

Telangana State Council Higher Education

Notations :

1.Options shown in green color and with icon are correct.

2.Options shown in red color and with icon are incorrect.

Question Paper Name :	Biomedical Engineering 13th Aug 2021 Shift 2
Subject Name :	Biomedical Engineering
Creation Date :	2021-08-13 1 7.43.1
Duration :	120
Total Marks :	120
Display Marks:	Yes
Calculator :	None
Magnifying Glass Required? :	
Ruler Required? : No Eraser Required? : No	
Scratch Pad Required? :	
Rough Sketch/Notepad Required? :	
Protractor Required? :	No
Show Watermark on Console? : Yes Highlighter :	
Auto Save on Console? :	Yes

Biomedical Engineering

Group Number :	1
Group Id :	12984026
Group Maximum Duration :	
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	

Group Marks : 120
Is this Group for Examiner? : No

Mathematics

Section Id : 12984045
Section Number : 1
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 10
Number of Questions to be attempted : 10
Section Marks : 10
Enable Mark as Answered Mark for Review and Clear Response : Yes
Sub-Section Number : 1
Sub-Section Id : 12984045
Question Shuffling Allowed : Yes
Question Number : 1 Question Id : 1298403001 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation :
Vertical Correct Marks : 1 Wrong Marks : 0
Similar matrices will have same

Options :

✘ Annihilating polynomial

✘ Eigen vectors

Eigen values

Inverse

Question Number : 2 Question Id : 1298403002 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question

Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The number of solutions of the system of equations

$$x + 2y + z = 0 \quad x - y + z = 3 \quad x + y + z = 1$$

Options :

1. + 1

✘ 00 by many

Question Number : 3 Question Id : 1298403003 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question

Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

1 1

If $\int_0^1 \int_0^1 xy \cos(x^2) dx dy = K \sin(1)$, then $K =$

0 0

Options :

1

1. 8 2

1

1

1
10

Question Number : 4 Question Id : 1298403004 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A curve $y = f(x)$ passes through the point $(0, 1)$ and satisfies $\frac{d^2y}{dx^2} + y^3$. Then one such a curve is

Options :

1. ✓ $y = \frac{1+2x}{1-2x}$

2. ✗ $y = \frac{1-2x}{1+2x}$

3. ✗ $y = \frac{1-x}{1+x}$

4. ✗ $y = \frac{1+x}{1-x}$

$+ y)^3$. Then

Question Number : 5 Question Id : 1298403005 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $z = \tan^{-1}(y - 2x)^3$, then $\frac{\partial^2 z}{\partial x^2} - 2 \frac{\partial^2 z}{\partial x \partial y} + 3 \frac{\partial^2 z}{\partial y^2}$

Options :

$\frac{\partial^2 z}{\partial x^2}$ ✖

$\frac{\partial^2 z}{\partial x \partial y}$

$\frac{\partial^2 z}{\partial x \partial y}$

$-\frac{\partial^2 z}{\partial x \partial y}$

$\frac{\partial^2 z}{\partial x \partial y}$

$\frac{-\partial^2 z}{\partial x \partial y}$

4. ✖

Question Number : 6 Question Id : 1298403006 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks :

$\int_0^1 z^2 e^z dz =$

$|z|=2$

Options :

1. $-it$

2. $27it$

Question Number : 7 Question Id : 1298403007 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A bag contains 7 red balls and 5 white balls. If two balls are drawn at random, then the probability that both the balls are of same color is

Options :

1. ✘ $\frac{23}{66}$

2. ✘ $\frac{29}{66}$

$\frac{31}{66}$

4. % $\frac{35}{66}$

Question Number : 8 Question Id : 1298403008 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If $f(x) =$ and the interval of differencing is of unit length, then $\frac{5\Delta(f(x))}{f(x)} =$

Options :

1. ✘ $x - 1$

3. ✖ $x-2$
 $x-3$

4. ✔ $x-4$

Question Number : 9 Question Id : 1298403009 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The particular integral of $(D^2 + D + 1) y = x^2 + x + 1$ is

Options :

1. ✖ $x^2 + x$

2. ✔ $x^2 - x$

3. $8x^2 - 2x$

4. ✖ $x^2 + 2x$

Question Number : 10 Question Id : 1298403010 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Residue of $z \tan(iz)$ at $z = -E$ is 2

Options :

2

$\frac{37t}{2}$

2

$-\frac{\pi}{2}$

3. ✓

2

$-\frac{37t}{2}$

2

Biomedical Engineering

Section Id : 11
Section Number : 0
Section type : 11
Mandatory or Optional : 0
Number of Questions : Yes
Number of Questions to be attempted : 1
Section Marks : 12
Enable Mark as Answered Mark for Review and Clear Response : 98
Sub-Section Number : 40
Sub-Section Id : 46
Question Shuffling Allowed : Yes

Question Number : 11 Question Id : 1298403011 Question Type :

Question Mandatory : No Option Orientation : Vertical

MCQ Option

Shuffling : Yes Display Question Number :

Correct Marks : 1 Wrong Marks : 0

Yes Is

12984046

2

Online

Mandatory 110

The most suitable gate to check whether the number of 1s in a digital word is even or odd is

Options :

XOR

2. * NAND

NOR

4. ✖ AND

Question Number : 12 Question Id : 1298403012 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The simplified Boolean expression for the given tenn $A+AB+ABC+ABCD$ is

Options :

3. $AH-AB$

4. ✖ AB

Question Number : 13 Question Id : 1298403013 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The minimum number of full-adders required to construct an m-bit parallel adder are

Options :

1. $\lceil m/2 \rceil$

2.4 m-1

4. 111+1

Question Number : 14 Question Id : 1298403014 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

A multiplexer with 4 select bits is a

Options :

4:1 multiplexer 8:1

multiplexer

16:1 multiplexer

32:1 multiplexer

Question Number : 15 Question Id : 1298403015 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Master slave configuration is used in flip-flops to

Options :

Increase its clocking rate

Reduce power dissipation

Eliminate race-around condition

Improve its reliability

Question Number : 16 Question Id : 1298403016 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

A 4-bit synchronous counter uses flip-flops with propagation delay time of 25 ns each. The maximum possible time required for change of state will be

Options :

25 ns

50 ns

75 ns

100 ns

Question Number : 17 Question Id : 1298403017 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The ADC which has fixed conversion time is

Options :

Counter type

Flash type

Successive approximation type

Dual slope type

Question Number : 18 Question Id : 1298403018 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Given that $(16)_{10} = (100b)_b$, the value of b will be

Options :

4

10

12

Question Number : 19 Question Id : 1298403019 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The 8085 microprocessor instruction set consists of _____ number of instructions

Options :

40

3. * 80

4 74

Question Number : 20 Question Id : 1298403020 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The Intensity of an absorption band is always proportional to_____

Options :

Atomic population

Molecular population of the final state

Molecular population of the initial state

Temperature

Question Number : 21 Question Id : 1298403021 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

A transistor amplifier has a mid-band power gain of 50dB. At the half power frequencies the gain is

Options :

25dB

47dB

35.5dB

50dB

Question Number : 22 Question Id : 1298403022 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The amplifier circuit suitable for impedance matching is

Options :

CE

2.4 cc

3. * CB

Diode

Question Number : 23 Question Id : 1298403023 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Maximum efficiency of a full wave rectifier is

Options :

1. 4 81.2%

2. ✘ 40.60 0

3. 33.33%

4. ✘ 50%

Question Number : 24 Question Id : 1298403024 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

For an op-amp having differential gain A_d and common-mode gain A_c the CMRR
is given by

Options :

1. ✘ $A_d + A_c$

2. 4 c

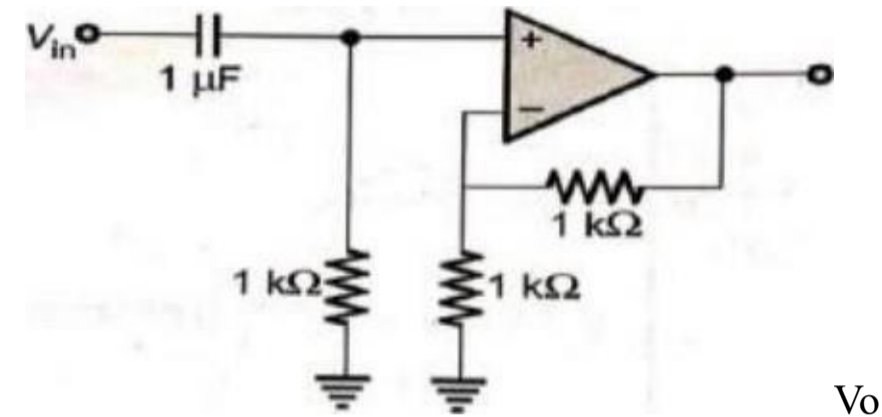
3. ✘ $A_d - A_c$

4. ✘ $\frac{A_c}{A_d}$

Question Number : 25 Question Id : 1298403025 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Op-amp circuit shown below is that of a



Options :

Low pass filter with a maximum gain of 1

Low pass filter with a maximum gain of 2

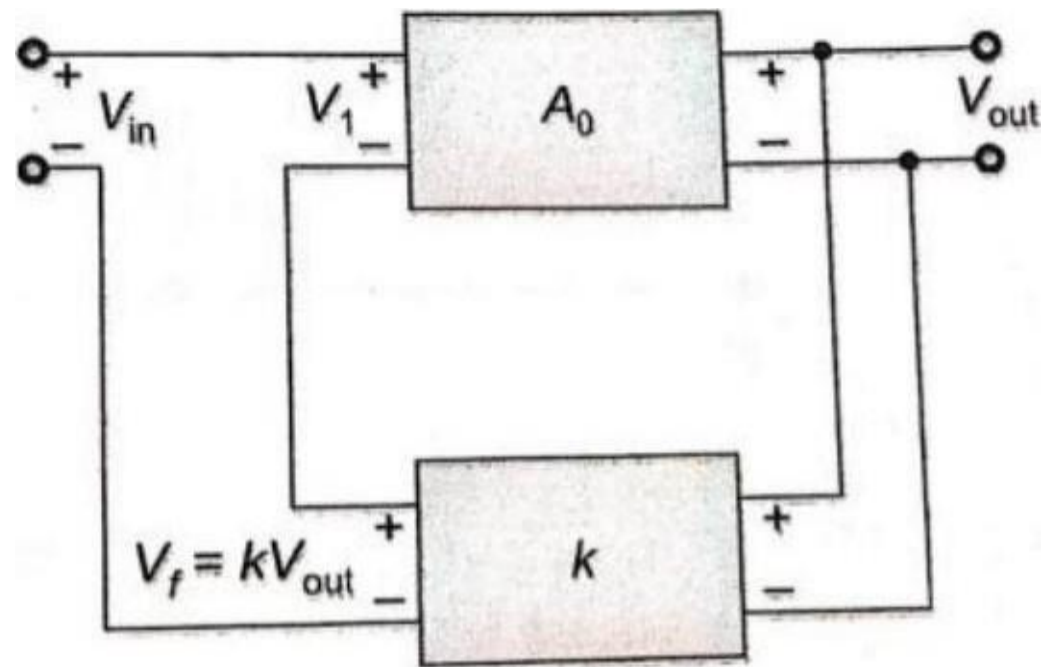
High pass filter with a maximum gain of 1

High pass filter with a maximum gain of 2

Question Number : 26 Question Id : 1298403026 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the feedback network shown below if the feedback factor k is increased, then the



Options :

Input Impedance increases and output impedance decreases

- ✘ Input impedance increases and output impedance increases
- ✘ Input impedance decreases and output impedance decreases
- ✘ Input impedance decreases and output impedance increases

Question Number : 27 Question Id : 1298403027 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

An input voltage of $v(t) = 10\sin(100\pi)t$ volts is applied to a half-wave rectifier. Assuming ideal diode characteristics, the average power consumed in watts by the load resistance $R_L = 100$ ohms is _____

Options :

I. V 0.25W

2. * IOW

3. 0.5W

4. ✘ 1W

Question Number : 28 Question Id : 1298403028 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

If both the junction of a transistor are forward biased it will be in

Options :

1. Saturation mode

2. Active mode

Cut-off mode

Inverse active mode

Question Number : 29 Question Id : 1298403029 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The operational amplifier is used in the non-linear mode in

Options :

✘ Integrators

2. Active filters

Schmitt triggers

✘ Instrumentation amplifiers

Question Number : 30 Question Id : 1298403030 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The bandwidth of the ideal Op-amp is of the order of

Options :

- 1 10kHz
- 2 5kHz
- 3 20kHz
- Infinite

Question Number : 31 Question Id : 1298403031 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

If a 10 V battery is connected across the parallel resistors of 10 ohm, 50ohm, 20 ohm, and 3 ohm. The voltage across 5 ohm resistor will be

Options :

- 1. V low
- 2 10V
- 3 20V

Question Number : 32 Question Id : 1298403032 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

A practical current source consists of

Options :

An ideal current source in series with a resistance

An ideal current source in parallel with a resistance

An ideal current source only

✘ An ideal voltage source in parallel with a resistance

Question Number : Question Id : 1298403033 Question Type : MCQ Option Shuffling : Yes Display Question Number :

Yes Is Question Mandatory No Option Orientation : Vertical Correct Marks : 1 Wrong Marks :

33

:

o

The nodal method of circuit analysis is based on

Options :

KVL and Ohm's Law

KCL and Ohm's Law

KCL, KVL and Ohm's Law

4. KCL KVL

Question Number : 34 Question Id : 1298403034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0 when the superposition theorem is applied

to any circuit, the dependent voltage source in that circuit is always

Options :

Opened



2. Shorted

Active

Question Number : Question Id : 1298403033 Question Type : MCQ Option Shuffling : Yes Display Question Number :

Yes Is Question Mandatory No Option Orientation : Vertical Correct Marks : 1 Wrong Marks :

Inactive

35

:

0

Maximum power is transferred when load impedance is

Options :

Equal to source impedance

Equal to half of the source Impedance

Equal to zero

Equal to one

Question Number : 36 Question Id : 1298403036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In a series RLC circuit, if C is increased, what happens to the resonant frequency

Options :

It increases

It decreases

Question Number : Question Id : 1298403033 Question Type : MCQ Option Shuffling : Yes Display Question Number :

Yes Is Question Mandatory No Option Orientation : Vertical Correct Marks : 1 Wrong Marks :

It remains same

It is zero

37

:

o

Illiat is the impedance of an ideal parallel resonant circuit without resistance in either branch

Options :

Zero

Inductive 

Capacitive

Infinite

Question Number : 38 Question Id : 1298403038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The RMS value of sinusoidal A.C. current is equal to its value at an angle of _____ degree.

Options :

Question Number : Question Id : 1298403033 Question Type : MCQ Option Shuffling : Yes Display Question Number :

Yes Is Question Mandatory No Option Orientation : Vertical Correct Marks : 1 Wrong Marks :

2.9 45

3. 30

✘ 90

Question Number : 39 Question Id : 1298403039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The magnification of Electron Microscope is about _____

Options :

1. 100X 2

1000X

3. ✔ 1,00,000X

4. 1500X

Question Number : 40 Question Id : 1298403040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The voltage applied across an R-L circuit is equal to _____ of V_R and V_L .

Options :

1. Arithmetic sum

2. Algebraic sum Phasor sum

✘ Sum of squares

Question Number : 41 Question Id : 1298403041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The transient response occurs

Options :

- Only in resistive circuits
- 2. Only in inductive circuits
- 3. Only in capacitive circuits

Both in inductive and capacitive circuits

Question Number : 42 Question Id : 1298403042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Apparent power is expressed in

Options :

- Volt- amperes
- 2. Watts
- Volt- amperes and watts
- 4. VAR

Question Number : 43 Question Id : 1298403043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In a pure capacitor, the voltage

Options :

Is in phase with the current

Is 180 degree out of phase with the current

3. lags behind the current by 90 degree leads

the current by 90 degree

Question Number : 44 Question Id : 1298403044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Degree of scattering in transmission electron microscope is a function of_____

Options :

Nervous tissue wavelength of electron beam used

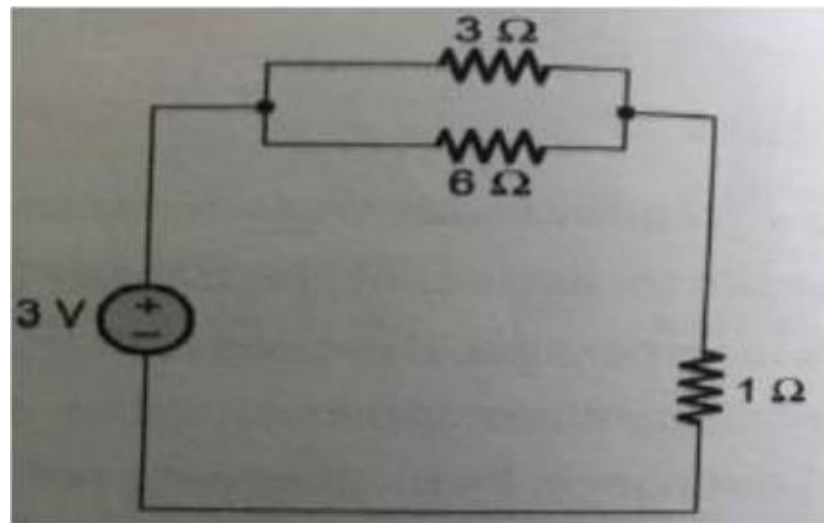
Number and mass of atoms that lie in the electron path

Number of atoms that lie in the electron path

Mass of atoms that lie in the electron path

Question Number : 45 Question Id : 1298403045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The power supplied by the DC source in the circuit shown below is



Options :

1. ✘ 0 W

2. ✘ 1 W

3. ✘ 2.5 W

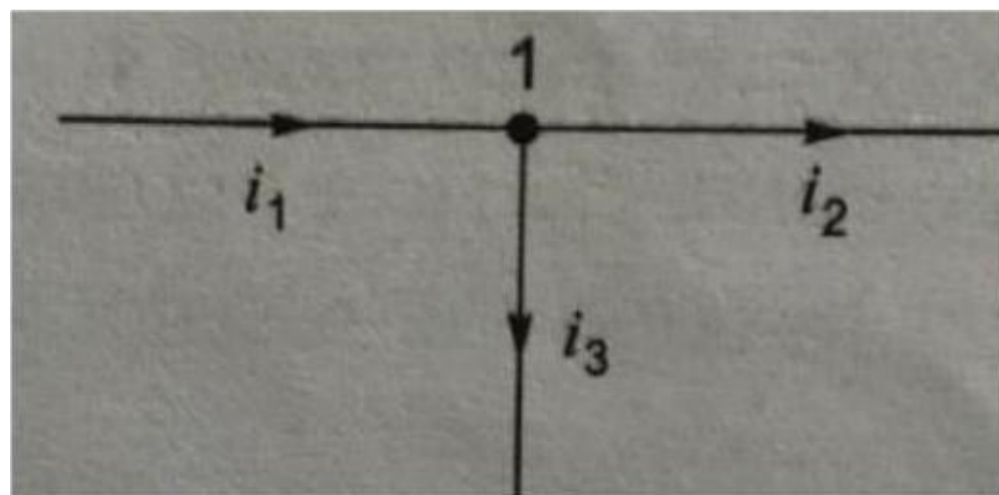
4. ✔ 3 W

Question Number : 46 Question Id : 1298403046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Three currents i_1 , i_2 and i_3 meet at a point as shown in the figure. If $i_1 = 3 \cos \omega t$ ampere, $i_2 = 4 \sin \omega t$ ampere and $i_3 = 13 \cos (\omega t + 6)$ ampere, The value of 13 in amperes is



Options :

✔ 5 Ampere

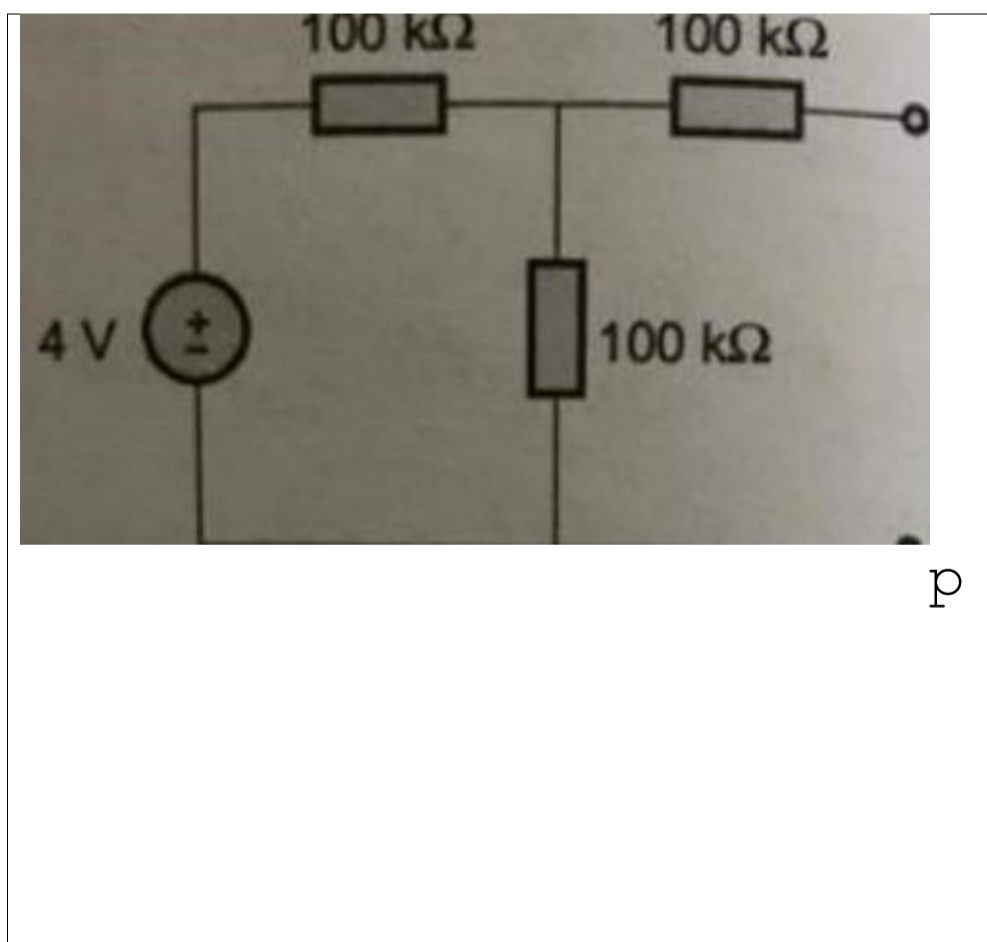
✘ 4 Ampere

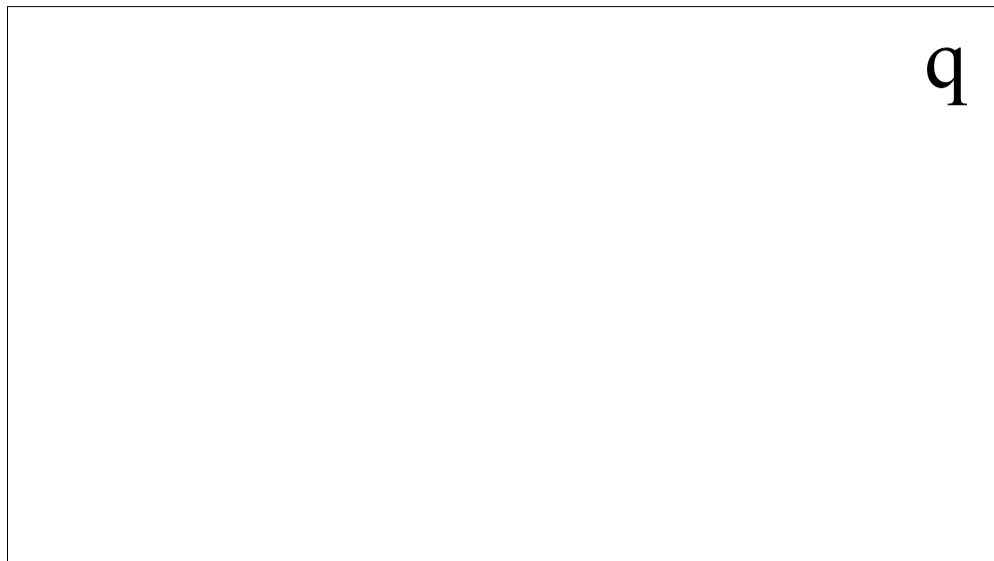
✘ 3 Ampere

✘ 7 Ampere

Question Number : 47 Question Id : 1298403047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The Thevenin equivalent circuit representation across terminals p-q of the circuit shown below is a





Options :

- 1 V source in series with resistance of 150 K ohm
- 2 V source in series with resistance of 150 K ohm
- 3 I V source in parallel with resistance of 150 K ohm
- 2 V source in series with resistance of 100 K ohm

Question Number : 48 Question Id : 1298403048 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The total reactance of a series RLC circuit at resonance is

Options :

- Equal to X_L
- Equal to R
- Equal to X_C

4. Zero

Question Number : 49 Question Id : 1298403049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Pipelining in Microprocessor is related to

Options :

Instntctions

✘ Mem01Y mapping

✘ ALU

✘ Intempts

Question Number : 50 Question Id : 1298403050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The instmction used to clear the accumulator in 8085 is

Options :

1. ✘ CLA A

2. ✔ XRA A

ORA A

4. ANA A

Question Number : 51 Question Id : 1298403051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

For the periodic signal $v(t)=30\sin 100t + 10\cos 300t + 6 \sin (500t + E)$, the
fundamental frequency in rad/sec is _____

Options :

i.e 100

2. 300

500

1500

Question Number : 52 Question Id : 1298403052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The initial value of $20-5t-e$ is

Options :

20

2M 19

 10

4. 25

Question Number : 53 Question Id : 1298403053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The final value theorem is used to find the

Options :

Steady state value of the system output ✘

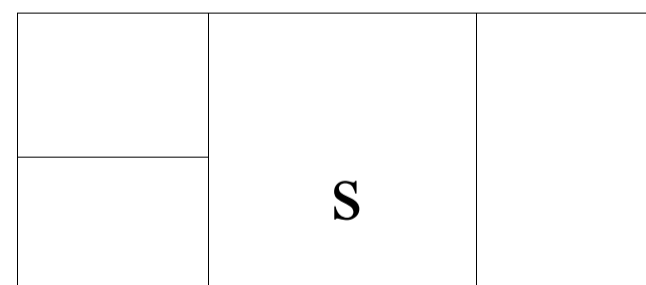
Initial value of the system output

✘ Transient behavior of the system output

✘ Both steady state value and transient behavior of the system output

Question Number : 54 Question Id : 1298403054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Assuming zero initial conditions, the response of the system given below to a unit step input $u(t)$ is



Options : ✘

$u(t)$

2. $tu(t)$

✘ $t^2 u(t)$

4. e^{j5t}

Question Number : 55 Question Id : 1298403055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The fundamental period of discrete time signal $x[n]=e^{j5n}$ is

Options :

1. $6/(57t)$

$12/5$

12

Question Number : 56 Question Id : 1298403056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

4-point DFT of a real discrete time signal of $x[n]$ of length 4 is given by $X[k]$, $n=0, 1, 2, 3$ and $k = 0, 1, 2, 3$. It is given that $X[1] = 1+j1$, $X[2] = 0$, then $X[3]$ is

Options :

1. ✓ $1-j1$

2. ✗ $1+j1$

✗ $0.1-j0.1$

4 $0.1 + j0.1$

Question Number : 57 Question Id : 1298403057 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

N point Radix-2 FFT algorithm requires_____ complex multiplications

Options :

1. $(N/2) \log_2 N$

$N \log_2 N$

Question Number : 58 Question Id : 1298403058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The Z-transform of the discrete time signal $x[n]=u[n]$ is

Options :

3. $\frac{1}{1-z^{-1}}$

Question Number : 59 Question Id : 1298403059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The system described by the input output equation $y(n) = n x(n)$ is

Options :

1. Static and linear

Static and non-linear

Dynamic and linear

Dynamic and non-linear

Question Number : 60 Question Id : 1298403060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Nyquist rate for the analog signal $x_a(t) = 3 \cos 50\pi t + 10 \sin 300\pi t - \cos 1007\pi t$ is

Options :

1. 50Hz

2. 4300 Hz

1000Hz

25 Hz

Question Number : 61 Question Id : 1298403061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0 window function is also known as raised cosine window function.

Options :

Rectangular

Kaiser

Blackman

Hanning

Question Number : 62 Question Id : 1298403062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A second order underdamped system has a damping factor of 0.8. It is subjected to a sinusoidal input of unit amplitude. It has a resonant peak of_____

Options :

108%

2.92%

20%

It has no resonant peak

Question Number : 63 Question Id : 1298403063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In order that a first order instrument should indicate an output which is within 100% of the true value of the output when subjected to a sinusoidal input, the product of angular frequency of input (ω) and time constant (t) of the instrument should be

Options :

1. Less than 0.5 Greater

than 0.5

Less than 10

Greater than 10

Question Number : 64 Question Id : 1298403064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The discrete time transfer function $\frac{1}{1-0.5z^{-1}}$ is

Options :

Non-minimum phase and unstable

Minimum phase and unstable

Minimum phase and stable

4. Non-minimum phase and stable

Question Number : 65 Question Id : 1298403065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In a continuous time signal $x(t) = \cos 27\pi t$ is sampled at 4Hz, the value of discrete time signal $x(n) = 5$ is

Options :

1. * -0.707

3.9 0

Question Number : 66 Question Id : 1298403066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0 An irregular and jagged wound that is produced by the tearing of soft body tissue is known as_____

Options :

1. Abrasion Avulsion

Laceration

Incision

Question Number : 67 Question Id : 1298403067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In a Kelvin's double bridge two sets of readings are taken when measuring a low resistance, one being the current in one direction and the other with the direction of current reversed. This is done to

Options :

Eliminate the effect of contact resistance

Eliminate the effect of resistance of leads ✖

Correct the changes in battery voltage

Eliminate the effect of thermo-electric emfs

Question Number : 68 Question Id : 1298403068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Moving iron instruments can be used on _____

Options :

Both A.C. and D.C.

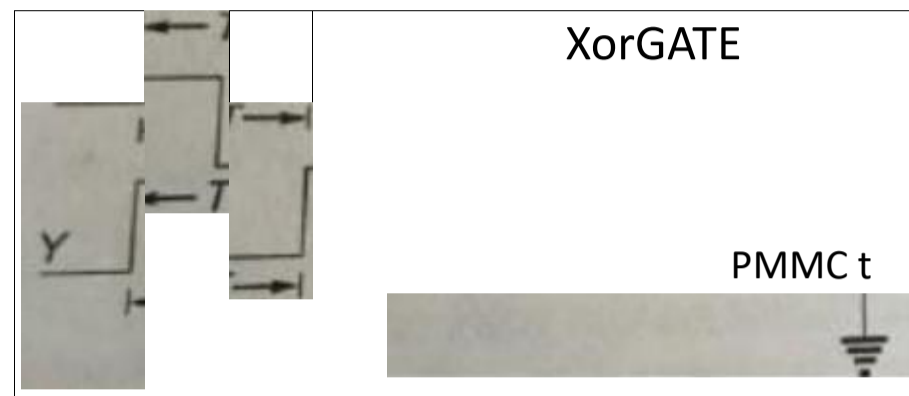
✖ D.C. only

3 A.C. only

Half wave rectified A.C.

Question Number : 69 Question Id : 1298403069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

For the two square inputs in the figure, the PMMC meter will read, maximum when the phase difference between them is _____



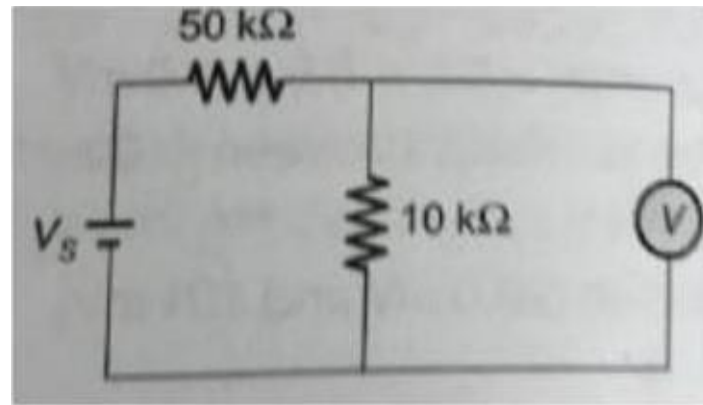
Options :

2. ✘ $T/4$

3.4 $T/2$

Question Number : 70 Question Id : 1298403070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A voltmeter is connected across the 10 KQ resistor as shown in figure reads 5V. The voltmeter is rated at 1000 ohm/volt and has a full scale reading of IOV. The supply voltage V_s in volts is _____



Options :

1. • 30
2. 50
3. v 55
4. 80

Question Number : 71 Question Id : 1298403071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Bone cells that function as phagocytic cells and are highly active in osteoporosis patients are called_____

Options :

1. Osteoprogenitor

2.4 Osteoclasts

Fibroblasts

4. Osteoblasts

Question Number : 72 Question Id : 1298403072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A very low loss coil is tested with a Q meter and the distributed (self) capacitance of the coil is found to be 820pF. Resonance occurred at an angular frequency of 10^6 rad/s with a capacitance of 9.18nF. The inductance of the coil is _____

Options :

100 pH

100 pH

100nH

4. 10011M

Question Number : 73 Question Id : 1298403073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Anderson bridge is a modified form of _____

Options :

Maxwell bridge

illieatstone's bridge

Schering bridge

Kelvin double bridge

Question Number : 74 Question Id : 1298403074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The system having $G(s) = \frac{16}{s^2+8s+16}$ and unity feedback, system will be

Options :

Under damped

Over damped

3 Critically damped

4. Oscillatory

Question Number : 75 Question Id : 1298403075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The ratio of the output Laplace Transfonn to the input Laplace Transfonn assuming zero Initial conditions is called_____

Options :

1. Nyquist's ratio

✘ Dynamic quotient

3. ...9 Transfer ftnction

Gibb's ratio

Question Number : 76 Question Id : 1298403076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

For the system to be stable

Options :

All poles must lie on light of the imaginary axis

All poles must lie on left of the imaginal Y axis All

zeroes must lie on right ofthe imagmaryr axis

All zeroes must lie on left of the imaginary axis

Question Number : 77 Question Id : 1298403077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

An input of 5 volt is applied to a negative feedback closed loop system. The system has a forward gain of 1 and a feedback gain of 1. The magnitude of the output voltage will be_____

Options :

1 Volt

1.5 Volt

3 2.0 Volt

4..2 2.5 Volt

Question Number : 78 Question Id : 1298403078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The steady state error is determined as the difference between the reference input and the system output at

Options : ✖

t=tp

2. ✖ t = 0

3 t=time constant t=∞

Question Number : 79 Question Id : 1298403079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A system is represented by the differential equation $M \frac{d^2x}{dt^2} + F \frac{dx}{dt} + Kx = u(t)$. The transfer function relating $X(s)$ and $U(s)$ is

Options :

$$\frac{M}{Ms^2 + Fs + K}$$

2. ✖ $\frac{F}{Ms^2 + Fs + K}$

✘ $\frac{K}{Ms^2+Fs+K}$

1
Ms²+Fs+K

Question Number : 80 Question Id : 1298403080 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

With increase in the type of the system the steady state error for a particular input function Options :

Increases

Decreases

Remains constant

First increases then decreases

Question Number : 81 Question Id : 1298403081 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The location of the closed loop conjugate pair of pole on jo axis indicates that the system is

Options :

1. Stable

2. Unstable
 3. Marginally stable
- ✘ Critically stable

Question Number : 82 Question Id : 1298403082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

In which type of strain gauge the gauge factor is maximum

Options :

Semiconductor

Pure metals

✘ Carbon metal alloys

✘ Super conductors

Question Number : 83 Question Id : 1298403083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

LVDT works on the principle of

Options :

Variable resistance

Variable self-inductance

3. Variable mutual inductance

4. Variable capacitance

Question Number : 84 Question Id : 1298403084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The size of air cored inductive transducers as compared with their Iron cored counterparts is

Options :

Smaller

2. Bigger

3. Same

✘ Can be either bigger or smaller

Question Number : 85 Question Id : 1298403085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Time dependent recoverable deformation under load is called _____
deformation

Options :

Arlastic

Elastic after-effect

3. Visco-elastic

Elastic

Question Number : 86 Question Id : 1298403086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A capacitive transducer working on the principle of change of capacitance with change of displacement, exhibits non-linear characteristics. The response of these transducers can be made linear by using

Options :

Differential arrangement

Working them over a large displacement range

The response can not be made linear

No special arrangement is required

Question Number : 87 Question Id : 1298403087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An optical pulse containing 6×10^6 photons is incident on photodiode and 4.5×10^6 electron hole pairs are created. The maximum possible quantum efficiency of photodiode is _____

Options :

1. 4

2. ✘ 80%

✘ 100%

Question Number : 88 Question Id : 1298403088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The frequency of light radiation with a wavelength of 500 nm is _____ MHz

Options :

✘ 500

2. 250

3. 50

4. 600

Question Number : 89 Question Id : 1298403089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In a photo-multiplier

Options :

✘ Gain is independent of stray magnetic fields

High frequency response is Improved by increasing the number of dynodes ✘
(emitting surface)

Secondary emission is used for amplification of low level photo current

The electron are directed to the anode by applying a strong magnetic field

Question Number : 90 Question Id : 1298403090 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

A piezoelectic crystal has a thickness of 2mm. Its voltage sensitivity is 0.012
V/nN. It is subjected to a pressure of $5 \times 10^5 \text{ N/m}^2$. The voltage generated is
_____ V

Options :

3M 12

4. 48

Question Number : 91 Question Id : 1298403091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In a ECG wave QRS complex represents_____

Options :

Ventricular depolarization

Ventricular repolarization

✘ Atrial depolarization

✘ Atrial repolarization

Question Number : 92 Question Id : 1298403092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The test mostly used for the diagnosis of epilepsy is_____

Options :

1.9 EEG

2. EOG

3. EMG

4. ECG

Question Number : 93 Question Id : 1298403093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

—Plincipal ion is not involved for the production of cell potentials

Options :

1. Sodium

Potassium

Chlorine

Hydrogen

Question Number : 94 Question Id : 1298403094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

EOG is used for the measurement of_____

Options :

Comeo-retinal standing potential

Blood Pressure

Respiration rate

Heart rate

Question Number : 95 Question Id : 1298403095 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

A small branch of an artery leading into capillaries is called_____

Options :

Capillaries

Arteriole

Areolas

Vessel

Question Number : 96 Question Id : 1298403096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Defibrillators are devices that

Options :

1. Restore a nonnal heartbeat by sending an electlic pulse

- ✘ Helps the person to breathe
- ✘ Measure the volume of air inspired
- ✘ Uses dialysis to remove Impurities and waste products

Question Number : 97 Question Id : 1298403097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

_____ Instlument is used to measures oxygen saturation level, or the
oxygen levels in your blood

Options :

Pulse oximeter

Defibrillator

Pacemaker

Sphygmometer

Question Number : 98 Question Id : 1298403098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The force needs to be applied to an object to cause it to change from elastic
defonnation to plastic defonnation is Imown as

Options :

✘ Compressive stress

✘ Impact stress Tensile

stress

Yield Stress

Question Number : 99 Question Id : 1298403099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which valve does the blood flow through after passing through the right atrium into the left ventricle

Options :

Tricuspid valve

Mitral valve

Bicuspid valve

Aortic valve

Question Number : 100 Question Id : 1298403100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Linear prediction method, Syntactic method and Long tenn prediction are the examples of_____category of ECG compression technique

Options :

1. Tmnsfonnation domain Time

domain

Parameter extraction

Frequency domain

Question Number : 101 Question Id : 1298403101 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The blood in hemodialysis is filtered through_____

Options :

Dialyzer

Cholesterol screen

✘ Hemolyzer

✘ Hemoglobin

Question Number : 102 Question Id : 1298403102 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The compression 17tio of ECG should be

Options :

Greater than one

Less than one

One

Zero

Question Number : 103 Question Id : 1298403103 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0 Spirometer is an
apparatus_____

Options :

That is capable of exchanging oxygen and carbon dioxide in the blood of human

For measuring the volume of air inspired and expired by the lungs

That is placed under the skin in your chest to help control your heartbeat

That restore a normal heartbeat by sending an electric pulse or shock to the heart

Question Number : 104 Question Id : 1298403104 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

X-rays can be used to detect_____disease

Options :

Bladder infection

Pneumonia

Dian-hea

Fever

Question Number : 105 Question Id : 1298403105 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The most common form of medical imaging, using high-energy radiation to penetrate skin and tissues but not bone is_____

Options :

1. Ultrasound

2. ✘ MRI

3. ✘ X-rays

4 PET

Question Number : 106 Question Id : 1298403106 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

As an ultrasound pulse moves through tissue in a patient's body, which of the following parameter will not change

Options :

✘ Amplitude (energy)

Frequency

✘ Intensity

Physical size

Question Number : 107 Question Id : 1298403107 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The smallest unit in the reconstruction of an MRI image is known as_____

Options :

Pixel ✘

Binary unit

Voxel

Dot

Question Number : 108 Question Id : 1298403108 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Spatial localization in MRI primarily relies on

Options :

Distance from the transmission coil

Distance to the receiving coil

3. Varying magnetic field across the patient

✘ Tomographic reconstmction

Question Number : 109 Question Id : 1298403109 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The type of joint between the skull bones is _____

Options :

✘ Ball and Socket joint

✘ Synovial Joint Fibrous

joint

✘ Cartilaginous joint

Question Number : 110 Question Id : 1298403110 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Galvanic skin response gives _____

Options :

✘ Activity of endrocine glands

2. Activity of sweat glands

Baseline value of skin resistance

✘ Baseline value of breathing

Question Number : 111 Question Id : 1298403111 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The structure which is not present in the knee is _____

Options :

Anterior cruciate ligament

Glenohumeral ligament

Posterior cruciate ligament

Medial collateral ligament

Question Number : 112 Question Id : 1298403112 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The bond between amino acids is called _____

Options :

Ionic bond

Peptide bond

3. Acidic bond

Hydrogen bond

Question Number : 113 Question Id : 1298403113 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The tissue which stores fats is known as _____

Options :

Nervous tissue

Epithelial tissue

Adipose tissue

Muscle tissue

Question Number : 114 Question Id : 1298403114 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The plasma protein which is responsible for blood coagulation is called_____

Options :

Fibrinogen

Globulin

Semm amylase

4. Albumin

Question Number : 115 Question Id : 1298403115 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Ribs and stemum are connected by_____

Options :

Areolar tissue

White fibrous canilage

3. Hyaline caltilage

✘ Bony matter

Question Number : 116 Question Id : 1298403116 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The characterization technique used to measure Young's modulus of a biomaterial is

Options :

Calculation from the stress-strain cuve

2. Tensile test

✘ Compression test

✘ Three- and four-point bend test

Question Number : 117 Question Id : 1298403117 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The _____ propenies of a biomaterial affect the maximum possible accommodation of cells in the scaffold.

Options :

Topography and roughness

✘ Charge

Stiffness

✘ Sillface chemist1Y

Question Number : 118 Question Id : 1298403118 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Creep mechanism which operates at stress level $10^{-2} > \sigma/G > 10^{-4}$ is

Options :

Dislocation creep

✘ Diffusion creep ✘

Dislocation glide

4 Gb sliding

Question Number : 119 Question Id : 1298403119 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An inherited red blood cell disorder where there are not healthy red blood cells to carry oxygen throughout human body is known as_____

Options :

Sickle cell anemia

✘ Alopecia

✘ Hemolysis

Heterochromia

Question Number : 120 Question Id : 1298403120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The condition where blood clot forms in circulatory system is known as _____

Options :

Strombus

Hematoma

Thrombus

Embolus