

Goa Staff Selection Commission

6th Floor,3rd Lift,SPACES Building,Patto Plaza, Panaji-Goa - 403001

Computer Based Test

Post Name : Technical Assistant (Computer/ Electronics), Programmer, Technical Officer (IT), & Junior Technical Officer

Question Description * Fill in the blank with the correct option: A place where money is coined is known as a ____ A * bank В* mint C * vault D * treasury E * None of the above Marks * 1 Answer * b

2	Question Description *	Identify the part of the sentence that contains an error: Everybody are meeting there at 3 p.m.
	A *	Everybody
	B *	are meeting
	C *	there
	D *	at 3 p.m.
	E *	None of the above
	Marks *	1
	Answer *	b

3	Question Description *	He accidentally <i>spilled the beans</i> about the surprise party during lunch. What does 'spill the beans' mean?
	A *	To spill food and stain ones clothes
	B *	To reveal a secret
	C *	To waste expensive food
	D *	To hide information
	E*	None of the above
	Marks *	1
	Answer *	b

Question Description *	Identify the part of the sentence that contains an error: He has been working on this project since a week.
A *	Не
B *	has been working
C *	on this project
D *	since a week
E *	None of the above
Marks *	1
Answer *	d

5	Question Description *	His remarks were far from <i>trivial</i> . Choose the antonym for trivial.
	A *	insignificant
	B *	vital
	C *	minor
	D *	unimportant
	E*	None of the above
	Marks *	1
	Answer *	b

Question Description *	Given below are four parts of a sentence. Rearrange the parts to form a meaningful sentence. a)essential for success b) having a clear vision c) and a strong strategy d) are the key factors
A *	BACD
B *	DACB
C *	ADCB
D *	BCDA
E *	None of the above
Marks *	1
Answer *	d

7	Question Description *	The research findings were <u>inconclusive</u> , leaving the hypothesis unproven. Select the antonym of the underlined word.
	A *	definite
	B *	rigid
	C *	unclear
	D *	ambiguous
	E *	None of the above
	Marks *	1
	Answer *	а

8	Question Description *	After missing several deadlines, Jay knew he was <i>on thin ice</i> with his boss. What does 'on thin ice' mean?
	A *	Safe and secure
	B *	Excited and thrilled
	C *	In a risky situation
	D *	Confused and unsure
	E *	None of the above
	Marks *	1
	Answer *	С

9	Question Description *	The candidate's performance was <u>mediocre</u> , failing to impress the interview panel. Select the antonym of the underlined word:
	A *	exceptional
	B *	average
	C *	exception
	D *	satisfactory
	E *	None of the above
	Marks *	1
	Answer *	а

Question Description *	Fill in the blank with the correct option: A person who does not believe in the existence of God is called
A *	An atheist
B *	An agnostic
C *	A theist
D *	A secularist
E*	None of the above
Marks *	1
Answer *	а

Question Description *	The student'sreaction to the compliment showed her lack of appreciation for praise.	
A *	Ungrateful	
B *	appreciative	
C *	ugly	
D *	thankful	
E *	None of the above	
Marks *	1	
Answer *	а	

Question Description *	Spot the error in the underlined parts of the sentenece, if any: <u>Although (1) I am a good singer and have won many awards, my sister is more better</u> (2) than me. <u>However (3)</u> she has performance anxiety and refuses to sing in public.(4)	
A *	1	
B *	2	
C *	3	
D *	4	
E*	None of the above	
Marks *	1	
Answer *	b	

Question Description *	Identify the part of the sentence that contains an error: I have seen her yesterday at the conference.	
A *	I	
B *	have seen her	
C *	yesterday	
D *	at the conference	
E*	None of the above	
Marks *	1	
Answer *	b	

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Question Description *	How many meaningful words can be formed with the letters EAML?
A *	1
B *	3
C *	4
D *	2
E *	None of the above
Marks *	1
Answer *	b

Question Description *	Fill in the blank with the correct option: The study of ancient civilisations through their material remains is called
A *	anthropology
B *	sociology
C *	archaeology
D *	history
E*	None of the above
Marks *	1
Answer *	С

Question Description *	Smriti <i>let the cat out of the bag</i> about the surprise vacation when she mentioned the tickets in front of everyone. What does 'let the cat out of the bag' mean?	
A *	To keep a secret	
B *	To release something into the wild	
C *	To accidentally reveal a secret	
D *	To apologise for a mistake	
E *	None of the above	
Marks *	1	
Answer *	С	

Question Description *	Given below are four parts of a sentence. Rearrange the parts to form a meaningful sentence. A)for innovation and progress B) creating a culture of collaboration C) is critical D) in any organisation
A *	ADCB
B *	BCAD
C *	DCBA
D *	DACB
E *	None of the above
Marks *	1
Answer *	b

18	Question Description *	Many believe that typewriters are now <i>obsolete</i> . Select the opposite of obsolete.
	A *	modern
	B *	outdated
	C *	irrelevant
	D *	ancient
	E *	None of the above
	Marks *	1
	Answer *	а

19	Question Description *	Identify the part of the sentence that contains an error: There is a big crowd waiting outside.
	A *	There
	B *	is
	C *	a big crowd
	D *	waiting outside
	E *	None of the above
	Marks *	1
	Answer *	е

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Question Description *	Spot the error in the underlined parts of the sentenece, if any: Author (1) Virginia Hamilton, who's books (2) established her as one of the most (3) influential figures in children's literature in the twentieth century, has won (4) many awards.	
A *	1	
B *	2	
C *	3	
D *	4	
E*	None of the above	
Marks *	1	
Answer *	b	

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Question Description *	In a museum an antic bell rings 12 times continuously at 6 p.m. everyday. The bell takes one second to ring and then there is a gap of 5 seconds between two successive rings of the bell. What is the total time taken by the bell to ring 12 times?
A *	60 seconds
B *	63 seconds
C *	65 seconds
D *	67 seconds
E *	None of the above
Marks *	1
Answer *	d

Question Description *	In how many ways can a cricket eleven be chosen out of 14 players?
A *	261
B *	364
C *	350
D *	154
E *	None of the above
Marks *	1
Answer *	b

Question Description *	The average age of Philip and Simon is 32 years. What is Philip's present age, if his age is now three times that of Simon's age?
A *	48 years
B *	49 years
C *	50 years
D *	51 years
E *	None of the above
Marks *	1
Answer *	а

Question Description *	Ganga, Yamuna and Saraswati invest capital in trading business. Ganga's investment is three times to that of Yamuna's investment. Yamuna's investment is two – third to that of Saraswati's investment. If the total profit earned from the trading business at the end of the year is Rs.6,600/ Then find what is Yamuna's share in the profit?
A *	Rs.1,000/-
B *	Rs.1,100/-
C *	Rs.1,200/-
D *	Rs.1,300/-
E *	None of the above
Marks *	1
Answer *	С

Question Description *	If $(x)^2 + (1/x)^2 = 53$, find the value of $(x) - (1/x)$
A *	√51
B *	√53
C *	√61
D *	√63
E *	None of the above
Marks *	1
Answer *	a

Question Description *	Weight of the moon is 7.346×10^{22} kg and weight of Earth is 5.9724×10^{24} kg What is the total weight of both in standard form?
A *	$6.04 \times 10^{24} kg$
B *	$7.08 \times 10^{22} kg$
C *	$5.98 \times 10^{24} kg$
D *	$6.44 \times 10^{24} kg$
E *	None of the above
Marks *	1
Answer *	а

Question Description *	The sum of two numbers is 56 and the difference between those two numbers is 32. What is the smallest number among the two numbers?
A *	15
B *	14
C *	13
D *	12
E *	None of the above
Marks *	1
Answer *	d

Question Description *	A man invested a sum at a certain rate of interest on simple interest and he got 60% more amount after 8 years. If he invests Rs.9600 at the same rate of interest on simple interest, then find the total interest he would get after 4 years?
A *	Rs.3,840.00
B *	Rs.2,160.00
C *	Rs.2,520.00
D *	Rs.2,880.00
E *	None of the above
Marks *	1
Answer *	d

Question Description *	Three cubes whose edges are 3 cm, 4 cm and 5 cm respectively are melted without any loss of metal, into a single cube. The edge of the new cube is
A *	6 cm
B *	12 cm
C *	9 cm
D *	10 cm
E *	None of the above
Marks *	1
Answer *	a

30	Question Description *	While constructing a building cement and sand are mixed initially in the ratio of 7:3. If 20% more of sand is added to the mixture, then what will be the new ratio of the mixture?
	A *	40:30
	B *	39:28
	C *	35:18
	D *	30:14
	E*	None of the above
	Marks *	1

С

Answer *

31	Question Description *	Which group of alphabets is different?
	A *	ACEG
	B *	BDGK
	C *	CEHL
	D *	DFIM
	E *	None of the above
	Marks *	1
	Answer *	a

Question Description *	Ten people are sitting in two rows facing each other. A, B, C, D, and E sit in Row 1 facing south. While P, Q, R, S, and T sit in Row 2 facing north. A sits opposite to T. B is not next to A. R is to the immediate right of Q. C sits opposite to the one who is second to the left of Q. D and S are at the extreme ends. Two people are seated between B and E. Who is sitting opposite to B?
A *	P
B *	Q
C *	R
D *	S
E *	None of the above
Marks *	1
Answer *	d

Question Description *

	starting from Monday to Sunday. The following information is known: 1. C shops on Wednesday and E shops on Friday. 2. A shops someday before D but not on Monday. 4. 2 persons shop between B and G but G shops after B. 5. F doesn't shop on Friday or Sunday. If D goes to shop on the last day of the week then, who goes to shop at the start of week i,e. Monday?
A *	В
B *	F
C *	A
D *	G
E*	None of the above
Marks *	1
Answer *	а

Seven girls – A, B, C, D, E, F, and G – go shopping on different days of the week

2	A

Question Description *	A food delivery guy starts from his restaurant and rides 4 km towards the east to deliver an order to a customer. He then takes a left turn and travels 7 km, followed by a turn towards the west and travels 10 km. Finally, he goes 15 km towards the south to reach the customer's location. How far and in which direction is he from the restaurant now?
A *	12 km South-East
B *	10 km South-West
C *	8 km South-East
D *	13 km South-West
E*	None of the above
Marks *	1
Answer *	b

Question Description *	In a class of 60 students, the average score of boys is 74, the average score of girls is 68, and the overall average is 72. How many boys are there in the class?
A *	20
B *	60
C *	40
D *	30
E*	None of the above
Marks *	1
Answer *	С

Question Description *	In the following question, find out the answer figure which completes the problem figure.
A *	A
B *	В
C *	С
D *	D
E *	None of the above
Marks *	1
Answer *	d

Question Description *	Following question has four alternatives, among which one completes the figures. A B C D
A *	A
B *	В
C *	С
D *	D
E *	None of the above
Marks *	1
Answer *	d

Question Description *	Choose a figure which would most closely resemble the unfolded form of Figure Z X B C D	
A *	A	
B *	В	
C *	С	
D *	D	
E*	None of the above	
Marks *	1	
Answer *	е	

Question Description *	Choose the alternatives which is closely resembles the mirror image of the given figure.	
	A B C D	
A *	A	
B *	В	
C *	С	
D *	D	
E *	None of the above	
Marks *	1	
Answer *	d	

40	Question Description *	Find out the answer figure in which the question figure is embedded. A B C D
	A *	A
	B *	В
	C *	С
	D *	D
	E *	None of the above
	Marks *	1
	Answer *	С

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Question Description *	What is the number of distinct ways to distribute 11 identical chocolates to 4 kids such that each kid gets at least one chocolate?		
A *	11C4		
B *	7C4		
C *	10C3		
D*	11C7		
E*	None of the above		
Marks *	1		
Answer *	С		

Question Description *	All of the following accurately describe Hadoop, EXCEPT	
A *	Distributed computing approach	
B *	Open-source	
C *	Real-time	
D *	Java-based	
E *	None of the above	
Marks *	1	
Answer *	С	

Question Description *	Suppose that you want to convert a digital clock signal with frequency 50ns to a clock signal with frequency 200ns. Which of the following devices would be ideal?	
A *	3 bit ring counter	
B *	2 bit Johnson counter	
C *	4 bit Ring counter	
D *	4 bit Johnson counter	
E *	None of the above	
Marks *	1	
Answer *	b	

Question Description *	page replacement algorithm suffers from Belady's Anomaly.	
A *	FIFO	
B *	Optimal eplacement	
C *	LRU	
D *	Both optimal replacement and FIFO	
E*	None of the above	
Marks *	1	
Answer *	a	

45	Question Description *	Consider a table A with 7 columns and B with 8 columns. One column is common in both the tables. How many columns are in the result of NATURAL JOIN, and LEFT OUTER JOIN?
	A *	8, 15
	B *	8, 14
	C *	14, 14
	D *	15, 15
	E *	None of the above
	Marks *	1

С

Answer *

46	Question Description *	Which of the following memory models is the closest to the processor?
	A *	Cache memory
	B *	Random access memory
	C *	Registers
	D *	Secondary memory
	E *	None of the above
	Marks *	1
	Answer *	С

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Question Description *	Which languages are accepted by a Non-deterministic finite automata (NFA)?
A *	Regular languages
B *	Context free languages
C *	Recursive languages
D *	Finite languages
E *	None of the above
Marks *	1
Answer *	а

Question Description *	In Artificial Neural Networks, the Perceptron Learning algorithm can only correctly classify
A *	Non-linearly separable data
B *	Linearly separable data
C *	Randomly distributed data
D *	Temporal sequences
E *	None of the above
Marks *	1
Answer *	b

49	Question Description *	allows you to connect and login to a remote computer.
	A *	Telnet
	B *	SMTP
	C *	HTTP
	D *	FTP
	E*	None of the above
	Marks *	1
	Answer *	а
50	Question Description *	is the most important language for Data Scientists
50	Question Description *	is the most important language for Data Scientists
50	Question Description * A *	is the most important language for Data Scientists C++
50		
50	A *	C++
50	A * B *	C++ Ruby
50	A * B * C *	C++ Ruby R
50	A * B * C * D *	C++ Ruby R Java

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Question Description *	Which of the following is a tight asymptotic upper bound on the running time of binary search?
A *	O(n)
B *	O(n log n)
C *	O(log n)
D *	O(n ²)
E *	None of the above
Marks *	1
Answer *	С

Question Description *	Which of the following does not belong with the others listed below with respect to programming paradigms?
A *	Logic
B *	Functional
C *	Reactive
D *	Object Oriented
E *	None of the above
Marks *	1
Answer *	а

Question Description *	Which of the following recursive formulas can be used to find the factorial of a number?
A *	fact(n) = n * fact(n)
B *	fact(n) = n * fact(n+1)
C *	fact(n) = n * fact(n-1)
D *	fact(n) = n * fact(1)
E*	None of the above
Marks *	1
Answer *	С

Question Description *	Which of the following data structures would be ideal for implementing shortest job first scheduling algorithm?
A *	Stack
B *	Binary tree
C *	Ternary tree
D *	Priority queue
E *	None of the above
Marks *	1
Answer *	d

Question Description *	An independent frame that is not related to any other frame in in Video Compression is called
A *	I-Frame
B *	B-Frame
C *	C-Frame
D *	P-Frame
E *	None of the above
Marks *	1
Answer *	а

Question Description *	is used to allow a single channel to be shared by multiple signals in a computer network.
A *	Digital Modulation
B *	Analog Modulation
C *	Multiplexing
D *	Phase Modulation
E *	None of the above
Marks *	1
Answer *	С

Question Description *	A complete undirected simple graph with n vertices has:
A *	n(n-1)/2 edges
B *	n(n+1)/2 edges
C *	Has a vertex of degree n
D *	Has a vertex of degree (n-2)
E *	None of the above
Marks *	1
Answer *	a

Question Description *	The expression 5-2-3*5-2 will evaluate to 18, if:
A *	-is left associative and * has precedence over –
B *	-is right associative and * has precedence over –
C *	-is right associative and – has precedence over *
D *	is left associative and – has precedence over *
E *	None of the above
Marks *	1
Answer *	С

Question Description *	Which of the following is an integer solution to the equation x^2 -6x-55=0?
A *	x = - 5
B *	x = 5
C *	x = 11
D *	x = -11
E*	None of the above
Marks *	1
Answer *	c (Question marked Invalid)

60	Question Description *	What is the sum of $(-n)^2 + (-(n-1))^2 + \dots + (-1)^2 + 0^2 + 1^2 + \dots + (n-1)^2 + n^2$
	A *	n(n+1)/2
	B *	n(n+1)(2n+1)/3
	C *	n(n+1)(2n+1)/6
	D *	n(n+1)
	E*	None of the above
	Marks *	1
	Answer *	b

A *	majority carriers in the source
B *	majority carriers in the substrate
C *	charge on the electrode
D *	minority carriers in the drain
E *	None of the above
Marks *	1
Answer *	a

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Question Description *	Two thin parallel wires are carrying current in the same direction. The force experienced between them is:
A *	Attractive
B *	Repulsive
C *	Perpendicular to the axis joining wires.
D *	No force exists.
E *	None of the above
Marks *	1
Answer *	a

Question Description *	Norton's theorem states that a complex network connected to a load can be replaced with an equivalent impedance
A *	In series with a current source
B *	In series with a voltage source
C *	In parallel with a voltage source
D *	In parallel with a current source
E *	None of the above
Marks *	1
Answer *	d

	Question Description *	A 8085 microprocessor based system uses 4Kx8 RAM, whose starting address is AA00H. What is the address of last byte in this memory?
	A *	AFFFH
	B *	В9FFH
	C *	BFFFH
	D *	A9FFH
	E *	None of the above
	Marks *	1
	Answer *	b
65	Question Description *	When a CPU is interrupted, it
	A *	acknowledges interrupt and waits for the next instruction from the interrupting device
	B *	acknowledges interrupt and continues
	C *	acknowledges interrupt and branches to a subroutine.
	D *	stops execution of instructions
	E *	None of the above
	Marks *	1
	Answer *	С
66	Question Description *	In MOSFET devices the n-channel type is better than p-channel type in the following respects
66	Question Description * A *	
66		following respects
66	A *	following respects it is faster
66	A * B *	it is faster it is TTL compatible
66	A * B * C *	it is faster it is TTL compatible it has better noise immunity
66	A * B * C * D *	it is faster it is TTL compatible it has better noise immunity it is slower

2 =P, 3 =Q, 4 =R, 1=S

None of the above

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C	0
o	o

D *

E *

Marks *

Answer *

Question Description *	How many number of NAND gates are required to implement F(A,B,C)=AB+BC+AC
A *	5
B *	6
C *	3
D *	4
E *	None of the above
Marks *	1
Answer *	d

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Question Description *	Consider the following two statements about the internal conditions in an n-channel MOSFET operating in the active region. S1: The inversion charge decreases from source to drain. S2: The channel potential increases from source drain. Which of the following is correct.
A *	Both S1 and S2 are true, and S2 is a reason for S1.
B *	Only S2 is true.
C *	Both S1 and S2 are false.
D *	Both S1 and S2 are true, and S2 is not a reason for S1.
E *	None of the above
Marks *	1
Answer *	а

Question Description *	A microprocessor with a 16-bit address bus is used in a linear memory selection configuration (i.e. Address bus lines are directly used as chip selects of memory chips) with 4 memory chips. The maximum addressable memory space is
A *	64k
B *	8k
C *	16k
D *	4k
E*	None of the above
Marks *	1
Answer *	а

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Question Description *	$G(s)H(s) = \frac{K(1+0.5s)}{s(1+s)(1+2s)}$
	Consider a feedback control system with loop transfer function
	The type of the closed loop system is
A *	two
B *	zero
C *	one
D *	three
E *	None of the above
Marks *	1
Answer *	С

Question Description *	The threshold effect in demodulators is
A *	exhibited by all demodulators when input signal to noise ratio is low
B *	properly exhibited by correlation receivers.
C *	properly exhibited by all AM suppressed carrier coherent demodulators.
D *	rapid fall on output signal to noise ratio when input signal to noise ratio falls below a particular value.
E *	None of the above
Marks *	1
Answer *	d

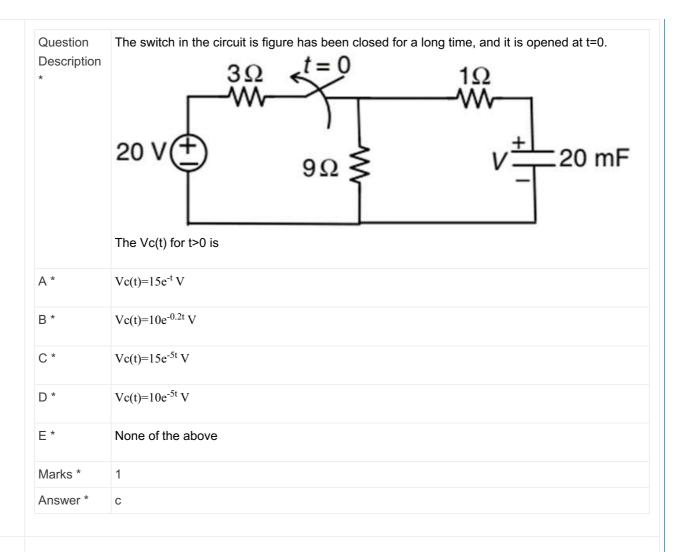
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	72		

Question Description *	The number of hardware interrupts (which require an external signal to interrupt) present in an 8085 microprocessor are
A *	13
B *	4
C *	5
D *	1
E *	None of the above
Marks *	1
Answer *	С

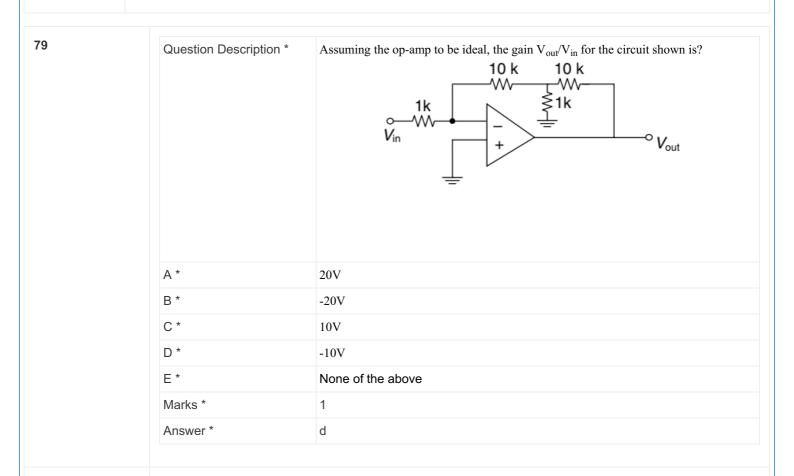
Question Description *	In a microprocessor system, the stack is used for
A *	transmitting and receiving input-output data
B *	storing a program return address whenever a sub-routine jump instruction is executed.
C *	storing program instructions for interrupt service routines.
D *	Storing all important CPU register contents whenever an interrupt is to be serviced.
E *	None of the above
Marks *	1
Answer *	b

Question Description *	A digital communication system employing FSK and 0 and 1 bits are represented by sine waves of 40 kHz and 55 kHz . The waveform will be orthogonal for a bit duration of
A *	$55 \mu s$
B *	$200\mu\mathrm{s}$
C *	$50 \mu\mathrm{s}$
D *	$40\mu\mathrm{s}$
E*	None of the above
Marks *	1
Answer *	b

Question Description *	A parallel-plate capacitor with d=1m and plate area $0.8m^2$ and a dielectric relative permittivity of 2.8 A DC volt of 500 V is applied between the plates. Find the energy stored.
A *	$247.9\mu\mathrm{J}$
B *	$24.79\mu\mathrm{J}$
C *	24.79 J
D *	$2.479\mu\mathrm{J}$
E *	None of the above
Marks *	1
Answer *	d

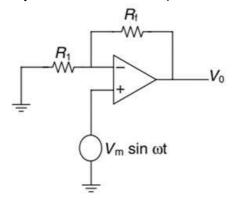


Question Description *	In the following circuit, the switch is closed at t=0. What is the initial value of the current through the capacitor? $\frac{2\Omega}{L}$
A *	0.8 A
B *	1.5 A
C *	2.5 A
D *	3.2 A
E *	None of the above
Marks *	1
Answer *	а



Question Description *

The op-amp has a slew rate of $1V/\mu$ second. The unity gain frequency is 1 MHz and the output saturation levels are of $\pm 14V$. What is the maximum output frequency at which undistorted output can be obtained?



A *	15.4 kHz
B *	12.39 kHz
C *	11.36 kHz
D *	13.8 kHz
E *	None of the above
Marks *	1
Answer *	С