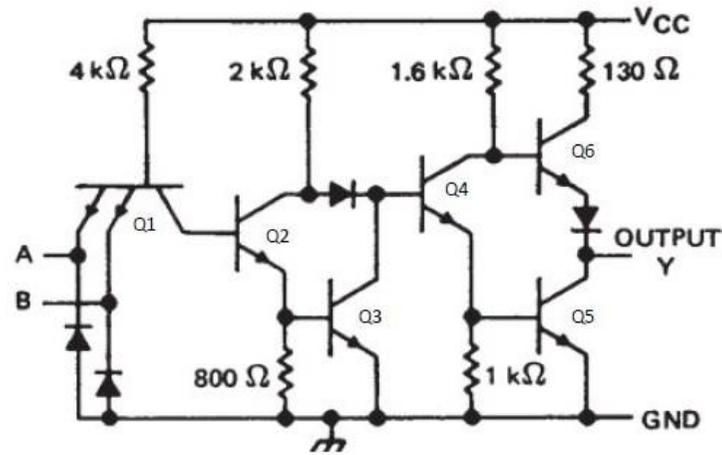|	
Exported On *	2022/06/27 12:02:07
Title *	Question Paper Answer Key
OES Exam *	GPSC08202111 / Assistant Professor in Electrical and Electronics Engineering/ Completed / 2022-06-26

1

Question Description	Consider R1 = 2kΩ, Rf = 8kΩ and vi = 2V in non-inverting amplifier circuit. Next, if a load resistor of 5kΩ is connected at the output of the circuit, then what is the load current (iL) ?
A	1.6 mA
B	2mA
C	-1.6 mA
D	-2mA
E	None of the above
Correct Answer	B
Marks	1

2

Question Description	The given circuit shows the implementation of following logic operation:

A	XOR
B	XNOR
C	AND
D	OR
E	None of the above

Correct Answer	C	
Marks	1	

3	**Question Description**	RLC circuit is given in figure, where $\vec{V}_s = 1 \angle 0\ V$, $\vec{I}_s = \sqrt{2} \angle \frac{\pi}{4}\ A$, $\vec{I}_{RL} = \sqrt{2} \angle -\frac{\pi}{4}\ A$. What is the value of resistance R in the given circuit?
	A	0.5Ω
	B	1Ω
	C	2Ω
	D	$\sqrt{2}\Omega$
	E	None of the above
	Correct Answer	A
	Marks	1

4	**Question Description**	What is the rank of system matrix when the given system $\dfrac{Y(s)}{U(s)} = \dfrac{1}{s^4}$ is in controllable canonical form representation?
	A	Three
	B	One
	C	Two
	D	Four
	E	None of the above
	Correct Answer	A
	Marks	1

5

Question Description	For a power system network with 5 nodes, if Z22 of its bus impedance matrix is j0.25 p.u. The voltage at node 3 is p.u. If a capacitor having a reactance of –j3.5 p.u. is now connected in shunt to bus2, the reactive power injected/drawn at the bus in p.u. is ....
A	0.3169 p.u., 126 degree
B	0.388 p.u., 147 degree
C	0.326 p.u. , 162 degree
D	0.468 p.u. , 156 degree
E	None of the above
Correct Answer	C
Marks	1

6

| Question Description	What is the lowest order of Butterworth filter with a pass band gain K_P= -1 dB at Ω_P=4 rad/sec and stop band attenuation greater than or equal to 20dB at Ω_S = 8 rad/sec?
A	5
B	4
C	3
D	6
E	None of the above
Correct Answer	A
Marks	1

7	Question Description	Which type of instruments measure the total quantity of electricity delivered in a particular time?
	A	Recording
	B	Indicating
	C	Absolute
	D	Integrating
	E	None of the above
	Correct Answer	D
	Marks	1

8

Question Description

The full bridge ac-dc converter shown in the figure is made up of ideal devices and supplies a constant current source (I_d) load. The average value of the output voltage of the converter, v_d can be reduced by increasing the value of delay angle, α. The effect of increase in α on the displacement power factor (DPF) and rms value of source current ($I_{s,rms}$) is:
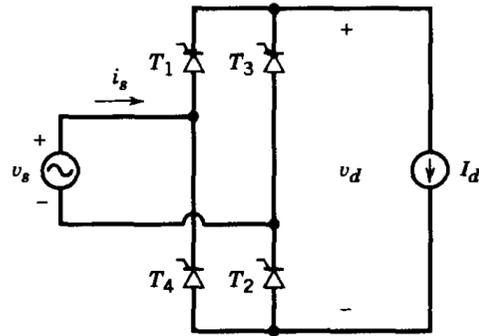
A   Both DPF and Is,rms reduce

B   DPF remains the same and Is,rms reduces

C   DPF increases and $I_{s,rms}$ reduces

D   DPF reduces and $I_{s,rms}$ remains the same

E   None of the above

Correct Answer   D

Marks   1

9	Question Description	The following number of flip-flops are required for the synthesis of a sequential logic circuit with N-number of states:
	A	N
	B	$\lceil \log \frac{N}{2} \rceil$
	C	2^N
	D	$\lfloor \log \frac{N}{2} \rfloor$
	E	None of the above
	Correct Answer	B
	Marks	1

10	Question Description	The plant in closed loop control system is given as: $\frac{d^2 y(t)}{dt^2} + 6 \frac{dy(t)}{dt} - 5 y(t) = u(t)$. It is required to design a unity negative feedback closed loop control system with this given plant using proportional controller. Thus, this designed closed loop system will be stable for
	A	$\forall K_p > -6$
	B	$\forall K_p > 5$
	C	$\forall K_p < 6$
	D	$\forall K_p > 0$
	E	None of the above
	Correct Answer	B
	Marks	1

11		
Question Description		When a low resistance is connected in parallel with a high resistance, the combined resistance is
A		always more than the high resistance
B		always less than the low resistance
C		always between the value of high and low resistance
D		either lower or higher than low resistance depending on the value of high resistance
E		None of the above
Correct Answer		B
Marks		1

12		
Question Description		The simplified form of the Boolean expression represented as: $\overline{((a+\bar{b}+c+\bar{d})+(b+\bar{c}))}$ is:
A		0
B		$\overline{a.b}$
C		$a.b$
D		1
E		None of the above
Correct Answer		A
Marks		1

13	Question Description	A nonresonant antenna is
	A	Yagi Antenna
	B	folded dipole
	C	rhombic antenna
	D	log periodic antenna
	E	None of the above
	Correct Answer	C
	Marks	1

14	**Question Description**	Suppose the voltage applied to a circuit is $v(t)=120\sqrt{2}\cos(10\pi t)\,V$ and the current drawn from circuit is: $i(t)=20\sqrt{2}\sin\left(10\pi t+\frac{\pi}{6}\right)Amp$ .The phasor representation of the current in Ampere is ____ by considering voltage as reference phasor.
	A	$20\sqrt{2}\angle\frac{\pi}{6}$
	B	$20\angle-\frac{\pi}{6}$
	C	$28.28\angle\frac{\pi}{6}$
	D	$28.28\angle-\frac{\pi}{6}$
	E	None of the above
	Correct Answer	D
	Marks	1

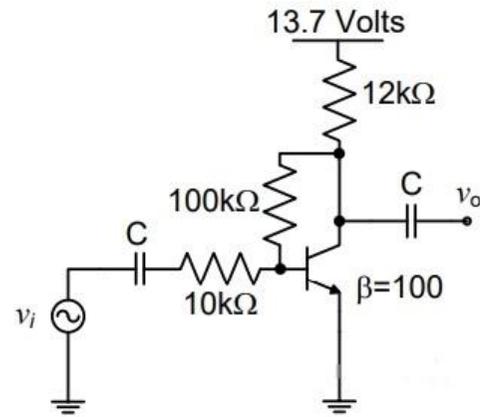| 15	Question Description	Consider closed loop system whose open-loop transfer function with unity negative feedback is given as: $\dfrac{s+6}{s^2+3s}$. With this, the gain-cross over frequency in (rad/sec) and phase-cross over frequency in (rad/sec) are_____
	A	4.354 rad/sec and 5.434 rad/sec respectively
	B	1.414 rad/sec and 2 rad/sec respectively
	C	1.665 rad/sec and 0 rad/sec respectively
	D	1.791 rad/sec and ∞ rad/sec respectively
	E	None of the above
	Correct Answer	D
	Marks	1

16

Question Description	The output of a second order system for unit step signal is given as: $c(t) = 1 - \frac{2}{\sqrt{3}} e^{-t} \cos(\sqrt{3}\ t - \frac{\pi}{6})$. The transfer function for this system is:
A	$\dfrac{s}{s^2+2s+4}$
B	$\dfrac{4}{s^2+2s+4}$
C	$\dfrac{4s}{s^2+2s+4}$
D	$\dfrac{1}{s^2+2s+4}$
E	None of the above
Correct Answer	B
Marks	1

17

Question Description	The voltage gain A_v of the given circuits is:_____
A	$\lvert A_v \rvert \approx 10$
B	$\lvert A_v \rvert \approx 100$
C	$\lvert A_v \rvert \approx 1000$
D	$\lvert A_v \rvert \approx 200$
E	None of the above
Correct Answer	A
Marks	1

18	Question Description	In Thevenin's theorem Z is determined by
	A	short-circuiting all independent current and voltage sources.
	B	open-circuiting all independent current and voltage sources
	C	short-circuiting all independent voltage sources and open-circuiting all independent current sources.
	D	open-circuiting all independent voltage sources and short-circuiting all independent current sources.
	E	None of the above
	Correct Answer	C
	Marks	1

19	Question Description	Transfer function is defined for
	A	linear and time variant system
	B	linear and time invariant system
	C	nonlinear and time variant system
	D	nonlinear and time invariant system
	E	None of the above
	Correct Answer	B
	Marks	1

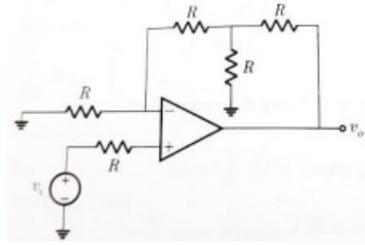| **Question Description**	The passive linear load (RLC load) shown in the figure is supplied by an ac source through an ideal single phase half bridge rectifier. The rms value of the ac source voltage is V_s . The average value of the output voltage (V_d) at steady state:
A	is independent of the parameters of the load and is equal to $\dfrac{2\sqrt{2}}{\pi} V_s$
B	is independent of the parameters of the load and is equal to $\dfrac{\sqrt{2}}{\pi} V_s$
C	depends upon the parameters of the load and can go upto a maximum of $\dfrac{\sqrt{2}}{\pi} V_s$
D	depends upon the parameters of the load and can vary between zero to $\sqrt{2} V_s$
E	None of the above
Correct Answer	D
Marks	1
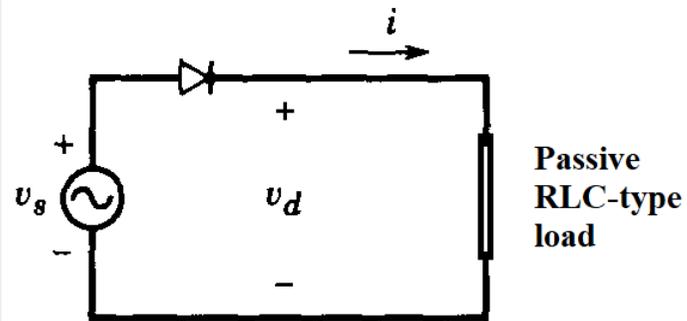
21		
Question Description	For the circuit shown below the value of $Av=\dfrac{v_o}{v_i}$ Is 	
A	5	
B	-5	
C	6	
D	-6	
E	None of the above	
Correct Answer	A	
Marks	1	

22	Question Description	In negative logic, the logic state 1 corresponds to
	A	negative voltage
	B	zero voltage
	C	more negative voltage
	D	lower voltage level
	E	None of the above
	Correct Answer	D
	Marks	1

23

Question Description	Suppose $E = 4\sin(2\pi \times 10^7 t - 0.8x)\hat{a}_x$ V/m in a non-magnetic medium. With this, time-average power carried by the wave is:
		A	$33.25\hat{a}_x$ mW/m²	
		B	$263\hat{a}_x$ mW/m²	
		C	$81\hat{a}_x$ mW/m²	
		D	$17\hat{a}_x$ mW/m²	

A	A
B	B
C	C
D	D
E	None of the above
Correct Answer	C
Marks	1

24	Question Description	For effective implementation of Smart Grids, the following feature is not mandatory.
	A	Interoperability
	B	Robustness
	C	Cyber Security
	D	Maintaining load factor at unity.
	E	None of the above
	Correct Answer	D
	Marks	1

Question Description	The buck-boost converter shown in the figure is built with ideal components and is operating in steady state. Assume C to be very large so that the output voltage (V_o) is ripple free. The average value of inductor current (I_L) is 10 A and the load current (I_o) is 5A. Input voltage, V_d=20V and duty ratio, D of the switch is 0.4. Determine V_o
A	20 V
B	13.33V
C	30 V
D	33.33V
E	None of the above
Correct Answer	A
Marks	1
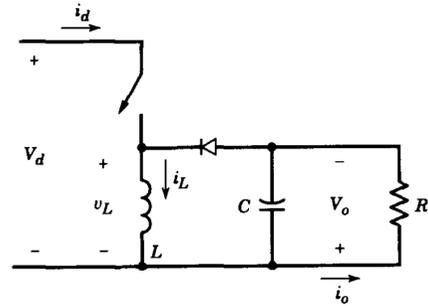
26

| Question Description	Suppose $y[n]$ is the output of LTI system computed using convolution of input $x[n]$ and its causal impulse response $h[n]$. If the input to given LTI system is $x[n]=\left(\frac{1}{4}\right)^{n}u[n]$ and output is $y[0]=\frac{7}{2}, y[1]=\frac{3}{2}, y[2]=\frac{3}{8}$, then what is the value of impulse response $h[n]$ at $n=2$. ?
A	$\frac{3}{8}$
B	0
C	$\frac{7}{2}$
D	$\frac{3}{4}$
E	None of the above
Correct Answer	B
Marks	1

27	**Question Description**	The output signal of temperature transducer is in continuous-time and this signal consists of frequency components from 1 kHz to 2 kHz. Next, it is decided to convert this signal into discrete-time in order to achieve digital control. What is the minimum sampling frequency is required to retain the information in the reconstructed signal?
	A	3 kHz
	B	4 kHz
	C	2 kHz
	D	All are correct
	E	None of the above
	Correct Answer	C
	Marks	1

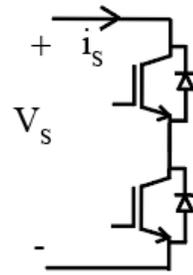| 28	**Question Description**	Four composite switches built using ideal diodes and ideal transistors are shown in Figure. Which among them are capable of 4-quadrant operation? (bidirectional voltage blocking and bidirectional current carrying capability)
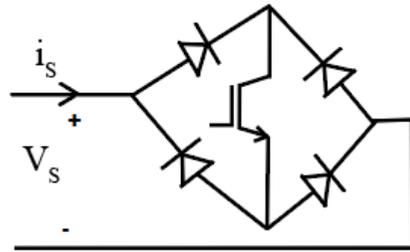
(i)
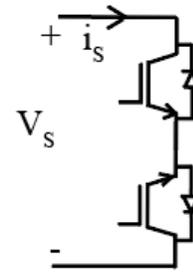
(iii)
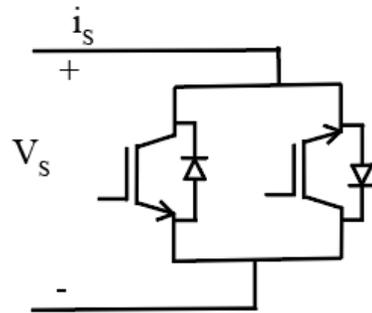
(ii)

(iv)

A	i and iii only
B	ii and iv only
C	ii, and iii only
D	i, ii, and iii only
E	None of the above
Correct Answer	A

Marks	1	

29 Question Description	Assume 3-bit inverted R-2R ladder type DAC with R = R_f = 10kΩ and V_R = 8V. What is the total current delivered to Op-Amp and the output voltage when the binary input is 101?	
A	0.5mA, 5V	
B	0.7mA, 7V	
C	0.4mA, 5V	
D	0mA, 8V	
E	None of the above	
Correct Answer	A	
Marks	1	

30 Question Description	Causes of low power factor are	
A	induction motors and arc lamp loads	
B	generating equipment during low loads	
C	industrial heating furnaces and arc furnaces	
D	Both A and C above	
E	None of the above	
Correct Answer	D	
Marks	1	

31	Question Description	In Gibb's phenomenon, the ringing effect is predominantly present near the following:
	A	Bandgap
	B	Bandedge
	C	Bandwidth
	D	Bandshell
	E	None of the above
	Correct Answer	B
	Marks	1

32	Question Description	The highest number of HVDC terminal station in India is:_____
	A	2 terminals
	B	3 terminals
	C	4 terminals
	D	5 terminals
	E	None of the above
	Correct Answer	B
	Marks	1

33	Question Description	When a program is being executed in 8085 microprocessor, its Program Counter contains
	A	the number of instructions in the current program that have already been executed
	B	the total number of instructions in the program being executed
	C	the memory address of the instruction that is being currently executed
	D	the memory address of the instruction that is to be executed next
	E	None of the above
	Correct Answer	D
	Marks	1

34	Question Description	The meter constant of energy meter is given by
	A	rev/kW
	B	rev/kWh
	C	rev/watt
	D	rev/kWs
	E	None of the above
	Correct Answer	B
	Marks	1

35	**Question Description**	Consider the signal $x(t)$ has Fourier transform as: $X(\omega)=2\pi j\omega e^{-|\omega|}$. Then the resultant signal $x(t)$ is:
	A	Real and Even
	B	Complex
	C	Real and Odd
	D	Imaginary and Odd
	E	None of the above
	Correct Answer	C
	Marks	1

36	**Question Description**	Consider a 3φ, 2 pole, 50 Hz, 200 MVA synchronous generator having an inertia constant of 5 MJ/MVA and initial rotor angle of 30 Electrical
	A	1890 Elect
	B	1900 Elect
	C	1980 Elect
	D	1540 Elect
	E	None of the above
	Correct Answer	A
	Marks	1

37	Question Description	The armature core of a D.C generator is usually made of
	A	silicon steel
	B	copper
	C	non-ferrous material
	D	cast-iron
	E	None of the above
	Correct Answer	A
	Marks	1

38	Question Description	In a closed loop control system
	A	control action depends on the output and also on the input command
	B	output signal is feedback to be compared with the reference signal
	C	the accuracy is better than in open loop system
	D	all of these
	E	None of the above
	Correct Answer	D
	Marks	1

39	Question Description	A DC generator generates
	A	DC voltage in armature
	B	AC voltage in armature
	C	DC and AC voltage
	D	pulsating DC
	E	None of the above
	Correct Answer	B
	Marks	1

| 40	Question Description	The single-precision floating point number expressed using IEEE-754 format is given as : 0111 1111 1101 0101 0101 0101 0101 0101. What is its corresponding numeric value?
	A	infinity
	B	positive number
	C	not a number
	D	negative number
	E	None of the above
	Correct Answer	C
	Marks	1

41	Question Description	Suppose sinusoidal signal of 1.5V is available for processing. The requirement is to quantize this sinusoidal signal with quantization steps of 2mV. How many bits required for doing such operation and what will be quantization error introduced in such operation?
	A	11-bits, 2mV
	B	10-bits, 1mV
	C	11-bits, 1mV
	D	12-bits, 2mV
	E	None of the above
	Correct Answer	C
	Marks	1

| 42 | **Question Description** | The rms values of steady state currents flowing through the upper, middle and lower branches are I_a, I_b and I_c respectively. Determine I_a: I_b: I_c
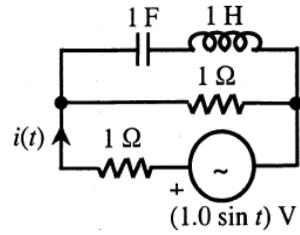
 |
|---|---|---|
| **A** | 0: 1: 2 |
| **B** | 1:0:1 |
| **C** | 1:1:0 |
| **D** | 0:1:1 |
| **E** | None of the above |
| **Correct Answer** | B |
| **Marks** | 1 |

43	Question Description	Total input when the power plant is generating 35 MW will be:_____
	A	181.6×10^6 kcal/hr
	B	250×10^6 kcal/hr
	C	362.5×10^6 kcal/hr
	D	582.4×10^6 kcal/hr
	E	None of the above
	Correct Answer	C
	Marks	1

44	Question Description	Time constant of series R-L circuit equals
	A	LR second
	B	L/R second
	C	L^2R second
	D	LR^2 second
	E	None of the above
	Correct Answer	B
	Marks	1

45	**Question Description**	Coupling between the two windings of a transformer can be increased by
	A	increasing the number of turns in the two windings
	B	increasing the primary voltage
	C	interleaving the windings on a common core of low reluctance
	D	reducing the insulation of the two windings
	E	None of the above
	Correct Answer	C
	Marks	1

46	**Question Description**	The best method of measuring capacitance is
	A	CRO method
	B	transistor voltmeter method
	C	voltmeter-ammeter method
	D	ac bridge method
	E	None of the above
	Correct Answer	D
	Marks	1

47		
Question Description	Find Norton equivalent (I_N and R_{th}) for the given circuit:	
A	0A, 50Ω	
B	5A, 25 Ω	
C	2A, 50 Ω	
D	1A, 25 Ω	
E	None of the above	
Correct Answer	A	
Marks	1	
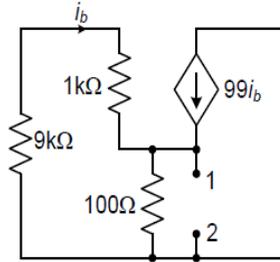
48	Question Description	A square wave inverter and its output voltage (Vab) is shown in Figure. Determine the value of α (in radians) such that the output voltage is devoid of 3rd harmonic component.
A		$\pi/6$
B		$\pi/4$
C		$\pi/3$
D		$2\pi/9$
E		None of the above
Correct Answer		A
Marks		1
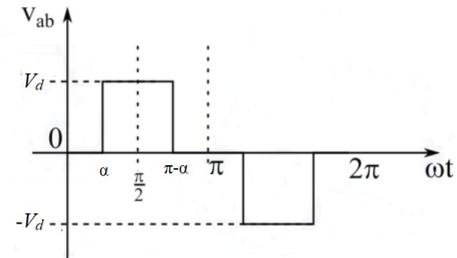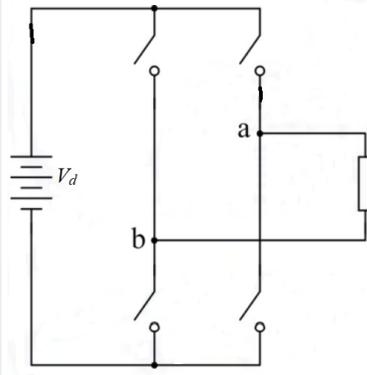
49		
Question Description		Suppose the finite sheet with $0 \leq x \leq 1$, $0 \leq y \leq 1$ on the $z=0$ plane has a charge density as $\rho_s = xy(x^2+y^2+25)^{3/2}$ nC/m². What is the total charge on the sheet ?
A		25.23 nC
B		12.67 nC
C		11.15 nC
D		33.15 nC
E		None of the above
Correct Answer		D
Marks		1

50	
Question Description	The given bridge circuit is used for the measurement of unknown element Z_X. This bridge circuit is suited when Z_X is:

A	Low Q inductor
B	Low resistance
C	High resistance
D	Lossy capacitor
E	None of the above
Correct Answer	A
Marks	1

| 51 | **Comprehension** | Read the Passage Below and answer the following questions:

From the very beginning man has attempted what has seemed impossible. Man is different from the rest of the creation in this respect. He has an eternal thirst for adventure. This has led to countless new discoveries and inventions. Human curiosity is limitless. This has led to space flights and moon landings. The desire to know what is beyond the visible world takes many forms. The Everest hero Tenzing and the hero of the 'Seven Seas', Mihir Sen, were inspired by the same restless spirit. Astronauts Armstrong, Collins and Aldrin, who were the first humans to set foot on the soil of the moon, have proved beyond doubt that man shall not rest until he has conquered the entire universe. But, is it enough to know and master nature? Which is more important: knowing and understanding the world around or knowing and understanding yourself? In the absence of self-knowledge, the most advanced knowledge of the universe is not only useless but dangerous. |
|---|---|---|
| | **Question Description** | From the options provided below, identify the phrase that does not describe the innate nature of human kind, as per the passage |
| | **A** | eternal thirst for knowledge |
| | **B** | countless new discoveries and inventions |
| | **C** | desire to know what is beyond the visible world |
| | **D** | restless spirit |
| | **E** | None of the above |
| | **Correct Answer** | B |
| | **Marks** | 1 |

| 52 | | |

Comprehension	Read the Passage Below and answer the following questions:
	From the very beginning man has attempted what has seemed impossible. Man is different from the rest of the creation in this respect. He has an eternal thirst for adventure. This has led to countless new discoveries and inventions. Human curiosity is limitless. This has led to space flights and moon landings. The desire to know what is beyond the visible world takes many forms. The Everest hero Tenzing and the hero of the 'Seven Seas', Mihir Sen, were inspired by the same restless spirit. Astronauts Armstrong, Collins and Aldrin, who were the first humans to set foot on the soil of the moon, have proved beyond doubt that man shall not rest until he has conquered the entire universe. But, is it enough to know and master nature? Which is more important: knowing and understanding the world around or knowing and understanding yourself? In the absence of self-knowledge, the most advanced knowledge of the universe is not only useless but dangerous.
Question Description	The passage indicates that mankind differs from other living species in
A	the thirst for adventure
B	self-knowledge
C	the desire to conquer the universe
D	attempting the impossible
E	None of the above
Correct Answer	D
Marks	1

| 53 | **Comprehension** | Read the Passage Below and answer the following questions:

From the very beginning man has attempted what has seemed impossible. Man is different from the rest of the creation in this respect. He has an eternal thirst for adventure. This has led to countless new discoveries and inventions. Human curiosity is limitless. This has led to space flights and moon landings. The desire to know what is beyond the visible world takes many forms. The Everest hero Tenzing and the hero of the 'Seven Seas', Mihir Sen, were inspired by the same restless spirit. Astronauts Armstrong, Collins and Aldrin, who were the first humans to set foot on the soil of the moon, have proved beyond doubt that man shall not rest until he has conquered the entire universe. But, is it enough to know and master nature? Which is more important: knowing and understanding the world around or knowing and understanding yourself? In the absence of self-knowledge, the most advanced knowledge of the universe is not only useless but dangerous. |
|---|---|---|
| | **Question Description** | Read the following statements and arrange them in a logical sequence in line with the tone of the passage

(i) In the absence of self-knowledge, it is also dangerous

(ii) Knowing and understanding yourself is more important

(iii)The most advanced knowledge of the universe is useless

(iv) Knowing and understanding the world around is important |
	A	(i); (ii); (iii) ;(iv)
	B	(iv); (ii);(iii);(iv)
	C	(iii); (i); (ii) ;(iv)

D	(ii); (iv); (iii) ;(i)
E	None of the above
Correct Answer	B
Marks	1

54	Comprehension	Read the Passage Below and answer the following questions:
		From the very beginning man has attempted what has seemed impossible. Man is different from the rest of the creation in this respect. He has an eternal thirst for adventure. This has led to countless new discoveries and inventions. Human curiosity is limitless. This has led to space flights and moon landings. The desire to know what is beyond the visible world takes many forms. The Everest hero Tenzing and the hero of the 'Seven Seas', Mihir Sen, were inspired by the same restless spirit. Astronauts Armstrong, Collins and Aldrin, who were the first humans to set foot on the soil of the moon, have proved beyond doubt that man shall not rest until he has conquered the entire universe. But, is it enough to know and master nature? Which is more important: knowing and understanding the world around or knowing and understanding yourself? In the absence of self-knowledge, the most advanced knowledge of the universe is not only useless but dangerous.
	Question Description	In the passage what is described as boundless
	A	the desire to know
	B	the universe
	C	the restless spirit
	D	human curiosity
	E	None of the above
	Correct Answer	D
	Marks	1

| 55 | Comprehension | Read the Passage Below and answer the following questions:

From the very beginning man has attempted what has seemed impossible. Man is different from the rest of the creation in this respect. He has an eternal thirst for adventure. This has led to countless new discoveries and inventions. Human curiosity is limitless. This has led to space flights and moon landings. The desire to know what is beyond the visible world takes many forms. The Everest hero Tenzing and the hero of the 'Seven Seas', Mihir Sen, were inspired by the same restless spirit. Astronauts Armstrong, Collins and Aldrin, who were the first humans to set foot on the soil of the moon, have proved beyond doubt that man shall not rest until he has conquered the entire universe. But, is it enough to know and master nature? Which is more important: knowing and understanding the world around or knowing and understanding yourself? In the absence of self-knowledge, the most advanced knowledge of the universe is not only useless but dangerous. |
|---|---|---|
| | Question Description | From the options provided, select the antonym of the word "restless", in the sense implied in the passage |
| | A | peace loving |
| | B | calm |
| | C | contentious |
| | D | eager |
| | E | None of the above |
| | Correct Answer | B |
| | Marks | 1 |

56	Question Description	What is the name of the eBook launched by the Income Tax Department?
	A	Amrutwani
	B	Pratidhwani
	C	Aatmnirbhar
	D	Kiyaverse
	E	None of the above
	Correct Answer	B
	Marks	1

57	Question Description	Who among the following has recently been appointed ambassador of Indo-UK culture platform?
	A	Sonu Nigam
	B	Arijit Singh
	C	Shankar Mahadevan
	D	AR Rahman
	E	None of the above
	Correct Answer	D
	Marks	1

58	Question Description	Baikho festival is celebrated in which state?
	A	Manipur
	B	Nagaland
	C	Tripura
	D	Assam
	E	None of the above
	Correct Answer	D
	Marks	1

59	Question Description	World Veterinary Day is being celebrated on which date?
	A	April 29
	B	April 28
	C	April 30
	D	April 27
	E	None of the above
	Correct Answer	C
	Marks	1

60	Question Description	Tap to pay for UPI' is a new functionality launched by which platform?
	A	Google Pay
	B	PhonePe
	C	BHIM App
	D	Paytm
	E	None of the above
	Correct Answer	A
	Marks	1

61	Question Description	India has recently launched its first COVID-19 vaccine for animals. What is the name of vaccine?
	A	Petcovax
	B	Anocovax
	C	Creacovax
	D	Armacovax
	E	None of the above
	Correct Answer	B
	Marks	1

62	Question Description	B. C. Roy Award is given in the field of
	A	Music
	B	Journalism
	C	Medicine
	D	Environment
	E	None of the above
	Correct Answer	C
	Marks	1

63	Question Description	The world's first wildlife conservation bond Has been issued by the World Bank for which animal?
	A	White elephant
	B	Black Rhinoceros
	C	Asiatic Lion
	D	Bengal Tiger
	E	None of the above
	Correct Answer	B
	Marks	1

64	Question Description	Who was the first Indian Chief of Army Staff of the Indian Army ?
	A	Gen. K.M. Cariappa
	B	Vice-Admiral R.D. Katari
	C	Gen. Maharaja Rajendra Singhji
	D	Gen. Vishit Singh
	E	None of the above
	Correct Answer	A
	Marks	1

65	Question Description	Maruti Suzuki Installs Asia's largest 20 MWp carport type Solar Plant at which state?
	A	Haryana
	B	Maharashtra
	C	Rajasthan
	D	Punjab
	E	None of the above
	Correct Answer	A
	Marks	1

Question Description	Find out the wrong number in the given sequence of numbers.
	105, 85, 60, 30, 0, -45, -90
A	0
B	85
C	-45
D	60
E	None of the above
Correct Answer	A
Marks	1

66

67		
Question Description		Following questions are based upon the word series given below. DEN, RAT, EAR, OWL, CUB If all the letters in all the words are arranged in reverse alphabetical order(within the word), then which of the following words can be formed using first letter of first word from left end, second letter of second word from right end and first letter of second word from left end?
A		BOT
B		ATN
C		NOT
D		TEN
E		None of the above
Correct Answer		C
Marks		1

68		
Question Description		On what dates of April, 2001 did Wednesday fall?
A		1st, 8th, 15th, 22nd, 29th
B		2nd, 9th, 16th, 23rd, 30th
C		3rd, 10th, 17th, 24th
D		4th, 11th, 18th, 25th
E		None of the above
Correct Answer		D
Marks		1

| 69 | Question Description | Direction: In each of the following question, there is a certain relationship between two given pair on both side of '::' . One word is given on another side of '::' while another word is to be found from the given options, having the same relation with this word as the words of the given pair . Choose the correct word from the following options.

Tectonics : Building : : Taxidermy : ? |
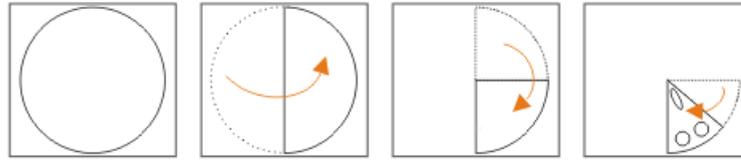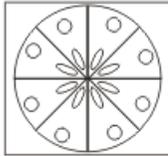| --- | --- | --- |
	A	Classification
	B	Conserving
	C	Stuffing
	D	Collecting
	E	None of the above
	Correct Answer	C
	Marks	1

| 70 | | |

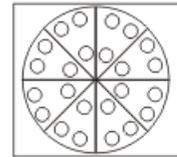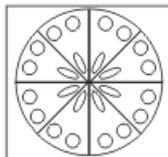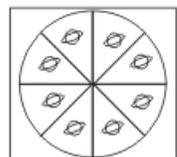|	
Question Description	In the question, a piece of paper is folded and cut as shown below in the questions figures. From the given option figures, which one indicates how it will appear when opened.

A

B

C

D

A	A
B	B
C	C
D	D

71	Question Description	January 1, 2008 is Tuesday. What day of the week lies on Jan 1, 2009?
	A	Monday
	B	Wednesday
	C	Thursday
	D	Sunday
	E	None of the above
	Correct Answer	C
	Marks	1

72 **Question Description**	In a family of 7 persons, there are only 3 females and three married couples. Each child has both the parents alive. The family members – A,B,C,D,E,F and G spent certain amounts in a month. B is the only son of G, who spent the third highest amount. A is not a female and spent an amount just lower than D's husband. C is the father of two children of different genders one of them is D. E's mother-in-law was the third highest spender. F is the aunt of A and spent the highest amount. The spendings of E were just lower than A's uncle, who spent the fourth highest amount. C spent Rs. 4500, which is the second highest amount to be spent. How is the second highest spender related to the second lowest spender?
A	Father
B	Maternal grandfather
C	Paternal Uncle
D	Can't be determined
E	None of the above
Correct Answer	B
Marks	1

73

Question Description	Find the missing Numbers.

38	54	61	79
21	?	12	24
19	09	14	?

A	18, 46
B	28, 51
C	42, 62
D	18, 44
E	None of the above
Correct Answer	D
Marks	1

74	
Question Description	Read the following information carefully and answer the questions given beside.

Certain number of persons is standing in a linear row facing towards the north. Information about few of them is given here. T stands third to the left of G, who is sixth to the right of A. 7 persons stand between B and T, where T is somewhere to the left of B. 3 persons stand between D and B, who is second to the left of the one who is fourth from the right end. Only 4 persons stand between U and C. 3 persons stand to the right of C, which is half the number of persons standing to the left of T.

What is the position of T with respect to U? |
A	2nd to the right
B	7th to the left
C	5th to the left
D	3rd to the left
E	None of the above
Correct Answer	C
Marks	1

75	**Question Description**	A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is:
	A	100 kmph
	B	110 kmph
	C	120 kmph
	D	130 kmph
	E	None of the above
	Correct Answer	C
	Marks	1