



भारतीय अंतरिक्ष अनुसंधान संगठन, अंतरिक्ष विभाग
Indian Space Research Organisation, Department of Space

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Test Center Name	iON Digital Zone iDZ Kuberpur
Test Date	18/04/2024
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Subject	Technician BElectronics MechanicsTechnician PowerElectronics SystemsMechanic Consumer Electronic AppliancesMechanic Industrial Electronics

Section : Technician BElectronics Mechanics

Q.1

- The Shielding around conductor:
- (A) offers mechanical strength to the wire.
 - (B)attenuates current and electrical fields.
 - (C) reduces the space occupancy.
 - (D) has no importance with respect to electric fields.

- Ans
- A. a
 - B. b
 - C. c
 - D. d

Question ID : 8496368398
Option 1 ID : 84963633553
Option 2 ID : 84963633554
Option 3 ID : 84963633555
Option 4 ID : 84963633556
Status : Answered

Chosen Option : A

Q.2

Inductors can be classified based on

- (A) Core material
- (B) Core Design
- (C) Usage
- (D) All the above

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368417
Option 1 ID : 84963633629
Option 2 ID : 84963633630
Option 3 ID : 84963633631
Option 4 ID : 84963633632
Status : Answered
Chosen Option : D

Q.3

The X axis of DSO is divided into ten divisions. The time scale is set to 10 milliseconds/div. The frequency value with single cycle that can be viewed in DSO will be

- (A) 1 Hz
- (B) 10Hz
- (C) 100Hz
- (D) 0.1Hz

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368390
Option 1 ID : 84963633521
Option 2 ID : 84963633522
Option 3 ID : 84963633523
Option 4 ID : 84963633524
Status : Answered
Chosen Option : B

Q.4

If T is the time period for a chopper circuit and D is its duty cycle, then the chopping frequency is:

$$T = T_{on} + T_{off}$$

- (A) T_{on}/D
- (B) T_{off}/D
- (C) D/T_{off}
- (D) D/T_{on}

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368453

Option 1 ID : 84963633773

Option 2 ID : 84963633774

Option 3 ID : 84963633775

Option 4 ID : 84963633776

Status : Answered

Chosen Option : D

Q.5

Air Ionizers are essential for controlling the ESD when relative humidity levels go ____

- (A) Below 30 %
- (B) Above 60 %
- (C) High (90 %)
- (D) None of the above

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368438

Option 1 ID : 84963633713

Option 2 ID : 84963633714

Option 3 ID : 84963633715

Option 4 ID : 84963633716

Status : Answered

Chosen Option : B

Q.6

The controlling parameter in IGBT is the:

- (A) I_g
- (B) V_{ge}
- (C) I_c
- (D) V_{ce}

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368448
Option 1 ID : 84963633753
Option 2 ID : 84963633754
Option 3 ID : 84963633755
Option 4 ID : 84963633756
Status : Answered
Chosen Option : D

Q.7

A load rated 12V, 24W is connected through a MOSFET switch.
Calculate the dissipation in the MOSFET switch when the switch is ON and channel ON resistance of the MOSFET is 0.1Ω

- (A) 1.6W
- (B) 0.8W
- (C) 0.4W
- (D) 0.2W

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368447
Option 1 ID : 84963633749
Option 2 ID : 84963633750
Option 3 ID : 84963633751
Option 4 ID : 84963633752
Status : Not Answered
Chosen Option : -

Q.8

Which one of the following is not an Operating System?

- (A) Windows
- (B) Linux
- (C) Oracle
- (D) DOS

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368403
Option 1 ID : 84963633573
Option 2 ID : 84963633574
Option 3 ID : 84963633575
Option 4 ID : 84963633576
Status : Answered
Chosen Option : C

Q.9

_____ is a counter in which output of the last flip flop is inverted and fed to the input of the first flip flop.

- (A) Ring counter
- (B) Johnson counter
- (C) Ripple counter
- (D) Decade counter

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368427
Option 1 ID : 84963633669
Option 2 ID : 84963633670
Option 3 ID : 84963633671
Option 4 ID : 84963633672
Status : Answered
Chosen Option : C

Q.10

What is the purpose of twisting the pairs of cables together in a UTP cable?

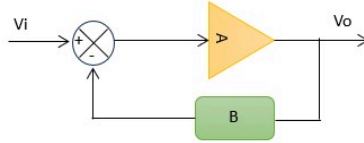
- (A) To reduce attenuation
- (B) to reduce cross talk
- (C) to reduce electro-magnetic interference.
- (D) to reduce noise.

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368405
Option 1 ID : 84963633581
Option 2 ID : 84963633582
Option 3 ID : 84963633583
Option 4 ID : 84963633584
Status : Answered
Chosen Option : C

Q.11

Oscillator circuit shown below



The voltage gain of the circuit to work as oscillator circuit is

- (A) $\frac{A}{1-AB}$
- (B) $\frac{A}{B}$
- (C) $\frac{1}{1-AB}$
- (D) $\frac{A}{1+AB}$

Ans A. a

B. b

C. c

D. d

Question ID : 8496368394

Option 1 ID : 84963633537

Option 2 ID : 84963633538

Option 3 ID : 84963633539

Option 4 ID : 84963633540

Status : Not Answered

Chosen Option : -

Q.12

What does a class of PCB determine?

- (A) Reliability of Design
- (B) Quality level of PCB
- (C) Quantity of Design
- (D) (A) & (B)

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368433

Option 1 ID : 84963633693

Option 2 ID : 84963633694

Option 3 ID : 84963633695

Option 4 ID : 84963633696

Status : Answered

Chosen Option : D

Q.13

Which among the following happens in a low power factor?

- (A) Large kVA rating of the equipment
- (B) Greater conductor size
- (C) Reduced handling capacity of the system
- (D) All of the above

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368465

Option 1 ID : 84963633821

Option 2 ID : 84963633822

Option 3 ID : 84963633823

Option 4 ID : 84963633824

Status : Answered

Chosen Option : D

Q.14

Which layer isolates gate terminal of MOSFET?

- (A) Silica
- (B) Silicon oxide
- (C) Silicon di-oxide
- (D) Silicon

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368446

Option 1 ID : 84963633745

Option 2 ID : 84963633746

Option 3 ID : 84963633747

Option 4 ID : 84963633748

Status : Answered

Chosen Option : D

Q.15

Convert decimal number 97 to hexadecimal

- (A) 59H
- (B) 62H
- (C) 61H
- (D) 67H

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368422
Option 1 ID : 84963633649
Option 2 ID : 84963633650
Option 3 ID : 84963633651
Option 4 ID : 84963633652
Status : Not Answered
Chosen Option : -

Q.16

In 8051 microcontrollers interrupt service routines occupy _____ bytes of space

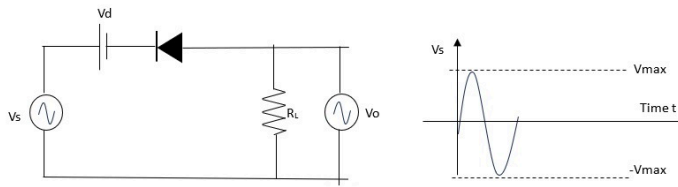
- (A) 2
- (B) 4
- (C) 8
- (D) 16

Ans A. a
 B. b
 C. c
 D. d

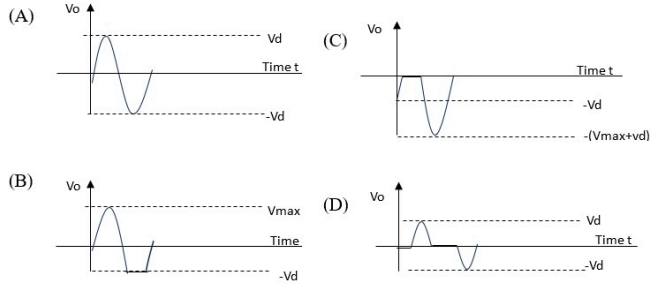
Question ID : 8496368432
Option 1 ID : 84963633689
Option 2 ID : 84963633690
Option 3 ID : 84963633691
Option 4 ID : 84963633692
Status : Answered
Chosen Option : C

Q.17

The V_o of the circuit for V_s and V_d is



Where $V_{max} > V_d$



- Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368395

Option 1 ID : 84963633541

Option 2 ID : 84963633542

Option 3 ID : 84963633543

Option 4 ID : 84963633544

Status : Answered

Chosen Option : A

Q.18

How many conducting layers are present in Single-sided PCB?

- (A) One
- (B) Two
- (C) Three
- (D) Four

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368434

Option 1 ID : 84963633697

Option 2 ID : 84963633698

Option 3 ID : 84963633699

Option 4 ID : 84963633700

Status : Answered

Chosen Option : A

Q.19

If a 500kVA, 200Hz transformer is operated at 50Hz, its kVA rating will be _____.

- (A) 2000kVA
- (B) 125kVA
- (C) 250kVA
- (D) 1000kVA

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368469
Option 1 ID : 84963633837
Option 2 ID : 84963633838
Option 3 ID : 84963633839
Option 4 ID : 84963633840
Status : Answered
Chosen Option : C

Q.20

The disks stores information in

- (A) Blocks
- (B) Tables
- (C) Tracks and sectors
- (D) Rows and Tables

Ans  A. a
 B. b
 C. c
 D. d

Question ID : **8496368407**
Option 1 ID : **84963633589**
Option 2 ID : **84963633590**
Option 3 ID : **84963633591**
Option 4 ID : **84963633592**
Status : **Answered**
Chosen Option : **B**

Q.21

Which of the following BJT region does amplification?

- (A) Active
- (B) Cut-off
- (C) Saturation
- (D) Both (B) and (C)

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368445

Option 1 ID : 84963633741

Option 2 ID : 84963633742

Option 3 ID : 84963633743

Option 4 ID : 84963633744

Status : Answered

Chosen Option : D

Q.22

Which of the following statement is true?

- (A) Thyristor is a four-layer, three junction devices.
- (B) Thyristor is a unidirectional device.
- (C) Thyristor has Gate, Anode and Cathode terminals.
- (D) All of the above.

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368451
Option 1 ID : 84963633765
Option 2 ID : 84963633766
Option 3 ID : 84963633767
Option 4 ID : 84963633768
Status : Answered
Chosen Option : B

Q.23

Convert decimal number 374 into BCD

- (A) 000101110110
- (B) 001101110100
- (C) 001001100011
- (D) 010010000101

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368423
Option 1 ID : 84963633653
Option 2 ID : 84963633654
Option 3 ID : 84963633655
Option 4 ID : 84963633656
Status : Not Answered
Chosen Option : -

Q.24

Disadvantage of SMD compared to Through Hole technology in electronic circuits is ____.

- (A) Higher bond strength
- (B) Higher density
- (C) Lower bond strength
- (D) Lower density

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368440

Option 1 ID : 84963633721

Option 2 ID : 84963633722

Option 3 ID : 84963633723

Option 4 ID : 84963633724

Status : Answered

Chosen Option : B

Q.25

Spreads through software programs such as Microsoft Word and Excel and infects documents and data files.

- (A) Directory virus
- (B) Macro Virus
- (C) Boot Virus
- (D) Cluster virus

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368408
Option 1 ID : 84963633593
Option 2 ID : 84963633594
Option 3 ID : 84963633595
Option 4 ID : 84963633596
Status : Answered
Chosen Option : A

Q.26

SISO shift registers are used for _____ application

- (A) Delay
- (B) Multiplexer
- (C) Demultiplexer
- (D) None of the above

Ans A. a

B. b

C. c

D. d

Question ID : 8496368429

Option 1 ID : 84963633677

Option 2 ID : 84963633678

Option 3 ID : 84963633679

Option 4 ID : 84963633680

Status : Answered

Chosen Option : C

Q.27

Choose the correct one for a simple Resistance circuit

- (A) Input Voltage (20 V), Resistance (4 ohms), Current (5 Amps)
- (B) Input Voltage (40 V), Resistance (10 ohms), Current (4 amps)
- (C) Input Voltage (10 V), Resistance (20 ohms), Current (0.5 amps)
- (D) All the above

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368416

Option 1 ID : 84963633625

Option 2 ID : 84963633626

Option 3 ID : 84963633627

Option 4 ID : 84963633628

Status : Answered

Chosen Option : D

Q.28

In a crimping tool, ratchet mechanism is employed for:

- (A) squeezing the wire terminal to provide a firm grip on inserted wire.
- (B) Stripping the insulation sleeve.
- (C) Cut the wire for the required length.
- (D) None of the above.

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368400

Option 1 ID : 84963633561

Option 2 ID : 84963633562

Option 3 ID : 84963633563

Option 4 ID : 84963633564

Status : Answered

Chosen Option : A

Q.29

Which of the following statements are correct with respect to conductor material?

- I. Conductors have negative temperature co-efficient with respect to temperature
 - II. Conductors have positive temperature co-efficient with respect to temperature
 - III. Free electrons are not available in valency band
 - IV. Free electrons are available in valency band
- (A) I, IV
(B) I & III
(C) II & III
(D) II & IV

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368466

Option 1 ID : 84963633825

Option 2 ID : 84963633826

Option 3 ID : 84963633827

Option 4 ID : 84963633828

Status : Not Answered

Chosen Option : -

Q.30

You should choose Sleep option when

- (A) When computer gets hanged frequently. Let it sleep for some time
- (B) The computer is tired after working for the whole day
- (C) You finish working and going to bed
- (D) You are leaving for a very short time and want to resume you work shortly

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368404

Option 1 ID : 84963633577

Option 2 ID : 84963633578

Option 3 ID : 84963633579

Option 4 ID : 84963633580

Status : Answered

Chosen Option : C

Q.31

_____ timers are there in 8051 microcontrollers

- (A) 2 numbers of 8-bit
- (B) 1 number of 16-bit
- (C) 1 number of 8-bit
- (D) 2 numbers of 16-bit

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368430
Option 1 ID : 84963633681
Option 2 ID : 84963633682
Option 3 ID : 84963633683
Option 4 ID : 84963633684
Status : Answered
Chosen Option : A

Q.32

Which of the followings is used in receiving side of Fibre Optic Communications?

- (A) Laser
- (B) LED
- (C) Photo Detector
- (D) PIN diode

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368443
Option 1 ID : 84963633733
Option 2 ID : 84963633734
Option 3 ID : 84963633735
Option 4 ID : 84963633736
Status : Answered
Chosen Option : D

Q.33

Peak factor for the pure sine wave signals is

- (A) 0.637
- (B) 0.707
- (C) 1.11
- (D) 1.414

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368468
Option 1 ID : 84963633833
Option 2 ID : 84963633834
Option 3 ID : 84963633835
Option 4 ID : 84963633836
Status : Answered
Chosen Option : B

Q.34

In PCB conformal coating is done

- (A) To protect it from Moisture and chemical pollutants
- (B) To provide mechanical strength
- (C) To produce better looking product
- (D) To protect against increasing voltage

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368435

Option 1 ID : 84963633701

Option 2 ID : 84963633702

Option 3 ID : 84963633703

Option 4 ID : 84963633704

Status : Answered

Chosen Option : A

Q.35

Offline and line-interactive UPS are often referred as:

- (A) Standby and Online systems respectively
- (B) In offline system, always inverter output is connected to the load.
- (C) Compare to offline, line-interactive system is faster than Offline for the restoration of power.
- (D) Compare to offline, line-interactive system is slower than Offline for the restoration of power.

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368411

Option 1 ID : 84963633605

Option 2 ID : 84963633606

Option 3 ID : 84963633607

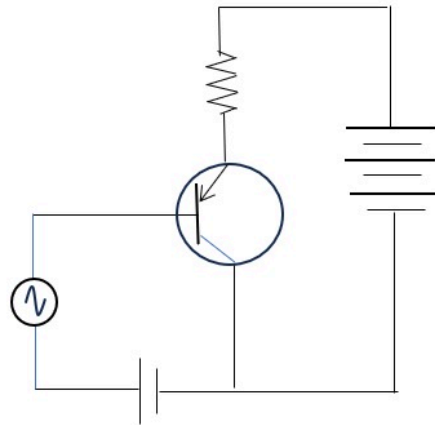
Option 4 ID : 84963633608

Status : Not Answered

Chosen Option : -

Q.36

The Configuration drawing denotes the circuit is in



- (A) CC configuration
- (B) CE Configuration
- (C) CB Configuration
- (D) None of the above

Ans A. a

B. b

C. c

D. d

Question ID : 8496368392

Option 1 ID : 84963633529

Option 2 ID : 84963633530

Option 3 ID : 84963633531

Option 4 ID : 84963633532

Status : Answered

Chosen Option : B

Q.37 नीचे दर्शाए गया प्रतीक जो पैकिंग केस में चिह्नित है.....सूचित करता है:



- (A) नंगे हाथ से न छुए अंदर जोखिम पदार्थ है।
- (B) पैकेज को खोलते वक्त हाथ का प्रयोग न करें। अंदर के वस्तुओं को मुक्त करने के लिए हथोड़े से पैकेज को तोड़ें।
- (C) पैकेज भारी है। पैकेज को हैंडल करने के लिए मशीन का प्रयोग करें।
- (D) नंगे हाथ से पैकेज के अंदर के वस्तुओं को न छुए। अंदर की वस्तुएं इलेक्ट्रोस्टैटिक आस्राव से प्रवण है।

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368396

Option 1 ID : 84963633545

Option 2 ID : 84963633546

Option 3 ID : 84963633547

Option 4 ID : 84963633548

Status : Not Answered

Chosen Option : -

Q.38

If the capacity of a battery is 1000mAH, it can supply 1A current for:

- (A) 30 minutes
- (B) 240 minutes
- (C) 60 minutes
- (D) 120 minutes

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368449

Option 1 ID : 84963633757

Option 2 ID : 84963633758

Option 3 ID : 84963633759

Option 4 ID : 84963633760

Status : Answered

Chosen Option : D

Q.39

PGA stands for _____

- (A) Programmable Gate Array
- (B) Ball grid array
- (C) Power Gate Array
- (D) Pulsed Gate Array

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368442

Option 1 ID : 84963633729

Option 2 ID : 84963633730

Option 3 ID : 84963633731

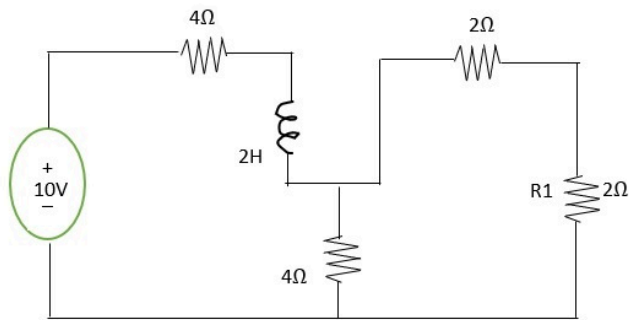
Option 4 ID : 84963633732

Status : Answered

Chosen Option : A

Q.40

With reference to following circuit, voltage drop across R1 resistance ___ volts.



- (A) 5volts
- (B) 10volts
- (C) 7.5volts
- (D) 2.5volts

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368464

Option 1 ID : 84963633817

Option 2 ID : 84963633818

Option 3 ID : 84963633819

Option 4 ID : 84963633820

Status : Answered

Chosen Option : D

Q.41

Pt100 is

- (A) A Thermocouple device consisting of two dissimilar conductors or semiconductors
- (B) A resistance temperature detector with a typical resistance of $100\ \Omega$ at 25°C
- (C) A resistance temperature detector with a typical resistance of $100\ \Omega$ at 0°C
- (D) An actuator operates in the range of 0°C to 100°C

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368462
Option 1 ID : 84963633809
Option 2 ID : 84963633810
Option 3 ID : 84963633811
Option 4 ID : 84963633812
Status : Answered
Chosen Option : D

Q.42

In a summing amplifier, which of the cases are true

- (A) Output > Sum of inputs
- (B) Output < Sum of inputs
- (C) Output = Sum of inputs
- (D) All the above

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368415

Option 1 ID : 84963633621

Option 2 ID : 84963633622

Option 3 ID : 84963633623

Option 4 ID : 84963633624

Status : Answered

Chosen Option : A

Q.43

Low charging static materials are used to avoid ESD risk because:

- (A) they have low tendency to generate an electric charge due to friction.
- (B) they do not build-up excessive charge.
- (C) they have high tendency to generate an electric charge due to friction.
- (D) None of the above.

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368397

Option 1 ID : 84963633549

Option 2 ID : 84963633550

Option 3 ID : 84963633551

Option 4 ID : 84963633552

Status : Answered

Chosen Option : C

Q.44

If an AC voltage of 230 V & 50 Hz frequency is applied to a series Resistance of 2 ohms and 0.2 H inductance, calculate the impedance.

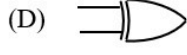
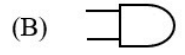
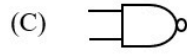
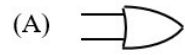
- (A) 46 K ohms
- (B) 46 ohms
- (C) 62.8 ohms
- (D) 628 ohms

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368467
Option 1 ID : 84963633829
Option 2 ID : 84963633830
Option 3 ID : 84963633831
Option 4 ID : 84963633832
Status : Not Answered
Chosen Option : -

Q.45

In a half adder carry is implemented using



Ans A. a

B. b

C. c

D. d

Question ID : 8496368424

Option 1 ID : 84963633657

Option 2 ID : 84963633658

Option 3 ID : 84963633659

Option 4 ID : 84963633660

Status : Answered

Chosen Option : A

Q.46

When would you use Ctrl+Alt+Delete keyboard shortcut

- (A) When a program is unresponsive
- (B) When you first boot up your computer
- (C) When you want to delete a file
- (D) When a program first opens

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368409

Option 1 ID : 84963633597

Option 2 ID : 84963633598

Option 3 ID : 84963633599

Option 4 ID : 84963633600

Status : Answered

Chosen Option : C

Q.47

Intersection of a row and a column in MS-Excel worksheet is known as

- (A) Row
- (B) Column
- (C) Cell
- (D) Tab

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368406

Option 1 ID : 84963633585

Option 2 ID : 84963633586

Option 3 ID : 84963633587

Option 4 ID : 84963633588

Status : Answered

Chosen Option : B

Q.48

The purpose of flux in electronic components soldering is _____.

- (A) Removes oxidation
- (B) Lubrication
- (C) Temperature control
- (D) Clean the soldered joint

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368436

Option 1 ID : 84963633705

Option 2 ID : 84963633706

Option 3 ID : 84963633707

Option 4 ID : 84963633708

Status : Answered

Chosen Option : D

Q.49

For CE Configuration the relationship between α and β is

(where $\alpha = \frac{I_C}{I_E}$ and $\beta = \frac{I_C}{I_B}$, I_C is collector current, I_E is emitter current and I_B is base current)

(A) $\alpha = \frac{1}{1+\beta}$

(B) $\alpha = \frac{1}{1+\beta}$

(C) $\alpha = \frac{1}{\beta}$

(D) $\alpha = \frac{1}{1+\frac{1}{\beta}}$

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368393

Option 1 ID : 84963633533

Option 2 ID : 84963633534

Option 3 ID : 84963633535

Option 4 ID : 84963633536

Status : Not Answered

Chosen Option : -

Q.50

When a PN junction diode is reverse biased, the resistance between its terminals will be

- (A) A few ohms
- (B) A few tens of ohms
- (C) Zero
- (D) Very high

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368455

Option 1 ID : 84963633781

Option 2 ID : 84963633782

Option 3 ID : 84963633783

Option 4 ID : 84963633784

Status : Answered

Chosen Option : C

Q.51

A type of electrical battery which can be charged, discharged into a load and then recharged many times is called

- (A) Rechargeable battery
- (B) Secondary battery
- (C) Primary battery
- (D) Both a and b

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368450

Option 1 ID : 84963633761

Option 2 ID : 84963633762

Option 3 ID : 84963633763

Option 4 ID : 84963633764

Status : Answered

Chosen Option : D

Q.52

The major difference between biasing of LED and Photodiode for their operation:

- (A) LED is forward biased whereas photodiode is reverse voltage
- (B) LED is reverse biased whereas photodiode is forward biased
- (C) LED and photodiode are forward biased
- (D) LED and photodiode function independent of bias voltage

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368460

Option 1 ID : 84963633801

Option 2 ID : 84963633802

Option 3 ID : 84963633803

Option 4 ID : 84963633804

Status : Answered

Chosen Option : C

Q.53

The capacitance of varactor diode can be controlled by

- (A) Applying varying forward voltage
- (B) Applying varying reverse voltage
- (C) Varying frequency in the circuit
- (D) Limiting the supply current

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368457
Option 1 ID : 84963633789
Option 2 ID : 84963633790
Option 3 ID : 84963633791
Option 4 ID : 84963633792
Status : Answered
Chosen Option : B

Q.54

Bing Search engine is owned by

- (A) Amazon
- (B) Microsoft
- (C) Google
- (D) Yahoo

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368402
Option 1 ID : 84963633569
Option 2 ID : 84963633570
Option 3 ID : 84963633571
Option 4 ID : 84963633572
Status : Answered
Chosen Option : C

Q.55

In Hall effect

- (A) The voltage generated due to magnetic flux across a semi-conductor plate with a movement of current through it.
- (B) Electron emission due to light incidence on photo-emissive surface.
- (C) The change in voltage generated in a magnetic field can be measured using its corresponding value of vibration or velocity.
- (D) The inductance changes of an alternating current excited coil due to the change in the magnetic circuit.

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368461

Option 1 ID : 84963633805

Option 2 ID : 84963633806

Option 3 ID : 84963633807

Option 4 ID : 84963633808

Status : Not Answered

Chosen Option : -

Q.56

Cellulose sponge in solder station is used to _____.

- (A) Temperature control of solder station
- (B) Clean the components
- (C) Clean the solder tip
- (D) Clean the PCB

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368437

Option 1 ID : 84963633709

Option 2 ID : 84963633710

Option 3 ID : 84963633711

Option 4 ID : 84963633712

Status : Answered

Chosen Option : D

Q.57

CMOS input levels are given by

- (A) $V_{IL} = 0$; $V_{IH} = 0.7V_{DD}$
- (B) $V_{IL} = 0.3V_{DD}$; $V_{IH} = 0.7V_{DD}$
- (C) $V_{IL} = 0.5V_{DD}$; $V_{IH} = 0.5V_{DD}$
- (D) $V_{IL} = 0.3V_{DD}$; $V_{IH} = V_{DD}$

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368421

Option 1 ID : 84963633645

Option 2 ID : 84963633646

Option 3 ID : 84963633647

Option 4 ID : 84963633648

Status : Not Answered

Chosen Option : -

Q.58

In a BCD to Decimal decoder _____ no of inputs and _____ no of outputs will be there

- (A) 4,8
- (B) 4,10
- (C) 3,8
- (D) 3,10

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368428

Option 1 ID : 84963633673

Option 2 ID : 84963633674

Option 3 ID : 84963633675

Option 4 ID : 84963633676

Status : Answered

Chosen Option : A

Q.59

The 'dark current' of a photodiode is the current that will exist...

- (A) with forwarding biasing and no applied illumination
- (B) with no applied illumination
- (C) with applied illumination having diode reverse biased.
- (D) with forwarding biasing and applied illumination

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368459
Option 1 ID : 84963633797
Option 2 ID : 84963633798
Option 3 ID : 84963633799
Option 4 ID : 84963633800
Status : Answered
Chosen Option : A

Q.60

D-Latch is S-R Latch along with

- (A) Single Enable and Dual Input
- (B) Multiple input without Enable
- (C) Single input and Multiple Enable
- (D) Single input and Single Enable

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368419

Option 1 ID : 84963633637

Option 2 ID : 84963633638

Option 3 ID : 84963633639

Option 4 ID : 84963633640

Status : Answered

Chosen Option : C

Q.61

Sequence of steps for conversion of Analog signals to Digital

- (A) Sampling, Quantization & Encoding
- (B) Quantization, Encoding & Sampling
- (C) Encoding, Sampling & Quantization
- (D) None of above

Ans  A. a

 B. b

 C. c

 D. d

Question ID : **8496368413**

Option 1 ID : **84963633613**

Option 2 ID : **84963633614**

Option 3 ID : **84963633615**

Option 4 ID : **84963633616**

Status : **Answered**

Chosen Option : **A**

Q.62

ESD lab coats have shielding characteristics for:

- (A) Safeguarding user from the emissions of sensitive electronics.
- (B) Safeguarding sensitive electronics from the charges generated by the user cloth.
- (C) reducing the accumulation of charges even if grounding is not connected.
- (D) None of the above.

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368399
Option 1 ID : 84963633557
Option 2 ID : 84963633558
Option 3 ID : 84963633559
Option 4 ID : 84963633560
Status : Answered
Chosen Option : C

Q.63

Ceramic capacitors marked as 0.04 and 103 indicates the value of capacitors as

- (A) 0.04 η F and 10 η F respectively.
- (B) 0.04 pF and 10 η F respectively.
- (C) 0.04 μ F and 10 η F respectively.
- (D) 0.04 η F and 10 μ F respectively.

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368401

Option 1 ID : 84963633565

Option 2 ID : 84963633566

Option 3 ID : 84963633567

Option 4 ID : 84963633568

Status : Answered

Chosen Option : C

Q.64

Which of the following is false regarding microprocessor and microcontroller?

- (A) Microcontrollers can have ADC and timers within the chip
- (B) Microprocessor will have ports within the chip
- (C) Microcontrollers will have timers and interrupts inbuilt into the chip
- (D) Microprocessors can have ADCs built into the chip

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368431
Option 1 ID : 84963633685
Option 2 ID : 84963633686
Option 3 ID : 84963633687
Option 4 ID : 84963633688

Status : Answered

Chosen Option : C

Q.65

Ripple rejection indicates the

- (A) ratio of ripple rejection between the input to output and expressed in decibels
- (B) ratio of ripple rejection between the input to output and expressed in volts
- (C) ratio of ripple rejection between the output to input and expressed in decibels
- (D) ratio of ripple rejection between the output to input and expressed in mA

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368458

Option 1 ID : 84963633793

Option 2 ID : 84963633794

Option 3 ID : 84963633795

Option 4 ID : 84963633796

Status : Answered

Chosen Option : B

Q.66

In CRT, the ray deflection is done with

- (A) Single magnetic coil
- (B) Double magnetic coil
- (C) Single Electric field
- (D) None of the above

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368391
Option 1 ID : 84963633525
Option 2 ID : 84963633526
Option 3 ID : 84963633527
Option 4 ID : 84963633528
Status : Answered
Chosen Option : B

Q.67

In Microsoft Word document, what is the blank space outside the printing area on a page?

- (A) Clipart
- (B) Margins
- (C) Header
- (D) Footer

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368410
Option 1 ID : 84963633601
Option 2 ID : 84963633602
Option 3 ID : 84963633603
Option 4 ID : 84963633604
Status : Answered
Chosen Option : A

Q.68

In Fibre optic communication, refractive index of core is _____
than the refractive index of cladding.

- (A) Lower
- (B) Equal
- (C) Higher
- (D) None of the above

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368444
Option 1 ID : 84963633737
Option 2 ID : 84963633738
Option 3 ID : 84963633739
Option 4 ID : 84963633740
Status : Answered
Chosen Option : A

Q.69

Incorrect statement for a Master-Slave Flip-Flop

- (A) Clock is inverted for Slave
- (B) Output of Master is Inverted and given as input to Slave
- (C) Master is inactive when Slave is inactive
- (D) Output of Slave is Inverted and given as input to Master

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368420
Option 1 ID : 84963633641
Option 2 ID : 84963633642
Option 3 ID : 84963633643
Option 4 ID : 84963633644
Status : Answered
Chosen Option : D

Q.70

LVDT is not

- (A) sensitive to magnetic field
- (B) feasible for very long-range measurements
- (C) affected by temperature changes
- (D) suitable for applications where minimum mechanical friction is required

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368463
Option 1 ID : 84963633813
Option 2 ID : 84963633814
Option 3 ID : 84963633815
Option 4 ID : 84963633816
Status : Answered
Chosen Option : B

Q.71

Which is correct combination for Ideal Op-Amp Characteristics

- (A) Infinite (Input Impedance, Open loop gain, Bandwidth) & Zero Output impedance
- (B) Infinite (Input Impedance, Open loop gain) & Zero (Output impedance, Bandwidth)
- (C) Zero (Input Impedance, Open loop gain) & Infinite (Output impedance, Bandwidth)
- (D) None of the above

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368414

Option 1 ID : 84963633617

Option 2 ID : 84963633618

Option 3 ID : 84963633619

Option 4 ID : 84963633620

Status : Answered

Chosen Option : A

Q.72

If we have to select a signal among many signals _____ has to be used

- (A) Encoder
- (B) Decoder
- (C) Multiplexer
- (D) Demultiplexer

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368425
Option 1 ID : 84963633661
Option 2 ID : 84963633662
Option 3 ID : 84963633663
Option 4 ID : 84963633664
Status : Answered
Chosen Option : D

Q.73

Choose the correct one for Types of radio wave propagation

- (A) Sky wave, Space wave & Ground wave
- (B) Sky Wave & Space Wave
- (C) Ground Wave & Wired type
- (D) None of the above

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368412

Option 1 ID : 84963633609

Option 2 ID : 84963633610

Option 3 ID : 84963633611

Option 4 ID : 84963633612

Status : **Not Answered**

Chosen Option : -

Q.74

A chopper circuit is fed from an input voltage of 20V, delivers a power of 16W. If the chopper efficiency is 80%, then find the value of input current

- (A) 0.64A
- (B) 1A
- (C) 0.8A
- (D) 1.25A

Ans A. a

B. b

C. c

D. d

Question ID : 8496368454

Option 1 ID : 84963633777

Option 2 ID : 84963633778

Option 3 ID : 84963633779

Option 4 ID : 84963633780

Status : Answered

Chosen Option : D

Q.75

Unwanted / unintended electrical path between two conductors / traces is called as _____.

- (A) Solder bridge
- (B) Solder ball
- (C) Solder fillet
- (D) Solder bump

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368441

Option 1 ID : 84963633725

Option 2 ID : 84963633726

Option 3 ID : 84963633727

Option 4 ID : 84963633728

Status : Not Answered

Chosen Option : -

Q.76

DIP components are widely used in electronics circuits because of

- (A) High Density
- (B) Resistance to Vibration
- (C) Miniaturization
- (D) All the above

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368439
Option 1 ID : 84963633717
Option 2 ID : 84963633718
Option 3 ID : 84963633719
Option 4 ID : 84963633720
Status : Answered
Chosen Option : D

Q.77

When three flip flops are used to make a counter, the highest decimal number that can be obtained for display is

- (A) 4
- (B) 5
- (C) 6
- (D) 7

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368426
Option 1 ID : 84963633665
Option 2 ID : 84963633666
Option 3 ID : 84963633667
Option 4 ID : 84963633668
Status : Answered
Chosen Option : A

Q.78

The Duty ratio of a DC-DC converter is:

- (A) $T_{on}/(T_{on}+T_{off})$
- (B) $T_{off}/(T_{on}+T_{off})$
- (C) T_{on}/T_{off}
- (D) T_{off}/T_{on}

Ans  A. a
 B. b
 C. c
 D. d

Question ID : 8496368452
Option 1 ID : 84963633769
Option 2 ID : 84963633770
Option 3 ID : 84963633771
Option 4 ID : 84963633772
Status : Answered
Chosen Option : C

Q.79

Sequence of steps for Operation of EM relays

- (A) Control signal, Energise coil, Movement of Electrical contact
- (B) Movement of Electrical contact, Energise coil, Control signal
- (C) Control signal, Movement of Electrical contact, Energise coil
- (D) None of above

Ans  A. a

 B. b

 C. c

 D. d

Question ID : 8496368418

Option 1 ID : 84963633633

Option 2 ID : 84963633634

Option 3 ID : 84963633635

Option 4 ID : 84963633636

Status : Answered

Chosen Option : A

Q.80

In an EM relay, diode is connected across coil

- (A) For biasing the relay coil
- (B) To supplement current to relay coil
- (C) To suppress surge when coil is de-energised
- (D) To share current

Ans A. a
 B. b
 C. c
 D. d

Question ID : 8496368456

Option 1 ID : 84963633785

Option 2 ID : 84963633786

Option 3 ID : 84963633787

Option 4 ID : 84963633788

Status : Answered

Chosen Option : C