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Test Time:	2:30 PM - 4:30 PM
Subject:	JUNIOR ENGINEER S & T

Section : Discipline

Q.1 What is meant by voltage resonance?

- Ans
- ☒ 1. It is a gain magnification.
 - ☒ 2. It is a parallel resonance.
 - ☒ 3. It is a series resonance.
 - ☒ 4. It is a current magnification.

Question ID : 5013735331

Status : Answered

Chosen Option : 2

Q.2 What is the drain current (I_d) for an ideal MOSFET with gate to source voltage (V_{gs}) = 0 V?

- Ans
- ☒ 1. $I_d = 0$
 - ☒ 2. $I_d = 0.1 \text{ mA}$
 - ☒ 3. $I_d = \infty$
 - ☒ 4. $I_d = 1 \text{ mA}$

Question ID : 5013735276

Status : Answered

Chosen Option : 1

Q.3 What is the value of V_{cb} (Potential difference between the base and the collector) in a PNP transistor in the saturation region?

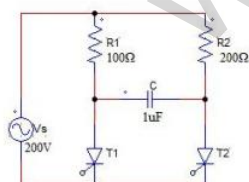
- Ans
- ☒ 1. -0.2 V
 - ☒ 2. 0.5 V
 - ☒ 3. -0.5 V
 - ☒ 4. 0.2 V

Question ID : 5013735272

Status : Answered

Chosen Option : 4

Q.4 Find the initial thyristor current at the time of turn-on of the Silicon-Controlled Rectifier (SCR).



- Ans
- ☒ 1. 3 A
 - ☒ 2. 5 A
 - ☒ 3. 10 A
 - ☒ 4. 2 A

Question ID : 5013735322

Status : Answered

Chosen Option : 3

Q.5 Which of the following electrolytes is used in an Edison cell?

- Ans
- ☒ 1. HCl
 - ☒ 2. NaOH
 - ☒ 3. KOH

Question ID : 5013735279

Status : Answered

Chosen Option : 4

☒ 4. HNO_3

Q.6 Which of the following is true about a complementary metal-oxide semiconductor (CMOS)?

- Ans ☒ 1. It has high packing density.
☒ 2. It has high power dissipation.
☒ 3. It has high complexity.
☒ 4. It has high noise margin.

Question ID : 5013735298

Status : Answered

Chosen Option : 1

Q.7 Which of the following devices has least switching loss and also opted for high frequency applications?

- Ans ☒ 1. Silicon-Controlled Rectifier (SCR)
☒ 2. Bipolar Junction Transistor (BJT)
☒ 3. Metal-Oxide-Semiconductor Field-Effect Transistor (MOSFET)
☒ 4. Insulated-Gate Bipolar Transistor (IGBT)

Question ID : 5013735274

Status : Answered

Chosen Option : 3

Q.8 What is the time delay (t_d) of an 8-bit serial in/serial out shift register with a clock frequency of 4 MHz?

- Ans ☒ 1. $0.2 \mu\text{s}$
☒ 2. $8 \mu\text{s}$
☒ 3. $4 \mu\text{s}$
☒ 4. $2 \mu\text{s}$

Question ID : 5013735343

Status : Answered

Chosen Option : 4

Q.9 What is the current flowing if a 25 C charge passes a point in 0.5 s?

- Ans ☒ 1. 12.5 A
☒ 2. 0.5 A
☒ 3. 50 A
☒ 4. 25 A

Question ID : 5013735277

Status : Answered

Chosen Option : 3

Q.10 Which of the following instructions is mnemonic?

- Ans ☒ 1. ADD
☒ 2. AAA
☒ 3. ADC
☒ 4. ADD and ADC

Question ID : 5013735293

Status : Answered

Chosen Option : 4

Q.11 How many transistors does the Intel 8085 microprocessor have?

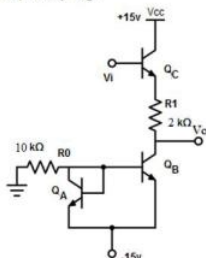
- Ans ☒ 1. 6,500
☒ 2. 8,500
☒ 3. 29,000
☒ 4. 9,000

Question ID : 5013735296

Status : Answered

Chosen Option : 3

Q.12 Determine the value of $V_i - V_o$ for the level shifter with the transistors Q_A and Q_B which are in the form of a current mirror. (Where, V_i - Input Voltage, V_o - Output voltage) Consider that the silicon transistors are identical and the value of β is very large.



Question ID : 5013735319

Status : Answered

Chosen Option : 3

- Ans
- ☒ 1. 0.7 V
 - ☒ 2. 1.43 V
 - ☒ 3. 3.56 V
 - ☒ 4. 15 V

Q.13 Which of the following is a diamagnetic material?

- Ans
- ☒ 1. Cobalt
 - ☒ 2. Silver
 - ☒ 3. Germanium
 - ☒ 4. Silicon

Question ID : 5013735326

Status : Answered

Chosen Option : 1

Q.14 If a monostable multivibrator has Resistor $R = 240 \text{ k}\Omega$ and a time delay $T = 1,200 \text{ ms}$, then what is the value of Capacitance C ?

- Ans
- ☒ 1. 2.5 μF
 - ☒ 2. 4.5 μF
 - ☒ 3. 3.5 μF
 - ☒ 4. 5.5 μF

Question ID : 5013735315

Status : Answered

Chosen Option : 1

Q.15 How many transistors are used in a current repeater circuit if the reference current $I_{\text{ref}} = 0.5 \text{ mA}$, Collector current $I_c = 0.4 \text{ mA}$ and the Feedback factor $\beta = 160$?

- Ans
- ☒ 1. 36
 - ☒ 2. 39
 - ☒ 3. 38
 - ☒ 4. 37

Question ID : 5013735317

Status : Answered

Chosen Option : 1

Q.16 Which of the following is true about a pure inductive circuit?

- Ans
- ☒ 1. The current is in phase with the voltage.
 - ☒ 2. The current lags behind the voltage by 90 degrees.
 - ☒ 3. The current leads the voltage by 90 degrees.
 - ☒ 4. The current can lead or lag by 90 degrees.

Question ID : 5013735330

Status : Answered

Chosen Option : 2

Q.17 If the modulating frequency (f_m) of a carrier wave varies between 120 Hz and 125 kHz, what is its bandwidth?

- Ans
- ☒ 1. 249.76 kHz
 - ☒ 2. 149.76 kHz
 - ☒ 3. 350 kHz
 - ☒ 4. 125 kHz

Question ID : 5013735287

Status : Answered

Chosen Option : 1

Q.18 If the half cycle surge current rating of an Silicon-Controlled Rectifier (SCR) is 1000 A for a 50 Hz supply, then what is the one cycle surge current?

- Ans
- ☒ 1. 803.21 A
 - ☒ 2. 707.11 A
 - ☒ 3. 1000 A
 - ☒ 4. 500 A

Question ID : 5013735320

Status : Answered

Chosen Option : 3

Q.19 The individual transistor current gain in a Darlington circuit is 100. Find the overall current gain?

- Ans
- ☒ 1. 10000
 - ☒ 2. 1000
 - ☒ 3. 10

Question ID : 5013735318

Status : Answered

Chosen Option : 1

☒ 4. 100

Q.20 How many layers are there in an internet protocol stack?

- Ans ☒ 1. 4
☒ 2. 7
☒ 3. 6
☒ 4. 5

Question ID : 5013735286

Status : Answered

Chosen Option : 1

Q.21 If the operating frequency of an astable multivibrator is 150 Hz and the discharge time is 3 minutes, then what is the duty cycle of the circuit?

- Ans ☒ 1. 55%
☒ 2. 45%
☒ 3. 50%
☒ 4. 40%

Question ID : 5013735316

Status : Answered

Chosen Option : 4

Q.22 What is the value of the Solar Constant?

- Ans ☒ 1. 1257 W/m²
☒ 2. 1447 W/m²
☒ 3. 1537 W/m²
☒ 4. 1367 W/m²

Question ID : 5013735309

Status : Answered

Chosen Option : 3

Q.23 What is an inverse transducer?

It is a device which converts an:

- Ans ☒ 1. electrical quantity to mechanical quantity
☒ 2. electrical energy to thermal energy
☒ 3. electrical energy to mechanical quantity
☒ 4. electrical energy to light energy

Question ID : 5013735283

Status : Answered

Chosen Option : 1

Q.24 What is the duration of execution of the loop in a microprocessor if we consider 'T' is the period of clock at which the microprocessor is running and 'n' is the number of clock cycles?

- Ans ☒ 1. $n+T$
☒ 2. $\frac{n}{T}$
☒ 3. $\frac{T}{n}$
☒ 4. $n * T$

Question ID : 5013735294

Status : Answered

Chosen Option : 4

Q.25 Which of the following layers provides delimiting and synchronisation of data exchange?

- Ans ☒ 1. Session layer
☒ 2. Application layer
☒ 3. Transport layer
☒ 4. Presentation layer

Question ID : 5013735285

Status : Answered

Chosen Option : 2

Q.26 Which of the following terms is relevant to analogue communication?

- Ans ☒ 1. Continuous signal with varying amplitude (or) phase
☒ 2. Suitable for long distance communication

Question ID : 5013735344

Status : Answered

Chosen Option : 2

☒ 3. Numerical coded signal

☒ 4. Discrete signal

Q.27 What is the value directivity when the antenna radiates over half a sphere?

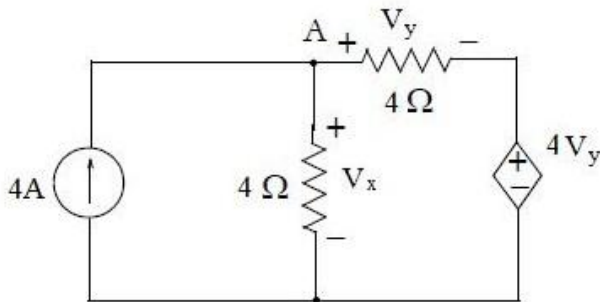
- Ans ☒ 1. 3
☒ 2. 4
☒ 3. 5
☒ 4. 2

Question ID : 5013735336

Status : Answered

Chosen Option : 2

Q.28 Find the value of the voltage V_x for the given circuit.



- Ans ☒ 1. 8 V
☒ 2. 1 V
☒ 3. 4 V
☒ 4. 5 V

Question ID : 5013735284

Status : Answered

Chosen Option : 1

Q.29 How long is an IPv4 address?

- Ans ☒ 1. 64 bits
☒ 2. 32 bits
☒ 3. 128 bits
☒ 4. 32 bytes

Question ID : 5013735312

Status : Answered

Chosen Option : 1

Q.30 Which of the following is the pinch-off voltage in a junction field-effect transistor?

- Ans ☒ 1. 0.6 V
☒ 2. 5.5 V
☒ 3. 6.6 V
☒ 4. 5 V

Question ID : 5013735270

Status : Answered

Chosen Option : 4

Q.31 How is a Photoresist layer formed?

It is formed by using _____.

- Ans ☒ 1. polysilicon
☒ 2. silicon dioxide
☒ 3. high sensitive polymer
☒ 4. light sensitive polymer

Question ID : 5013735300

Status : Answered

Chosen Option : 1

Q.32 A terminal multiplexer has five 1000 bps terminals and 'n' 200 bps terminals are connected to it. The outgoing line is 10000 bps. What is the maximum value of n?

- Ans ☒ 1. 25
☒ 2. 1000
☒ 3. 200

Question ID : 5013735311

Status : Answered

Chosen Option : 1

✗ 4. 50

Q.33 The primary winding of a transformer has AC voltage 115 V across it. If the turn ratio of the transformer is 9, what is the secondary voltage of the transformer?

- Ans
- ✗ 1. 12.78 V
 - ✓ 2. 1035 V
 - ✗ 3. 115 V
 - ✗ 4. 1080 V

Question ID : 5013735306

Status : Answered

Chosen Option : 2

Q.34 Which of the following is a DISADVANTAGE of Pulse-code modulation (PCM)?

- Ans
- ✗ 1. All of the options.
 - ✗ 2. It cannot be decoded easily.
 - ✓ 3. It requires large bandwidth.
 - ✗ 4. It has very high noise.

Question ID : 5013735346

Status : Answered

Chosen Option : 3

Q.35 Which of the following is equivalent to a TRIAC (Triode for Alternating Current)?

- Ans
- ✓ 1. Two SCRs are in inverse-parallel.
 - ✗ 2. Two SCRs are in parallel.
 - ✗ 3. Three SCRs are in series.
 - ✗ 4. Two SCRs are in series.

Question ID : 5013735321

Status : Answered

Chosen Option : 1

Q.36 Which of the following is true of repeaters?

- Ans
- ✗ 1. Repeaters are used to provide translation services between incompatible LANs.
 - ✗ 2. Repeaters connect multiple device segments.
 - ✗ 3. Repeaters are used to provide a link between two separate devices but same type LANs.
 - ✓ 4. Repeaters receive a signal and retransmit it at a higher level.

Question ID : 5013735314

Status : Answered

Chosen Option : 4

Q.37 What is the voltage of a single solar cell?

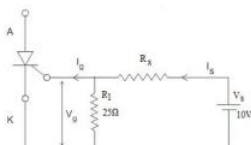
- Ans
- ✗ 1. 1.5 V
 - ✓ 2. 0.5 V
 - ✗ 3. 5 V
 - ✗ 4. 2.5 V

Question ID : 5013735308

Status : Answered

Chosen Option : 1

Q.38 If a thyristor triggers at the gate voltage (V_g) of 2 V and the gate current (I_g) of 120 mA, what is the value of R_x in the given circuit?



- Ans
- ✗ 1. 25 Ω
 - ✓ 2. 40 Ω
 - ✗ 3. 50 Ω
 - ✗ 4. 45 Ω

Question ID : 5013735324

Status : Answered

Chosen Option : 2

Q.39 Which among the following materials is commonly used for shielding magnetism?

- Ans
- ✗ 1. Copper

Question ID : 5013735282

Status : Answered

- ☒ 2. Brass
☒ 3. Aluminium
☒ 4. Soft iron

Chosen Option : 4

Q.40 If a RADAR receives an echo from a target (T) $10 \mu\text{s}$ after sending the signal, what is the approximate range of the target in metres?

- Ans ☒ 1. 500 m
☒ 2. 1,500 m
☒ 3. 2,000 m
☒ 4. 1,000 m

Question ID : 5013735290

Status : Answered

Chosen Option : 3

Q.41 An AM broadcast station transmits a modulating frequency of 5 kHz and a transmitting frequency of 876 kHz. What are the values of maximum and minimum frequencies of upper and lower sidebands?

- Ans ☒ 1. 881 kHz, 871 kHz
☒ 2. 881 kHz, 876 kHz
☒ 3. 871 kHz, 881 kHz
☒ 4. 876 kHz, 871 kHz

Question ID : 5013735345

Status : Answered

Chosen Option : 1

Q.42 What is the induced torque in a DC shunt motor of 6 kW running at 1200 rpm?

- Ans ☒ 1. 56.76 N
☒ 2. 57.77 N
☒ 3. 46.76 N
☒ 4. 47.77 N

Question ID : 5013735303

Status : Answered

Chosen Option : 2

Q.43 An 8.76 kW, 200 V DC shunt motor has full load efficiency (η) of 87% and armature resistance (R_a) of 0.27 ohms. What is the value of starting resistance (R_s) in ohms for a current (I_s) 1.8 times of the full load current (I_f)?

- Ans ☒ 1. 1.937 Ω
☒ 2. 0.270 Ω
☒ 3. 1.800 Ω
☒ 4. 0.876 Ω

Question ID : 5013735304

Status : Answered

Chosen Option : 3

Q.44 For a resistance $R = 10 \Omega$ and conductance $G = 0.4 \Omega$. What is the attenuation constant α ?

- Ans ☒ 1. 6 units
☒ 2. 4 units
☒ 3. 2 units
☒ 4. 10 units

Question ID : 5013735335

Status : Answered

Chosen Option : 2

Q.45 Which among the following protocols provides unreliable data transfer?

- Ans ☒ 1. All of the other options
☒ 2. Transmission Control Protocol (TCP)
☒ 3. Internet Protocol (IP)
☒ 4. User Datagram Protocol (UDP)

Question ID : 5013735288

Status : Answered

Chosen Option : 3

Q.46 Which of the following provides a separate physical connection to the memory?

- Ans ☒ 1. PCI BUS
☒ 2. PCI bridge
☒ 3. PCI interface
☒ 4. Switch circuit

Question ID : 5013735310

Status : Answered

Chosen Option : 1

Q.47

Which semiconductor material has a small band-gap?

- Ans ☒ 1. Conductor
☒ 2. Metal
☒ 3. Insulator
☒ 4. Both metal and conductor

Question ID : 5013735329

Status : Answered

Chosen Option : 4

Q.48 Which logic family is used for high speed applications?

- Ans ☒ 1. Transistor-Transistor Logic (TTL)
☒ 2. Diode Transistor Logic (DTL)
☒ 3. Emitter Coupled Logic (ECL)
☒ 4. Integrated Injection Logic (I²L)

Question ID : 5013735339

Status : Answered

Chosen Option : 3

Q.49 Which diode impurities among the following are the most heavily doped?

- Ans ☒ 1. Zener diode
☒ 2. Tunnel diode
☒ 3. Varactor diode
☒ 4. PIN diode

Question ID : 5013735273

Status : Answered

Chosen Option : 2

Q.50 Which of the following shapes is most commonly used for patch antennas?

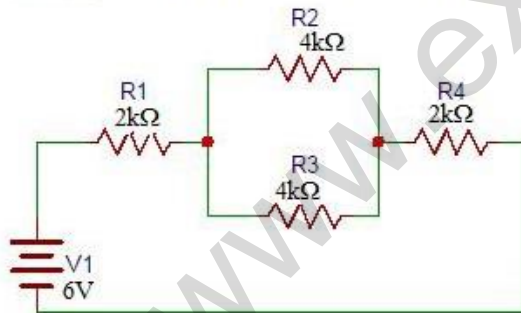
- Ans ☒ 1. Elliptical
☒ 2. Circular
☒ 3. Rectangular
☒ 4. Parabolic

Question ID : 5013735337

Status : Answered

Chosen Option : 4

Q.51 What is the total current (mA) in the given circuit?



- Ans ☒ 1. 1.5 mA
☒ 2. 1.6 mA
☒ 3. 0.75 mA
☒ 4. 0.5 mA

Question ID : 5013735325

Status : Answered

Chosen Option : 3

Q.52 Which of the following has least luminous efficiency?

- Ans ☒ 1. Fluorescent tube
☒ 2. High-wattage light bulb
☒ 3. Low-wattage light bulb
☒ 4. Mercury vapour lamp

Question ID : 5013735332

Status : Answered

Chosen Option : 2

Q.53 What is the IP address range of Automatic Private IP Addressing (APIPA)?

- Ans ☒ 1. 169.254.0.1 to 169.254.0.254

Question ID : 5013735313

Status : Answered

- ☒ 2. 169.254.0.1 to 169.254.0.255
- ☒ 3. 169.254.0.1 to 169.254.255.254
- ☒ 4. 169.254.0.1 to 169.254.255.255

Chosen Option : 3

Q.54 How many full and half-adders are required to add 16-bit numbers?

- Ans ☒ 1. 8 half-adders, 8 full-adders
- ☒ 2. 4 half-adders, 12 full-adders
- ☒ 3. 16 half-adders, 0 full-adders
- ☒ 4. 1 half-adder, 15 full-adders

Question ID : 5013735340

Status : Answered

Chosen Option : 4

Q.55 Which among the following gives maximum probability of error?

- Ans ☒ 1. Binary Frequency Shift Keying (BFSK)
- ☒ 2. Amplitude Shift Keying (ASK)
- ☒ 3. Binary Phase Shift Keying (BPSK)
- ☒ 4. Differential Phase Shift Keying (DPSK)

Question ID : 5013735348

Status : Answered

Chosen Option : 2

Q.56 When is the starting current reduced in a 200 V DC motor? Consider that it has an external resistance R_a (armature resistance) and R_f (field resistance)

- Ans ☒ 1. When R_f is maximum and R_a is maximum.
- ☒ 2. When R_f is minimum and R_a is maximum.
- ☒ 3. When R_f is maximum and R_a is minimum.
- ☒ 4. When R_f is minimum and R_a is minimum.

Question ID : 5013735305

Status : Answered

Chosen Option : 1

Q.57 Which of the following gates is required to build a half adder?

- Ans ☒ 1. EX-OR gate and OR gate
- ☒ 2. EX-OR gate and NOR gate
- ☒ 3. Four NAND gate
- ☒ 4. EX-OR gate and AND gate

Question ID : 5013735338

Status : Answered

Chosen Option : 4

Q.58 Which access technology can enhance battery life?

- Ans ☒ 1. Frequency Division Multiple-Access (FDMA)
- ☒ 2. All of the options
- ☒ 3. Orthogonal Frequency-Division Multiple Access (OFDMA)
- ☒ 4. Time Division Multiple-Access (TDMA)

Question ID : 5013735349

Status : Answered

Chosen Option : 3

Q.59 What is the crest factor of a direct current?

- Ans ☒ 1. 10
- ☒ 2. 0
- ☒ 3. 1
- ☒ 4. 100

Question ID : 5013735347

Status : Answered

Chosen Option : 3

Q.60 How many select lines are required in a 1-to-4 demultiplexer?

- Ans ☒ 1. 2

Question ID : 5013735341

Status : Answered

Chosen Option : 1

- ☒ 2. 4
- ☒ 3. 3
- ☒ 4. 1

Q.61 Which of the following is used to make Pure Green LED?

- Ans ☒ 1. Indium gallium nitride (InGaN)
- ☒ 2. Gallium arsenide (GaAs)
- ☒ 3. Zinc selenide (ZnSe)
- ☒ 4. Aluminium gallium arsenide (AlGaAs)

Question ID : 5013735328

Status : Answered

Chosen Option : 4

Q.62 If the maximum allowable gate power dissipation (P_{gm}) is 20 kW and the duty cycle is 60%, then what is the average gate power dissipation (P_{gm})?

- Ans ☒ 1. 12 kW
- ☒ 2. 20 kW
- ☒ 3. 14 kW
- ☒ 4. 16 kW

Question ID : 5013735323

Status : Answered

Chosen Option : 2

Q.63 Which of the following companies is the biggest player in the microprocessor industry?

- Ans ☒ 1. Intel
- ☒ 2. Motorola
- ☒ 3. AMD
- ☒ 4. IBM

Question ID : 5013735292

Status : Answered

Chosen Option : 1

Q.64 Which of these cells is used as a standard cell?

- Ans ☒ 1. Solar cell
- ☒ 2. Mercury-Cadmium cell
- ☒ 3. Zinc-Carbon cell
- ☒ 4. Dry cell

Question ID : 5013735281

Status : Answered

Chosen Option : 2

Q.65 What is the range of a buried layer sheet resistance?

- Ans ☒ 1. 15 to 20 Ω / Sq
- ☒ 2. 5 to 15 Ω / Sq
- ☒ 3. 1 to 3 Ω / Sq
- ☒ 4. 3 to 5 Ω / Sq

Question ID : 5013735301

Status : Answered

Chosen Option : 1

Q.66 When does the transformer have zero voltage regulation?

- Ans ☒ 1. At zero power factor
- ☒ 2. At unity power factor
- ☒ 3. At lagging power factor
- ☒ 4. At leading power factor

Question ID : 5013735302

Status : Answered

Chosen Option : 2

Q.67 What kind of chemical is used for shielding the active areas during oxidation?

- Ans ☒ 1. silicon nitride
- ☒ 2. polysilicon
- ☒ 3. silver nitride

Question ID : 5013735299

Status : Answered

Chosen Option : 2

☒ 4. hydrofluoric acid

Q.68 Which among the following write buffers is used by the pipeline ALUs in order to write the result to the memory in a Pentium processor?

- Ans ☒ 1. External Snoop Write Buffer
☒ 2. Line Replacement Write Buffer
☒ 3. Write-back Buffer
☒ 4. Internal Snoop Write Buffer

Question ID : 5013735297

Status : Answered

Chosen Option : 1

Q.69 What is the average range of VHF (Very High Frequency) communications?

- Ans ☒ 1. 100 miles
☒ 2. 15 miles
☒ 3. 30 miles
☒ 4. 60 miles

Question ID : 5013735333

Status : Answered

Chosen Option : 2

Q.70 What is the wavelength range of visible light?

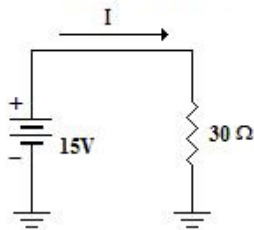
- Ans ☒ 1. 440 nm to 540 nm
☒ 2. 390 nm to 770 nm
☒ 3. 670 nm to 1,000 nm
☒ 4. 110 nm to 240 nm

Question ID : 5013735291

Status : Answered

Chosen Option : 2

Q.71 Determine the power in the given circuit.



- Ans ☒ 1. 2.0 W
☒ 2. 450 W
☒ 3. 7.5 W
☒ 4. 0.5 W

Question ID : 5013735278

Status : Answered

Chosen Option : 3

Q.72 What is a Pelton wheel?

- Ans ☒ 1. It is an outward flow impulse turbine.
☒ 2. It is an inward flow impulse turbine.
☒ 3. It is an inward flow reaction turbine.
☒ 4. It is an axial flow impulse turbine.

Question ID : 5013735307

Status : Answered

Chosen Option : 4

Q.73 What is the operating voltage of HV (High-voltage) cables?

- Ans ☒ 1. Up to 6.6 kV
☒ 2. Up to 11 kV
☒ 3. Up to 3.3 kV
☒ 4. Up to 1.1 kV

Question ID : 5013735334

Status : Answered

Chosen Option : 2

Q.74 Which among the following theorems uses the curl operation?

- Ans ☒ 1. Green's theorem

Question ID : 5013735327

Status : Answered

- ☒ 2. Stokes' theorem
☐ 3. Gauss Divergence theorem
☐ 4. Maxwell equation

Chosen Option : 2

Q.75 For a Bipolar Junction Transistor (BJT), if the threshold voltage (V_t) is 6 V, the collector resistance (R_C) = 2 k Ω and the bias current is 13 mA, then what is the value of the voltage gain?

- Ans ☐ 1. 1.3 V
☒ 2. 4.3 V
☐ 3. 26 V
☐ 4. 5.4 V

Question ID : 5013735271

Status : Answered

Chosen Option : 2

Q.76 What is the bandwidth of a typical satellite?

- Ans ☐ 1. 200 MHz
☐ 2. 400 MHz
☐ 3. 300 MHz
☒ 4. 500 MHz

Question ID : 5013735289

Status : Answered

Chosen Option : 2

Q.77 Which of the following parameters is used for controlling an Insulated-Gate Bipolar Transistor (IGBT)?

- Ans ☐ 1. V_{CE} (Collector to Emitter Voltage)
☐ 2. I_G (Gate current)
☐ 3. I_C (Collector current)
☒ 4. V_{GE} (Gate to Emitter Voltage)

Question ID : 5013735275

Status : Answered

Chosen Option : 2

Q.78 Which of the following laws governs electrolysis applications?

- Ans ☐ 1. Ohm's law
☐ 2. Coulomb's law
☒ 3. Faraday's law
☐ 4. Lenz's law

Question ID : 5013735280

Status : Answered

Chosen Option : 2

Q.79 Which of the following flip-flops are most commonly used for designing synchronous counters?

- Ans ☒ 1. J-K flip-flops
☐ 2. D flip-flops
☐ 3. S-R flip-flops
☐ 4. T flip-flops

Question ID : 5013735342

Status : Answered

Chosen Option : 1

Q.80 What is the address line for RST 5?

- Ans ☐ 1. 0030 H
☒ 2. 0028 H
☐ 3. 0020 H
☐ 4. 0038 H

Question ID : 5013735295

Status : Answered

Chosen Option : 3

Section : General

Q.1 In the following question the parts of a sentence namely P, Q, R, and S are jumbled. Choose the correct order of these to make a grammatically correct and meaningful sentence from the given options:

P- is often misleading
Q- using another person's
R- ideas to guide others
S- and leads to confusion

- Ans ☐ 1. RPSQ

Question ID : 5013735354

Status : Answered

Chosen Option : 4

- ☒ 2. PRSQ
☒ 3. SQPR
☒ 4. QRPS

Q.2 Fill in the blanks selecting the best possible option.

Most actors have _____ higher standard of living than _____ people who watch their films.

- Ans ☒ 1. an, the
☒ 2. the, no article
☒ 3. no article, an
☒ 4. a, the

Question ID : 5013735355

Status : Answered

Chosen Option : 4

Q.3 Choose the word which means the same as the group of words given.

That which cannot be heard

- Ans ☒ 1. Noisy
☒ 2. Inaudible
☒ 3. Unheard
☒ 4. Inaccessible

Question ID : 5013735358

Status : Answered

Chosen Option : 2

Q.4 Identify the underlined part of the sentence which is not grammatically correct.

Freedom of speech or the right to say what you think, are the most important feature of a democratic society.

- Ans ☒ 1. the right to say what you think
☒ 2. Freedom of speech
☒ 3. are the most important feature
☒ 4. of a democratic society.

Question ID : 5013735352

Status : Answered

Chosen Option : 3

Q.5 Fill in the blanks selecting the best possible option.

Round the neck of the chimpanzee there _____ a thick chain which the man held to bring him out of the cage.

- Ans ☒ 1. are
☒ 2. was
☒ 3. be
☒ 4. will be

Question ID : 5013735357

Status : Answered

Chosen Option : 2

Q.6 Identify the underlined part of the sentence which is not grammatically correct.

Even if the last date for sending the applications was drawing near he had still not filled in all the information.

- Ans ☒ 1. was drawing near
☒ 2. Even if
☒ 3. still not filled in
☒ 4. for sending the applications

Question ID : 5013735353

Status : Answered

Chosen Option : 2

Q.7 Pick the word from the given options that is closest in meaning to the underlined word.

The presence of her parents gave her solace in her time of grief.

- Ans ☒ 1. pride
☒ 2. joy
☒ 3. strength
☒ 4. comfort

Question ID : 5013735350

Status : Answered

Chosen Option : 3

Q.8

Question ID : 5013735356

Fill in the blanks selecting the best possible option.

Status : Answered

Chosen Option : 2

I tried _____ all my might to pull the heavy box, but in vain.

- Ans
- ☒ 1. by
 - ☒ 2. with
 - ☒ 3. from
 - ☒ 4. for

Q.9 Pick the word from the given options that means the opposite of the underlined word.

The tribals venerate tree gods.

- Ans
- ☒ 1. dislike
 - ☒ 2. decorate
 - ☒ 3. insult
 - ☒ 4. worship

Question ID : 5013735351

Status : Answered

Chosen Option : 1

Q.10 Choose the correctly spelt word.

- Ans
- ☒ 1. oppurtunity
 - ☒ 2. opportunity
 - ☒ 3. oportunity
 - ☒ 4. oportunety

Question ID : 5013735359

Status : Answered

Chosen Option : 2

Q.11 What is the currency of the Latin American country of Argentina?

- Ans
- ☒ 1. Argentine Real
 - ☒ 2. Argentine Sterling
 - ☒ 3. Argentine Peso
 - ☒ 4. Argentine Dollar

Question ID : 5013735361

Status : Answered

Chosen Option : 2

Q.12 Name the astronomer who discovered the planet of Pluto?

- Ans
- ☒ 1. Stephen Hawking
 - ☒ 2. Edwin Hubble
 - ☒ 3. Clyde Tombaugh
 - ☒ 4. Copernicus

Question ID : 5013735364

Status : Answered

Chosen Option : 4

Q.13 Who is the author of the book 'Laghu Paniniyam', which is a treatise on Sanskrit grammar?

- Ans
- ☒ 1. AR Raja Raja Varma
 - ☒ 2. Panini
 - ☒ 3. Patanjali
 - ☒ 4. Ramachandra Guha

Question ID : 5013735363

Status : Answered

Chosen Option : 2

Q.14 Which Indian actress will reprise the role that Sadhana immortalised in the yesteryear film 'Woh Kaun Thi'?

- Ans
- ☒ 1. Aishwarya Rai
 - ☒ 2. Priyanka Chopra
 - ☒ 3. Deepika Padukone
 - ☒ 4. Anushka Sharma

Question ID : 5013735365

Status : Answered

Chosen Option : 1

Q.15 Water rising in a tube due to capillary action is driven by which phenomenon?

- Ans
- ☒ 1. Viscosity
 - ☒ 2. Anomalous expansion
 - ☒ 3. Surface tension
 - ☒ 4. Vaporisation

Question ID : 5013735366

Status : Answered

Chosen Option : 3

Q.16 Who among the following foreign invaders was a Mongol?

- Ans
- ☒ 1. Vasco da Gama
 - ☒ 2. Sher Shah Suri
 - ☒ 3. Genghis Khan
 - ☒ 4. Babur

Question ID : 5013735362

Status : Answered

Chosen Option : 4

Q.17 Which new-age bank's Initial Public Offering (IPO) got oversubscribed by nearly 15 times in March 2018?

- Ans
- ☒ 1. Bandhan Bank
 - ☒ 2. Kotak Bank
 - ☒ 3. EXIM Bank
 - ☒ 4. Yes Bank

Question ID : 5013735368

Status : Answered

Chosen Option : 1

Q.18 What is the factor that is leading to a potential environmental degradation issue in Koodankulam, a small town in southern Tamil Nadu

- Ans
- ☒ 1. Nuclear power plant
 - ☒ 2. Hydroelectric power plant
 - ☒ 3. Leather industry
 - ☒ 4. Mining

Question ID : 5013735369

Status : Answered

Chosen Option : 2

Q.19 Who presented the Best Actor award to Aamir Khan at the Dinanath Mangeshkar Awards ceremony held in April 2017?

- Ans
- ☒ 1. Asha Bhosle
 - ☒ 2. Manohar Parrikar
 - ☒ 3. Lata Mangeshkar
 - ☒ 4. Mohan Bhagwat

Question ID : 5013735360

Status : Answered

Chosen Option : 3

Q.20 In which country would you find the giant statue of Christ the Redeemer, considered as one of the modern wonders of the world?

- Ans
- ☒ 1. Vatican
 - ☒ 2. Italy
 - ☒ 3. Spain
 - ☒ 4. Brazil

Question ID : 5013735367

Status : Answered

Chosen Option : 4