 ID : 6306801978523  
Option 2 ID : 6306801978522  
Option 3 ID : 6306801978524  
Option 4 ID : 6306801978521  
Status : Answered  
Chosen Option : B

Q.78 Copper losses are due to the \_\_\_\_\_ of the transformer windings.

- Ans ☒ A. density  
☒ B. frequency  
☒ C. resistance  
☒ D. oil

Question ID : 630680505952  
Option 1 ID : 6306801977330  
Option 2 ID : 6306801977331  
Option 3 ID : 6306801977329  
Option 4 ID : 6306801977332  
Status : Answered  
Chosen Option : C

Q.79 What is the maximum length of coaxial cable in a Thick Ethernet segment?

- Ans ☒ A. 125 meters  
☒ B. 500 meters  
☒ C. 250 meters  
☒ D. 1000 meters

Question ID : 630680506187  
Option 1 ID : 6306801978265  
Option 2 ID : 6306801978267  
Option 3 ID : 6306801978266  
Option 4 ID : 6306801978268  
Status : Not Answered  
Chosen Option : --

Q.80 If the amplitude of the carrier wave is changed according to the instantaneous value of the modulating wave, then what is this modulation called?

- Ans ☒ A. Phase Modulation  
☒ B. Amplitude Modulation  
☒ C. Wavelength Modulation  
☒ D. Frequency Modulation

Question ID : 630680506199  
Option 1 ID : 6306801978314  
Option 2 ID : 6306801978316  
Option 3 ID : 6306801978315  
Option 4 ID : 6306801978313  
Status : Answered  
Chosen Option : B