

Questions	Choices
What does the following declaration mean? <code>int (*ptr)[10];</code>	<ol style="list-style-type: none"> 1. ptr is array of pointers to 10 integers 2. ptr is a pointer to an array of 10 integers 3. ptr is an array of 10 integers 4. ptr is an pointer to array
Which header file should be included to use functions like <code>malloc()</code> and <code>calloc()</code> ?	<ol style="list-style-type: none"> 1. <code>memory.h</code> 2. <code>dos.h</code> 3. <code>string.h</code> 4. <code>stdlib.h</code>
Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 ?	<ol style="list-style-type: none"> 1. <code>rem = 3.14 % 2.1;</code> 2. <code>rem = modf(3.14, 2.1);</code> 3. <code>rem = fmod(3.14, 2.1);</code> 4. Remainder cannot be obtain in floating point division.
Which bitwise operator is suitable for turning off a particular bit in a number?	<ol style="list-style-type: none"> 1. <code>&</code> operator 2. <code>&&</code> operator 3. <code> </code> operator 4. <code>!</code> operator
How will you free the allocated memory ?	<ol style="list-style-type: none"> 1. <code>remove(var-name);</code> 2. <code>free(var-name);</code> 3. <code>delete(var-name);</code> 4. <code>dalloc(var-name);</code>

Questions	Choices
The library function used to find the last occurrence of a character in a string is	1. strnstr() 2. laststr() 3. strrchr() 4. strstr()
What do the 'c' and 'v' in argv stands for?	1. 'c' means argument count 'v' means argument vector 2. 'c' means argument count 'v' means argument vertex 3. 'c' means argument control 'v' means argument vector 4. 'c' means argument configuration 'v' means argument visibility
Which of the following special symbol allowed in a variable name?	1. * (asterisk) 2. (pipeline) 3. - (hyphen) 4. _ (underscore)
How is a J-K flip-flop made to toggle?	1. J = 0, K = 0 2. J = 0, K = 1 3. J = 1, K = 0 4. J = 1, K = 1
A ripple counter's speed is limited by the propagation delay of.	1. each flip-flop 2. all flip-flops and gates 3. only circuit gates 4. none

Questions	Choices
Memory elements in clocked sequential circuits are called.	1. latches 2. flipflop 3. signals 4. gates
The clock signals are used in sequential logic circuits to	1. Tell the time of the day 2. Tell how much time has elapsed since the system was turned on 3. Carry parallel data signals 4. Synchronize events in various parts of system
It is difficult to design asynchronous sequential circuit because.	1. External clock is to be provided 2. It is more complex 3. It is using Flip flops 4. Generally they involve stability problem
NOR Gate does NOT follow	1. Commutative Law 2. Distributive Law 3. Associative Law 4. DeMorgan's Theorem
Which statement is true:	1. All canonical form are standard form 2. All standard form are canonical forms 3. Standard form must consists of minterms 4. Canonical form can consist of a term with a literal missing

Questions	Choices
The combination of Sixteen adjacent squares in four variable K-map represent the function equal to	1. One literal 2. Unity 3. Zero 4. Four literal
K-map follow following code for marking adjacent variables	1. 84-2-1 2. 8421 3. Gray Code 4. 2421
Which data structure is used during recursion	1. merge sort 2. stack 3. list 4. linear search
Divide and conquer mechanism is used in	1. selection sort 2. merge sort 3. quick sort and merge sort 4. indexed sequential search
How will you handle the overflow condition of a linked stack through code(note: new_node is a newly created node in a memory)	1. if(new_node==null) 2. if(new_node==0) 3. if(top==size) 4. none

Questions	Choices
What is the worst case for Selection sort	1. $O(\log n)$ 2. $O(n)$ 3. $O(2n)$ 4. $O(n^2)$
What is the precondition for binary search	1. Un sorted array to be the input 2. Have to consider only $n/2$ elements 3. all elements should be sorted 4. none
What is the best case for Selection sort	1. $O(\log n)$ 2. $O(2n)$ 3. $O(1)$ 4. $O(n^2)$
For a node at position n its left and right child are given by the relations _____ (consider the index starts from 0)	1. left child = $2n+1$ right child= $2n+2$ 2. left child = $2n+2$ right child= $2n+1$ 3. left child = $2n-1$ right child= $2n-2$ 4. None

Questions	Choices
Which searching technique is better, if unsorted array is given as input	1. Radix search 2. Linear search 3. Binary search 4. Indexd sequential search
Which of the following tree may have smaller elements in its left subtree and larger element in its right subtree	1. B+ Tree 2. AVL Tree 3. Binary Tree 4. Binary Search Tree
Which of the following algorithm is used to find the shortest path between two nodes in graph	1. Kruskal's algorithm 2. Prim's algorithm 3. Dijkstra's algorithm 4. Merge algorithm
Which of the following case does not exist in complexity theory?	1. Best Case 2. Worst Case 3. Average Case 4. Null Case
The operation of processing each element in the list is known as	1. Traversal 2. Sorting 3. Merging 4. Inserting

Questions	Choices
Which of the following data structure is linear data structure?	1. Array 2. Tree 3. Graph 4. None
The complexity of Merge sort algorithm is	1. $O(n)$ 2. $O(n \log n)$ 3. $O(\log n)$ 4. $O(1)$
Binary search algorithm can not be applied to	1. sorted linked list 2. sorted binary trees 3. sorted linear array 4. pointer array
The situation when in a linked list $START = NULL$ is	1. overflow 2. underflow 3. housefull 4. saturated
Which of the following name does not relate to stacks?	1. FIFO list 2. LIFO list 3. Piles 4. Push-down list

Questions	Choices
A data structure where elements can be added or removed at either end but not in the middle	1. Linked lists 2. Stacks 3. Queues 4. Deque
Given inorder :EACKFHDBG, Find the preorder	1. FAEKCDBHG 2. FAEKCDHGB 3. EAFKHDCBG 4. FEAKDCHBG
The space factor when determining the efficiency of algorithm is measured by	1. Counting the maximum memory needed by the algorithm 2. Counting the minimum memory needed by the algorithm 3. Counting the average memory needed by the algorithm 4. Counting the maximum disk space needed by the algorithm
What will be the output of the following code: int a = 10; printf("%d",&a);	1. 10 2. -10 3. 10.000 4. none
unsinged int a = 10; printf("%d",a-20);	1. 10 2. -10 3. 20 4. -20

Questions	Choices
In the following print statement, without changing the string "VIT UNIVERSITY", how do you print "VIT" alone in the output.	1. <code>printf("*3s", "VIT UNIVERSITY");</code> 2. <code>printf("\3s", "VIT UNIVERSITY");</code> 3. <code>printf("%3s", "VIT UNIVERSITY");</code> 4. <code>printf("%.3s", "VIT UNIVERSITY");</code>
How do you print largest of two numbers in the following statement: <pre>#define big(a,b)? printf("%d",big(5,77));</pre>	1. Not possible 2. <code>if a>b return a else b</code> 3. <code>a>b ? a:b</code> 4. None
How can you access the address of register variable in C? ex: register int i;	1. <code>printf("%x", &i);</code> 2. <code>printf("%u", &i);</code> 3. <code>printf("%d", &i);</code> 4. None
Write the answer of the following statement: (note: program have no errors) <pre>char a[5]="vit"; char b[] = {'v','i','t'}; if(a==b) printf("same"); else printf("not same");</pre>	1. same 2. not same 3. None 4. error

Questions	Choices
Identify the invalid statement from the following	1. break(0); 2. for (;); 3. if (1) 4. while(false)
Choose the correct answer for the given expression: 1+2-3*4%5	1. -2 2. 0 3. 1 4. -1
Application software...	1. Tells the computer components what to do 2. Let's the computer interact with the user 3. Let's the user perform a task 4. Is encoded on a piece of hardware
In the following code, the P2 is Integer Pointer or Integer? typedef int *ptr; ptr p1, p2;	1. Integer 2. Integer pointer 3. Error in declaration 4. None
Which of the following gives the memory address of a variable pointed to by pointer a?	1. a; 2. *a; 3. &a; 4. address(a);

Questions	Choices
<p>What will be the output of the following code</p> <pre>#include<stdio.h> void main() { int i; int a[3]=5; for (i=2;i>=0;i--) { printf("%d\n",a[i]); } }</pre>	<ol style="list-style-type: none"> 5 0 0 5 null null 5 garbage garbage 0 0 5
<p>Which of the following factors does not affect the total time taken to generate by using computers?</p>	<ol style="list-style-type: none"> complexity of calculations to be performed ower of the processor speed of the printer place where the computer is kept
<p>_____ is used to store data in registers</p>	<ol style="list-style-type: none"> D flip flop JK flip flop SR flip flop None
<p>What is the output of following program?</p> <pre>#include <stdio.h> int main() { int a = 1; int b = 1; int c = a --b; int d = a-- && --b; printf("a = %d, b = %d, c = %d, d = %d", a, b, c, d); return 0; }</pre>	<ol style="list-style-type: none"> a = 0, b = 0, c = 1, d = 0 a = 0, b = 0, c = 0, d = 0 a = 0, b = 1, c = 1, d = 0 a = 0, b = 1, c = 1, d = 1

Questions	Choices
<p>Which of the following is not a valid declaration in C?</p> <ol style="list-style-type: none"> 1. <code>short int x;</code> 2. <code>signed short x;</code> 3. <code>short x;</code> 4. <code>unsigned short x;</code> 	<ol style="list-style-type: none"> 1. 1, 2, 3 and 4 2. 1 3. 2 4. 3 and 4
<pre>#include <stdio.h> int main() { if (sizeof(int) > -1) printf("Yes"); else printf("No"); return 0; }</pre>	<ol style="list-style-type: none"> 1. Yes 2. No 3. None 4. Error
<p>In a C program, following variables are defined:</p> <pre>float x = 2.17; double y = 2.17; long double z = 2.17;</pre> <p>Which of the following is correct way for printing these variables via printf.</p>	<ol style="list-style-type: none"> 1. <code>printf("%f %Lf %LLf",x,y,z);</code> 2. <code>printf("%f %lf %Lf",x,y,z);</code> 3. <code>printf("%f %ff %Lff",x,y,z);</code> 4. <code>printf("%f %lf %LLf",x,y,z);</code>

Questions	Choices
<pre> #include <stdio.h> int main() { int n; for (n = 9; n!=0; n--) printf("%d \t", n--); return 0; return 0; } </pre> <p>Predict the output of the above code</p>	<ol style="list-style-type: none"> 1. Infinite loop 2. 9 8 7 6 5 4 3 2 1 3. 9 7 5 3 1 4. 9 7 5 3
<p>Predict the output</p> <pre> # include <stdio.h> int main() { int i = 0; for (i=0; i<20; i++) { switch(i) { case 0: i += 5; case 1: i += 2; case 5: i += 5; default: i += 4; break; } printf("%d ", i); } return 0; } </pre>	<ol style="list-style-type: none"> 1. 16 21 2. 7 12 17 22 3. 5 10 15 20 4. 9 7 5 3

Questions	Choices
<p>What would happen when we compile and run this program?</p> <pre> #include "stdio.h" int main() { int i; goto LOOP; for (i = 0 ; i < 10 ; i++) { printf("GeeksQuizn"); LOOP: break; } return 0; } </pre>	<ol style="list-style-type: none"> No compile error and it will not print anything Compile Error because any goto label isn't allowed in for loop in C No compile error but behaviour of the program would depend on C compiler due to nondeterministic behaviour of goto statement No compile error and it will print GeeksQuiz 10 times because goto label LOOP wouldn't come in effect
<p>Consider the following program fragment</p> <pre> if(a > b) if(b > c) s1; else s2; </pre> <p>s2 will be executed if</p>	<ol style="list-style-type: none"> a<=b a > b and b <= c b>c b >= c and a <= b
<p>Consider the following program fragment</p> <pre> i=6720; j=4; while (i%j)==0 { i=i/j; j=j+1; } </pre> <p>On termination j will have the value</p>	<ol style="list-style-type: none"> 9 4 8 6720

Questions	Choices
<p>What does the following C statement mean?</p> <pre>scanf("%10d", &a);</pre>	<ol style="list-style-type: none"> 1. compiler error 2. runtime error 3. Read maximum 10 characters from console 4. Read exactly 10 characters from console
<p>Find the output</p> <pre>#include <stdio.h> int main() { int i = 1, 2, 3; printf("%d", i); return 0; }</pre>	<ol style="list-style-type: none"> 1. 1 2. 2 3. 3 4. error
<p>Find out the output</p> <pre>#include <stdio.h> int main() { float x = 0.1; if (x == 0.1) printf("IF"); else if (x == 0.1) printf("ELSE IF"); else printf("ELSE"); return 0; }</pre>	<ol style="list-style-type: none"> 1. IF 2. ELSE IF 3. ELSE 4. error

Questions	Choices
<p>Find the output</p> <pre>#include <stdio.h> int main() { int i = (1, 2, 3); printf("%d", i); return 0; }</pre>	<ul style="list-style-type: none">1. 12. 23. 34. error
<p>Find the output</p> <pre>#include <stdio.h> int main() { int x, y = 5, z = 5; x = y == z; printf("%d", x); return 0; }</pre>	<ul style="list-style-type: none">1. 12. 03. 54. error

Questions	Choices
<p>What will be the output of the following C code?</p> <pre> #include <stdio.h> main() { int i; for (i=0; i<5; i++) { int i = 10; printf ("%d ", i); i++; } return 0; } </pre>	<ol style="list-style-type: none"> 10 10 10 10 10 10 11 12 13 14 error 10
<p>Find the output of the below program</p> <pre> #include <stdio.h> int main() { printf(4 + "Quizprogram"); return 0; } </pre>	<ol style="list-style-type: none"> Quiz program compile time error run time error
<p>Output of following program?</p> <pre> #include <stdio.h> int main() { printf("%d", printf("%d", 12345678)); return 0; } </pre>	<ol style="list-style-type: none"> 81 123456788 123456781 error

Questions	Choices
<p>What is the output of the below program?</p> <pre> #include <stdio.h> int main() { int i = 0; switch (i) { case '0': printf("welcome"); break; case '1': printf("Quiz"); break; default: printf("sjt419"); } return 0; } </pre>	<ol style="list-style-type: none"> 1. welcome 2. Quiz 3. sjt419 4. error
<p>Predict the output of below program?</p> <pre> #include <stdio.h> int main() { int i; if (printf("0")) i = 3; else i = 5; printf("%d", i); return 0; } </pre>	<ol style="list-style-type: none"> 1. 03 2. 05 3. 3 4. 5

Questions	Choices
<p>Find the output of the below code</p> <pre>#include <stdio.h> int main() { printf(" \\"raj %% kumar %% c\\" "); return 0; }</pre>	<ol style="list-style-type: none"> 1. "raj % kumar % c" 2. raj % kumar % c 3. raj kumar 4. error
<p>What is the output of the following code snippet?</p> <pre>#include<stdio.h> main() { int x = 5; if(x=5) { if(x=5) break; printf("Hello"); } printf("Hi"); }</pre>	<ol style="list-style-type: none"> 1. compile error 2. Hi 3. HelloHi 4. runtime error
<p>What is the output of following program?</p> <pre># include <stdio.h> int main() { char str1[] = "GeeksQuiz"; char str2[] = {'G', 'e', 'e', 'k', 's', 'Q', 'u', 'i', 'z'}; int n1 = sizeof(str1)/sizeof(str1[0]); int n2 = sizeof(str2)/sizeof(str2[0]); printf("n1 = %d, n2 = %d", n1, n2); return 0; }</pre>	<ol style="list-style-type: none"> 1. n1 = 10, n2 = 9 2. n1 = 9, n2 = 9 3. n1 = 10, n2 = 10 4. n1 = 9, n2 = 10

Questions	Choices
<p>In below program, what would you put in place of “?” to print “Quiz”?</p> <pre>#include <stdio.h> int main() { char arr[] = "GeeksQuiz"; printf("%s", ?); return 0; }</pre>	<ol style="list-style-type: none"> arr (arr+5) (arr+4) not possible
<p>Linker generates ____ file</p>	<ol style="list-style-type: none"> object code executable code assembly code error
<p>What is the common issue in signed numbers and 1's complement representation</p>	<ol style="list-style-type: none"> A human readable 2 representations for 0 2 representations for 1 2 representations for every number
<p>Perform the subtraction with the following unsigned binary numbers by taking the 2's complement of the subtrahend 11010 - 10000 is</p>	<ol style="list-style-type: none"> 01010 1100 101010 1011
<p>When Q_n and $Q_{n+1} = 01$ then the action taken is</p>	<ol style="list-style-type: none"> subtract multiplicand from partial product add multiplicand to partial product arithmetic shift right logical shift right

Questions	Choices
Which algorithm is not used for performing binary division	1. restoring algorithm 2. non-restoring division 3. booth's algorithm 4. comparison method
Subtract the two floating numbers $0.67880e+4$ and $.67320e+4$. What is the value of the number after normalization?	1. 56 2. $0.56e-2$ 3. 560 4. 0.056
What is exponent underflow in IEEE 754 single precision format?	1. Exponent is equal to zero 2. Exponent is greater than 127 3. Exponent is smaller than -127 4. Exponent is equal to 127
Magnetic tape is a	1. Serial access medium 2. Random access medium 3. A parallel access medium 4. None
In which Access method , Cycle time is Same for all the blocks of memory	1. Random Access 2. Sequential Access 3. Direct Access 4. Semi Random Access

Questions	Choices
Memory Address locations are specified using which data representation	1. Sign-magnitude 2. one's complement 3. Unsigned 4. two's complement
The address where data is available as part of the instruction is called as addressing mode	1. Implied 2. Immediate 3. Indirect 4. Direct
To avoid the race condition, the number of processes that may be simultaneously inside their critical section is	1. 8 2. 1 3. 0 4. 16
Fork is	1. the dispatching of a task 2. the creation of a new job 3. the creation of a new process 4. increasing the priority of a task
Thrashing	1. is a natural consequence of virtual memory systems 2. can always be avoided by swapping 3. always occurs on large computers 4. can be caused by poor paging algorithms

Questions	Choices
Interprocess communication	<ol style="list-style-type: none"> 1. is required for all processes 2. is usually done via disk drives 3. is never necessary 4. allows processes to synchronize activity
The principle of locality of reference justifies the use of	<ol style="list-style-type: none"> 1. Reenterable 2. non reusable 3. virtual memory 4. cache memory
Fragmentation of the file system	<ol style="list-style-type: none"> 1. occurs only if the file system is used improperly 2. can always be prevented 3. can be temporarily removed by compaction 4. is a characteristic of all file systems
Page stealing	<ol style="list-style-type: none"> 1. is a sign of an efficient system 2. is taking page frames from other working sets 3. should be the tuning goal 4. is taking larger disk spaces for pages paged out
.. refers to a situation in which a process is ready to execute but is continuously denied access to a processor in deference to other processes.	<ol style="list-style-type: none"> 1. Synchronization 2. Mutual Exclusion 3. Dead lock 4. Starvation

Questions	Choices
..... provides a larger sized of virtual memory but require virtual memory which provides multidimensional memory.	1. Paging method 2. Segmentation method 3. Paging and segmentation method 4. Demand paging
The policy restricts scanning to one direction only	1. SCAN 2. C-SCAN 3. N-Step SCAN 4. LOOK
The decoded instruction is stored in _____	1. IR 2. PC 3. Registers 4. MDR
The type of memory assignment used in Intel processors is _____	1. Little Endian 2. Big Endian 3. Medium Endian 4. None
To get the physical address from the logical address generated by CPU we use _____	1. MAR 2. MMU 3. Overlays 4. TLB

Questions	Choices
During transfer of data between the processor and memory we use _____	1. Cache 2. TLB 3. Buffers 4. Registers
The instructions like MOV or ADD are called as _____	1. OP-Code 2. Operators 3. Commands 4. None
Instructions which wont appear in the object program are called as _____	1. Redundant instructions 2. Exceptions 3. Comments 4. Assembler Directives
The program is divided into operable parts called as _____	1. Frames 2. Segments 3. Pages 4. Sheets
The pipelining process is also called as _____	1. Superscalar operation 2. Assembly line operation 3. Von neumann cycle 4. None

Questions	Choices															
Each stage in pipelining should be completed within ____ cycle	1. 1 2. 2 3. 3 4. 4															
An operating system uses Shortest Remaining Time first (SRT) process scheduling algorithm. Consider the arrival times and execution times for the following processes: <table><tr><td>Process</td><td>Execution time</td><td>Arrival time</td></tr><tr><td>P1</td><td>20</td><td>0</td></tr><tr><td>P2</td><td>25</td><td>15</td></tr><tr><td>P3</td><td>10</td><td>30</td></tr><tr><td>P4</td><td>15</td><td>45</td></tr></table> What is the total waiting time for process P2?	Process	Execution time	Arrival time	P1	20	0	P2	25	15	P3	10	30	P4	15	45	1. 40 2. 5 3. 15 4. 10
Process	Execution time	Arrival time														
P1	20	0														
P2	25	15														
P3	10	30														
P4	15	45														
If the task executes the service codes and gets the system resources at that instance, it is said to be in	1. idle 2. running 3. blocked 4. ready															
The time elapsed between the job submission and its completion is	1. turnaround time 2. response time 3. burst time 4. waiting time															
Which of the following level of storage is not managed by operating system?	1. cache 2. register 3. magnetic disk 4. solid state disk															

Questions	Choices
Which of the following process scheduling algorithm may lead to starvation	1. multilevel queue 2. first come first served 3. shortest job next 4. round robin
Consider three CPU-intensive processes, which require 10, 20 and 30 time units and arrive at times 0, 2 and 6, respectively. How many context switches are needed if the operating system implements a shortest remaining time first scheduling algorithm? Do not count the context switches at time zero and at the end.	1. 1 2. 2 3. 3 4. 4
Which of the following is not shared by the threads of the same process?	1. stack 2. file descriptor table 3. address space 4. message queue
All resources are shared and integrated within one OS, in computing paradigm named	1. Distributed computing 2. Parallel computing 3. Cloud computing 4. Centralized computing
In a distributed system, information is exchanged through	1. Memory sharing 2. None 3. Message passing 4. Exceptions

Questions	Choices
All resources are tightly coupled in computing paradigm of	<ol style="list-style-type: none"> 1. Cloud computing 2. Centralized computing 3. Distributed computing 4. Parallel computing
A set of highly integrated machines that run same process in parallel is known to be	<ol style="list-style-type: none"> 1. Tightly coupled 2. Loosely coupled 3. Space based 4. Peer-to-Peer
DLP stands for	<ol style="list-style-type: none"> 1. Data-level processing 2. Degree-level processing 3. Data-level parallelism 4. Degree-level parallelism
Cloud computing and web service platforms are focused on applications like	<ol style="list-style-type: none"> 1. HPC 2. HTC 3. HCC 4. HRC
RPC connectors and message queues are mechanisms for	<ol style="list-style-type: none"> 1. Message retrieving 2. Message passing 3. Message delivering 4. Message Sync-ing

Questions	Choices
Grid and cloud platforms are regarded as	<ol style="list-style-type: none"> 1. Parallelized services 2. Innovative services 3. Utility service providers 4. Cyber services
In grid computing model, servers or personal computers run	<ol style="list-style-type: none"> 1. Dependently 2. Independently 3. Concurrently 4. Horizontally
HTC stands for	<ol style="list-style-type: none"> 1. High-turning computing 2. High-tabulation computing 3. High-technology computing 4. High-throughput computing
One of first uses of grid computing was breaking of a	<ol style="list-style-type: none"> 1. Critical computed code 2. Tabulated code 3. Cryptographic code 4. Decryptographic code
Speed of HPC systems has enhanced from Gflops to	<ol style="list-style-type: none"> 1. Tflops 2. Pflops 3. Eflops 4. Mflops

Questions	Choices
Centralized computing covers many data centers and	<ol style="list-style-type: none"> 1. Minicomputers 2. Mainframe computers 3. Supercomputers 4. Microcomputers
Primary goal for HTC paradigm is to provide	<ol style="list-style-type: none"> 1. Low-flux computing 2. High-flux computing 3. Computer utilities 4. High ratio Identification
Differentiate between Computer Architecture & Computer Organization	<ol style="list-style-type: none"> 1. Computer architecture deals with the functional behaviour of a computer system as viewed by a programmer & Computer organization deals with structural relationships that are not visible to the programmer 2. Computer organization deals with the functional behaviour of a computer system as viewed by a programmer & Computer Architecture deals with structural relationships that are not visible to the programme 3. Computer organization deals with Functional operation of the individual hardware units within a computer system, and the flow of information and control among them & Computer Architecture deals with clock frequency or the size of the physical memory 4. None
The addressing mode which makes use of in-direction pointers is _____	<ol style="list-style-type: none"> 1. Indirect addressing mode 2. Index addressing mode 3. Relative addressing mode 4. Offset addressing mode

Questions	Choices
If the memory address space is 256 MB and the word size is 16 bits, then bits needed to access each word	1. 26 2. 24 3. 27 4. 28
Represent (-14) in signed magnitude form	1. 10001110 2. 01111110 3. 11111110 4. 10000001
Add the numbers in signed magnitude and give the value of AVF in each case? (a) (+45) + (+31) (b) (+45) - (+31)	1. 1,0 2. 0,0 3. 0,1 4. 1,1
The best way to avoid divide overflow condition is	1. divide stop 2. Provide an Interrupt Request 3. Suspend the Program 4. Floating point representation of data
The memory reference is intercepted and the cache is checked first for a hit, and if a miss occurs then the access to main memory is started. A cache that operates in this manner is called a	1. Look Aside cache 2. Look through Cache 3. Look inside only cache 4. Look outside cache

Questions	Choices
In which cache organization, index field is not required during block identification	<ol style="list-style-type: none"> 1. Direct mapping 2. set associative 3. fully associative 4. 2-way associative
In an daisy chain priority interrupt the condition to pass the acknowledge signal to the next device is	<ol style="list-style-type: none"> 1. $PI=1 \ \& \ RF=1$ then $PO=0$ 2. $PI=1 \ \& \ RF=0$ then $PO=1$ 3. $PI=0 \ \& \ RF=1$ then $PO=0$ 4. $PI=0 \ \& \ RF=0$ then $PO=0$
In a virtual memory system, the addresses used by the programmer belongs to	<ol style="list-style-type: none"> 1. memory space. 2. address space. 3. main memory address. 4. physical addresses.
The method for updating the main memory as soon as a word is removed from the Cache is called	<ol style="list-style-type: none"> 1. Write-through 2. write-back 3. protected write 4. cache-write
Zero address instruction format is used for	<ol style="list-style-type: none"> 1. RISC architecture. 2. CISC architecture. 3. Von-Neuman architecture. 4. Stack-organized architecture.

Questions	Choices
Address symbol table is generated by the	<ol style="list-style-type: none"> 1. memory management software. 2. assembler. 3. match logic of associative memory. 4. generated by operating system.
Stack overflow causes	<ol style="list-style-type: none"> 1. Hardware interrupt. 2. External interrupt. 3. Internal interrupt. 4. Software interrupt.
Arithmetic shift left operation	<ol style="list-style-type: none"> 1. Produces the same result as obtained with logical shift left operation. 2. Causes the sign bit to remain always unchanged. 3. Needs additional hardware to preserve the sign bit. 4. Is not applicable for signed 2's complement representation.
Which of the following is NOT a valid deadlock prevention scheme?	<ol style="list-style-type: none"> 1. Release all resources before requesting a new resource 2. Number the resources uniquely and never request a lower numbered resource than the last one requested. 3. Never request a resource after releasing any resource 4. Request and all required resources be allocated before execution.

Questions	Choices
<p>Let $m[0] \dots m[4]$ be mutexes (binary semaphores) and $P[0] \dots P[4]$ be processes. Suppose each process $P[i]$ executes the following:</p> <pre> wait (m[i]); wait (m[(i+1) mod 4]); ----- release (m[i]); release (m[(i+1) mod 4]); </pre> <p>This could cause</p>	<ol style="list-style-type: none"> 1. Thrashing 2. Deadlock 3. Starvation, but not deadlock 4. None
<p>Consider a virtual memory system with FIFO page replacement policy. For an arbitrary page access pattern, increasing the number of page frames in main memory will</p>	<ol style="list-style-type: none"> 1. Always decrease the number of page faults 2. Always increase the number of page faults 3. Some times increase the number of page faults 4. Never affect the number of page faults
<p>Which of the following requires a device driver?</p>	<ol style="list-style-type: none"> 1. Register 2. Cache 3. Main memory 4. Disk
<p>Process is</p>	<ol style="list-style-type: none"> 1. a program in execution 2. a job in secondary memory 3. contents of main memory 4. program in High level language kept on disk
<p>A system program that sets up an executable program in main memory ready for execution is</p>	<ol style="list-style-type: none"> 1. loader 2. linker 3. assembler 4. compiler

Questions	Choices																																			
<p>Fragmentation of the file system</p>	<div><div>1. can be temporarily removed by compaction</div><div>2. is a characteristic of all file systems</div><div>3. can always be prevented</div><div>4. occurs only if the file system is used improperly</div></div>																																			
<p>A single processor system has three resource types X, Y and Z, which are shared by three processes. There are 5 units of each resource type. Consider the following scenario, where the column alloc denotes the number of units of each resource type allocated to each process, and the column request denotes the number of units of each resource type requested by a process in order to complete execution. Which of these processes will finish LAST?</p> <table><tr><td></td><td colspan="3">alloc</td><td colspan="3">request</td></tr><tr><td></td><td>X</td><td>Y</td><td>Z</td><td>X</td><td>Y</td><td>Z</td></tr><tr><td>P0</td><td>1</td><td>2</td><td>1</td><td>1</td><td>0</td><td>3</td></tr><tr><td>P1</td><td>2</td><td>0</td><td>1</td><td>0</td><td>1</td><td>2</td></tr><tr><td>P2</td><td>2</td><td>2</td><td>1</td><td>1</td><td>2</td><td>0</td></tr></table>		alloc			request				X	Y	Z	X	Y	Z	P0	1	2	1	1	0	3	P1	2	0	1	0	1	2	P2	2	2	1	1	2	0	<div><div>1. P0</div><div>2. P1</div><div>3. P2</div><div>4. none</div></div>
	alloc			request																																
	X	Y	Z	X	Y	Z																														
P0	1	2	1	1	0	3																														
P1	2	0	1	0	1	2																														
P2	2	2	1	1	2	0																														
<p>Consider three processes (process id 0, 1, 2 respectively) with compute time bursts 2, 4 and 8 time units. All processes arrive at time zero. Consider the longest remaining time first (LRTF) scheduling algorithm. In LRTF ties are broken by giving priority to the process with the lowest process id. The average turn around time is:</p>	<div><div>1. 13 units</div><div>2. 14 units</div><div>3. 15 units</div><div>4. 16 units</div></div>																																			
<p>Normally user programs are prevented from handling I/O directly by I/O instructions in them. For CPUs having explicit I/O instructions, such I/O protection is ensured by having the I/O instructions privileged. In a CPU with memory mapped I/O, there is no explicit I/O instruction. Which one of the following is true for a CPU with memory mapped I/O?</p>	<div><div>1. I/O protection is ensured by operating system routine(s)</div><div>2. I/O protection is ensured by a hardware trap</div><div>3. I/O protection is ensured during system configuration</div><div>4. I/O protection is not possible</div></div>																																			

Questions	Choices
A database is a	1. collection of files 2. collection of data 3. collection of interrelated data 4. collection of multimedia data
Data Dictionary stores	1. User data 2. System data 3. Data about data 4. different view of data
The following data type is specific to Oracle product	1. varchar 2. varchar2 3. integer 4. number(p,s)
The data mapping is done at	1. physical level 2. conceptual level 3. view level 4. high level
A transaction is a	1. sequence of instructions 2. sequence of instructions for a task 3. sequence of instructions for a sequence of job 4. sequence of instructions for consistent database

Questions	Choices
Concurrency control is handled in the following environment	1. Single user dbms 2. Multi-user dbms 3. client-server dbms 4. Multi-tier dbms
A following is the lock meant for a single user operations	1. S-Lock 2. X-Lock 3. I-Lock 4. none
The basic i/o in database is done in terms of	1. bits 2. bytes 3. blocks 4. words
ODBC component is used in the following level	1. physical level 2. conceptual level 3. view level 4. high level
Relationship between entity sets of cardinality either 1:1 or 1:M or M:1 is mapped into relational schema by	1. Primary Key 2. Unique Key 3. Foreign Key 4. Composite Key

Questions	Choices
A relationship is said to be recursive if	<ol style="list-style-type: none"> 1. a weak entity set is associated with its strong entity set 2. an entity set participate in relationship more than once in different roles 3. more than one entity set participate in relationship 4. an entity set is totally participating in a relationship
The job of pre-compiler component of database systems is	<ol style="list-style-type: none"> 1. to separate DML and host language statements in application program 2. to separate high level DML statements from low level DML statements in application program 3. to club DML and host language statements in application program 4. to club high level DML statements and low level DML statements in application program
Join operation that involves in-equality in it is called	<ol style="list-style-type: none"> 1. Equi Join 2. Theta Join 3. Inner Join 4. Outer Join
Which among the following is not desirable property of a transaction in database system?	<ol style="list-style-type: none"> 1. Atomicity 2. Consistency 3. Insulation 4. Durability

Questions	Choices
Which recovery scheme in database system is not going to make use of system log?	1. Shadow Paging 2. Immediate Update 3. Differed Update 4. Delayed Update
The concept that gives freedom to modify schema at one level with out need to make those changes at schemas at higher levels is called	1. Data Isolation 2. Data Insulation 3. Data Inconsistency 4. Data Independence
Which among the following is true with respect to view of the database?	1. It is virtual in nature and consumes no memory 2. It is non-virtual in nature and consumes memory 3. It is physical in nature and consumes memory 4. It is logical in nature and consumes memory
Which pair of operations in a schedule of transactions is called conflict operations?	1. Operations belong to different transactions, both accessing different data items and atleast one of them be write operation 2. Operations belong to same transaction, both accessing different data items and at least one of them be read operation 3. Operations belong to different transactions, both accessing different data items and at least one of them be write operation 4. Operations belong to different transactions, both accessing different data items and at least one of them be read operation
Which among the following locks is an exclusive lock?	1. read lock 2. write lock 3. binary lock 4. multi-mode lock

Questions	Choices
Which is responsible for ensuring Isolation property	1. Transaction- management component 2. Recovery- management component 3. Concurrency control component 4. None
If the bucket for the record is already full then the record is placed in other bucket based on some policy called -----	1. Closed Hashing 2. open Hashing 3. open Hashing and Closed Hashing 4. None
In Basic Timestamp Ordering algorithm	1. Younger transactions are executed first 2. Older transaction are restarted 3. Older transactions are executed first 4. Both older and younger transactions are restarted
Which of the following methods is used to avoid cascading rollback?	1. Basic 2PL 2. Strict 2PL 3. Linear 2PL 4. None
Indexes whose search key specifies an order that is different from sequential order of the file are called _____ index.	1. Primary 2. Secondary 3. Non key 4. None

Questions	Choices
Which of the following is true for timestamp ordering?	<ol style="list-style-type: none"> 1. Basic timestamp ordering does not ensure conflict serializability 2. Strict timestamp ordering ensures freedom from deadlock 3. Thomas' write rule enforces conflict serializability 4. None
Cascading rollback is avoided in all protocol except	<ol style="list-style-type: none"> 1. Strict two-phase locking protocol 2. Tree locking protocol 3. Two-phase locking protocol 4. Validation based protocol
If one attribute is determinant of second, which in turn is a determinant of third, then the relation cannot be	<ol style="list-style-type: none"> 1. well structured 2. in 1 NF 3. in 2 NF 4. in 3 NF
A 3 NF relation is split into 4 NF by	<ol style="list-style-type: none"> 1. Removing overlapping composite keys 2. Splitting into relations which do not have more than one independent multivalued dependency 3. Removing multivalued dependency 4. By putting dependent non-key attribute in a separate table
The FD $A \rightarrow B$, $DB \rightarrow C$ implies	<ol style="list-style-type: none"> 1. $DA \rightarrow C$ 2. $A \rightarrow C$ 3. $B \rightarrow A$ 4. $DB \rightarrow A$

Questions	Choices
R(A,B,C,D) is a relation. Which of the following does not have a lossless join dependency preserving BCNF decomposition	1. A->B, B->CD 2. A->B, B->C, C->D 3. AB->C, C->AD 4. A->BCD
Fifth Normal form is concerned with	1. Functional dependency 2. Multivalued dependency 3. Join dependency 4. Domain-key
Which of the following relational algebra operations do not require the participating tables to be union-compatible?	1. Union 2. Intersection 3. Difference 4. Join
Using the below data: EMPNO ENAME SAL A822 RAMASWAMY 3500 A812 NARAYAN 5000 A973 UMESH A500 BALAJI 5750 Select count(sal) from Emp will retrieve	1. 1 2. 0 3. 3 4. 4

Questions	Choices
Which of these is incorrect ?	<ol style="list-style-type: none"> 1. Software engineering belongs to Computer science 2. Software engineering is a part of more general form of System Engineering 3. Computer science belongs to Software engineering 4. Software engineering is concerned with the practicalities of developing and delivering useful software
For select operation the _____ appear in the subscript and the _____ argument appears in the parenthesis after the sigma.	<ol style="list-style-type: none"> 1. Predicates, relation 2. Relation, Predicates 3. Operation, Predicates 4. Relation, Operation
Which one of the following models is not suitable for accommodating any change?	<ol style="list-style-type: none"> 1. Build & Fix Model 2. Prototyping Model 3. RAD Model 4. Waterfall Model
Using Relational Algebra the query that finds customers, who have a balance of over 1000 is	<ol style="list-style-type: none"> 1. $\rho_{Customer_name}(s \text{ balance} > 1000(\text{Deposit}))$ 2. $s \text{ Customer_name}(P\text{balance} > 1000(\text{Deposit}))$ 3. $\rho_{Customer_name}(s \text{ balance} > 1000(\text{Borrow}))$ 4. $s \text{ Customer_name}(P\text{balance} > 1000(\text{Borrow}))$

Questions	Choices
A B-tree of order m has maximum of _____ children	1. m 2. m+1 3. m-1 4. m+2
Which model can be selected if user is involved in all the phases of SDLC?	1. Waterfall Model 2. Prototyping Model 3. RAD Model 4. both b & c
Consider a schema R(A, B, C, D) and functional dependencies A → B and C → D. Then the decomposition R1(A, B) and R2(C, D) is	1. Dependency preserving but not lossless join 2. Dependency preserving and lossless join 3. Lossless Join but not dependency preserving 4. Lossless Join
What is a Software ?	1. Software is set of programs 2. Software is documentation and configuration of data 3. a,b 4. None of the mentioned
Consider the join of a relation R with relation S. If R has m tuples and S has n tuples, then the maximum size of join is:	1. mn 2. m+n 3. (m+n)/2 4. 2(m+n)

Questions	Choices
Functional requirements capture the intended behavior of the system.	1. True 2. False 3. All 4. None
Which is one of the most important stakeholder from the following ?	1. Entry level personnel 2. Middle level stakeholder 3. Managers 4. Users of the software
In the case of a --- the index record is created only for some search key values	1. Sparse 2. Dense 3. Primary 4. None
Which of the following is a dynamic model that shows how the system interacts with its environment as it is used?	1. system context model 2. interaction model 3. environmental model 4. both system context and interaction

Questions	Choices
Which of the following is not considered as a risk in project management?	1. Specification delays 2. Product competition 3. Testing 4. Staff turnover
Which phase is not a part of the optimistic technique?	1. Execution phase 2. Read phase 3. write phase 4. Validation phase
Interaction Diagram is a combined term for	1. Sequence Diagram + Collaboration Diagram 2. Activity Diagram + State Chart Diagram 3. Deployment Diagram + Collaboration Diagram 4. None of the mentioned
According to ISO 9001, the causes of nonconforming product should be	1. deleted 2. eliminated 3. identified 4. eliminated and identified

Questions	Choices
In CMM, the life cycle activities of requirements analysis, design, code, and test are described in	1. Software Product Engineering 2. Software Quality Assurance 3. Software Subcontract Management 4. Software Quality Management
How many stages are there in process improvement?	1. 3 2. 4 3. 5 4. 6
The documentation of a process which records the tasks, the roles and the entities used is called	1. Process metric 2. Process analysis 3. Process modelling 4. None of the mentioned
Which of the following is a project scheduling method that can be applied to software development?	1. PERT 2. CPM 3. CMM 4. both PERT and CPM

Questions	Choices
Identify the disadvantage of Spiral Model.	1. Doesn't work well for smaller projects 2. High amount of risk analysis 3. Strong approval and documentation control 4. Additional Functionality can be added at a later date
What is the correct JavaScript syntax to change the content of the HTML element below? <p id="demo">IWP demo</p>	1. document.getElementById("demo").innerHTML="Hello!"; 2. document.getElementsByClassName("demo").innerHTML="Hello!"; 3. document.getElementsByName("demo").innerHTML="Hello!"; 4. #demo.innerHTML="Hello!";
How do you create a function in JavaScript?	1.function = myfunction() 2.function:myfunction() 3.function myfunction() 4.func myfunction()
What is the correct way to write a JavaScript array?	1.var cars = ["a", "b", "c"]; 2.var cars = "a", "b", "c"; 3.var cars = ("a", "b", "c"); 4.var cars = a, b, c;
Which event occurs when the user clicks on an HTML element?	1.onchange 2.onmouseclick 3.onclick 4.onmouseover
How do you declare a JavaScript integer variable as "i"?	1.var i; 2.int i; 3.variable i; 4.\$i;
Consider the following code snippet : var a = [1,2,3,4,5]; x=a.slice(0,3); What is the value of x in the given code snippet ?	1.1,2,3 2.4,5 3.1,2,3,4 4.1,2,3,4,5
What will be the output of the following Javascript code? var val1=[1,2,3]; var val2=[6,7,8]; var result=val1.concat(val2); document.writeln(result);	1.1,2,3 2.Error 3.1,2,3,6,7,8 4.123
What will be the output of the following Javascript code? var values=["1","2","3"]; var ans=values.shift(); document.writeln(ans);	1.1 2.2 3.3 4.Error
What will be the output of the following Javascript code? function info() { int a=1; int b=2; return a*b; } document.write(info());	1.1 2.2 3.3 4.Error

Questions	Choices
Which function among the following lets to register a function to be invoked once?	1. setTimeout() 2. setTimeout() 3. setInterval() 4. setTime()
Which method receives the return value of setInterval() to cancel future invocations?	1. clearInvocation() 2. cancelInvocation() 3. clearInterval() 4. clear()
To which object does the location property belong?	1. Window 2. Position 3. Element 4. Document
What will be the output of the following Javascript code? function output(option) { return (option ? "yes" : "no"); } bool ans=true; console.log(output(ans));	1. yes 2. No 3. Run time error 4. Compile time error

Questions	Choices
<p>What will be the output of the following Javascript code?</p> <pre>string a = "hi"; string b = "there"; alert(a+b);</pre>	<p>1. hi</p> <p>2. there</p> <p>3. hithere</p> <p>4. undefined</p>
<p>What will be the output of the following Javascript code?</p> <pre>function getcube() { var number=document.getElementById("number").value; alert(number*number*number); } <form> Enter No:<input type="text" id="number" name="number" value="3" />
 <input type="button" value="Cube" onclick="getcube()"/> </form></pre>	<p>1. 9</p> <p>2. 27</p> <p>3. error</p> <p>4. undefined</p>
<p>Which is the method that removes the current document from the browsing history before loading the new document?</p>	<p>1. modify()</p> <p>2. assign()</p> <p>3. replace()</p> <p>4. remove()</p>
<p>What will be the output of the following Javascript code?</p> <pre><p>1</p> <p>2</p> <p>3</p> function myFunction() { var x = document.getElementsByTagName("P").item(0); alert(x.innerHTML); }</pre>	<p>1. 1.1</p> <p>2. 2</p> <p>3. 3</p> <p>4. error</p>
<p>What will be the output of the following Javascript code?</p> <pre><p>1</p> <p>2</p> <p>3</p> function myFunction() { var l = document.getElementsByTagName("P").length; alert(l); }</pre>	<p>1. 1</p> <p>2. 2</p> <p>3. 3</p> <p>4. error</p>
<p>Java script regular expressions has the following syntax</p>	<p>1./pattern/quantifiers 2./quantifiers/pattern 3./modifiers/pattern 4./pattern/modifiers</p>
<p>Select the quantifiers of java script regular expression</p>	<p>1.i 2.g 3.m 4.n+</p>

Questions	Choices
In java script regular expressions ?=n means	1.Matches any string that is followed by a sp 2.Matches any string that ends with a specific string n 3.Excludes any string that is followed by a specific string n 4.Excludes any string that ends with a specific string n
Pick a statement that matches any string that is not followed by a specific string n in java script regular expression	1.?=n 2.^n 3.?!n 4.n\$
Select the quantifier of java script regular expression	1.>= 2.<= 3.* 4./
select the modifier of java script regular expression	1.* 2.h 3.+ 4.i
The quantifier n* represents in java script regular expression is	1.Matches any string that contains zero or more occurrences of n 2.Matches any string that contains zero or one occurrences of n 3.Matches any string that contains at least one n 4.Matches any string that contains a sequence of X n's
The quantifier n+ represents in java script regular expression is	1.Matches any string that contains zero or more occurrences of n 2.Matches any string that contains zero or one occurrences of n 3.Matches any string that contains at least one n 4.Matches any string that contains a sequence of X n's
The quantifier n? represents in java script regular expression is	1.Matches any string that contains zero or more occurrences of n 2.Matches any string that contains zero or one occurrences of n 3.Matches any string that contains at least one n 4.Matches any string that contains a sequence of X n's
The quantifier n{X} represents in java script regular expression is	1.Matches any string that contains zero or more occurrences of n 2.Matches any string that contains zero or one occurrences of n 3.Matches any string that contains at least one n 4.Matches any string that contains a sequence of X n's
The quantifier n\$ represents in java script regular expression is	1.Matches any string with n at the end of it 2.Matches any string with n at the beginning of it 3.Matches any string that contains at least one n 4.Matches any string that contains a sequence of X n's
The execution of java script regular expression pattern results is true or false. Which of the following function does it?	1.exec() 2.Compile () 3.Test () 4.toString ()
The execution of java script regular expression pattern results in returning the first match. Which of the following function does it?	1.exec() 2.Compile () 3.Test () 4.match ()
The quantifier n^ represents in java script regular expression is	1.Matches any string with n at the end of it 2.Matches any string with n at the beginning of it 3.Matches any string that contains at least one n 4.Matches any string that contains a sequence of X n's
The following function does the initializations before the page is loaded	1.Onchange () 2.OnClick () 3.OnLoad () 4.Onmouseover ()

Questions	Choices
HTML patter attribute pattern="(?!.*\d)(?!.*[a-z])(?!.*[A-Z]).{8,}" represents	1.Must contain at least one number and one uppercase and lowercase letter, and at least 8 or more characters 2.Must contain more number and one uppercase and lowercase letter, and at least 8 or more characters 3.Must contain more number and more uppercase and lowercase letter, and at least 8 or more characters 4.Must contain at least one number and more uppercase and lowercase letter, and at least 8 or more characters
In AJAX the open method is always accompanied with _____ method	1.create () 2. send () 3.close () 4.abort ()
The jquery \$("p:first") statement does	1.Selects all the elements 2. Selects the first element 3.Selects the last element 4.Selects the middle element
How can we set a constant in PHP	1. define(name, value); 2.constant(name, value); 3.none 4.#define(name, value);
The following piece of script will output \$n1=011; \$n2=9; \$n=\$n1+\$n2; print(\$n);	1.020 2.20 3.18 4.none
Which of following function return 1 when output is successful	1.echo 2. print() 3.both echo and print() 4.None
Which of the following method is suitable when you need to send larger data of form submissions_____	1.Get 2. Post 3.Both Get and Post 4.there is no direct way for larger form. You need to store them in a file and retrieve
Which of the following php function returns the number of elements in an array	1.count(\$array_name) 2.sizeof(\$array_name) 3.length(\$array_name) 4. both count(\$array_name) and sizeof(\$array_name)
Which of the following variables is not a global variable in php	1.\$_get 2. \$_ask 3.\$_request 4.\$_post
If a boolean variable \$a= 5;	1. a is false 2. \$a is true 3. \$a is overflow 4. the statement is not valid
The output of the following script would be \$GVAR=0; function INCRIT() { GLOBAL \$GVAR; \$GVAR++; \$GVAR--; \$GVAR++; echo "GVAR is \$GVAR"; } INCRIT();	1. GVAR is 15 2. GVAR is 16 3. GVAR is 1 4. GVAR is \$GVAR.

Questions	Choices
If the variable \$a is equal to 5 and variable \$b is equal to "a", what's the value of \$\$b?	<ol style="list-style-type: none"> \$5 5 \$100 \$a
Which of the functions is used to sort an array in descending order?	<ol style="list-style-type: none"> sort() asort() rsort() dsort()
Which in-built function will add a value to the end of an array?	<ol style="list-style-type: none"> array_unshift() into_array() array_push() array_shift()
What will be the output of the following PHP code? <pre><?php \$state = array ("Karnataka", "Goa", "Tamil Nadu", "Andhra Pradesh"); echo (array_search ("Tamil Nadu", \$state)); ?></pre>	<ol style="list-style-type: none"> True 1 False 2
Which statement will output \$x on the screen?	<ol style="list-style-type: none"> echo "\$x"; echo "\$\$x"; echo "/\$x"; echo "\$x";

Questions	Choices
<p>What will be the output of the following PHP code ?</p> <pre><?php int \$one = 1; echo "\$one"; ?></pre>	<p>1. 0</p> <p>2. 1</p> <p>3. \$one</p> <p>4. error</p>
<p>What will be the output of the following PHP code ?</p> <pre><?php \$a = 12; --\$a; echo \$a++; ?></pre>	<p>1. 11</p> <p>2. 10</p> <p>3. 12</p> <p>4. error</p>
<p>What will be printed?</p> <pre>\$a = array(); if (\$a[0]) echo "null"; echo count(\$a);</pre>	<p>1. 0</p> <p>2. 1</p> <p>3. 2</p> <p>4. error</p>
<p>What will be the output of the following PHP code?</p> <pre><?php function a() { function b() { echo 'I am b'; } echo 'I am a'; } b(); a(); ?></pre>	<p>1. I am b</p> <p>2. I am bI am a</p> <p>3. Error</p> <p>4. I am a</p>

Questions	Choices
What is x+ mode in fopen() used for?	<ol style="list-style-type: none"> 1. Read/Write. Creates a new file. Returns FALSE and an error if file already exists 2. Write only. Creates a new file. Returns TRUE and an error if file already exists 3. Read/Write. Opens and clears the contents of file 4. Write. Opens and clears the contents of file
What is the output of PHP code <?php \$rest = substr("abcdef", -1); echo \$rest.", "; \$rest = substr("abcdef", 0, -1); echo \$rest; ?>	<ol style="list-style-type: none"> 1. a,fedcb 2. f,abcde 3. b,abcdef 4. a,abcde
Which of the following attribute is needed for file upload via form?	<ol style="list-style-type: none"> 1. enctype='text/plain' 2. enctype='singlepart/data' 3. enctype='multipart/form-data' 4. enctype='form-data/file'
You need to check the size of a file in PHP function. \$size = X(filename); Which function will suitably replace 'X'?	<ol style="list-style-type: none"> 1. filesize 2. size 3. sizeofFile 4. getSize

Questions	Choices
What is the output of PHP code <?php echo "Today is " . date("3"); . " "; ?>	1. Today is Tuesday 2. Today is 3 3. Today is 3rd day 4. Error
Which one of the following function will print current time in 24 hours format with minutes and seconds	1. date("h"); 2. date("h:I:S"); 3. date("H"); 4. date("H:i:s");
Which of the following function which is used to set default time zone in PHP	1. default_timezone_set() 2. default_date_timezone_set() 3. date_default_timezone_set() 4. set_default_timezone()
Which is a valid strtotime() function in PHP	1. strtotime("tomorrow"); 2. strtotime("next Saturday"); 3. All of them 4. strtotime("+3 Months");

Questions	Choices
<p>What is the output of PHP code<?php //Assume today is september 6th 2019 \$d1=strtotime("December 04"); \$d2=ceil((\$d1-time())/60/60/24); echo \$d2; ?></p>	<ol style="list-style-type: none"> 89 90 88 Error//75
<p>How to read a entire file in one line PHP script</p>	<ol style="list-style-type: none"> Using readfile() Using both readfile and get_file_contents() Using read_file() Using get_file_contents()
<p>Totally how many arguments are mandatory for mail() function</p>	<ol style="list-style-type: none"> 1 2 3 4
<p>Which of the following is not a valid file mode in PHP</p>	<ol style="list-style-type: none"> r w x+ y+
<p>Which function is used, for seeing last time modification of a file</p>	<ol style="list-style-type: none"> filemtime() fileinode() lchgrp() lchown()

Questions	Choices
Which of the following statements is false regarding the opening modes of a file?	<ol style="list-style-type: none"> 1. When you open a file for reading, if the file does not exist, an error occurs. 2. When you open a file for writing, if the file does not exist, a new file is created. 3. When you open a file for reading, if the file does not exist, the program will open an empty file. 4. When you open a file for writing, if the file exists, the existing file is overwritten with the new file.
What will be the output of the following PHP code <?php echo str_pad("O", 5,"O")." My God."; ?>	<ol style="list-style-type: none"> 1. OOOOO My God 2. OOOO My God 3. Error 4. Warning
Which statement can be used for modifying the definition of an existing table?	<ol style="list-style-type: none"> 1. Alter 2. Modify 3. Select 4. Update
What is the default number of seconds that cached session pages are made available before the new pages are created?	<ol style="list-style-type: none"> 1. 360 2. 180 3. 3600 4. 1800

Questions	Choices
Which one of the following methods can be used to diagnose and display information about a MySQL connection error?	1. connects_errno() 2. connects_error() 3. mysqli_connect_errno() 4. mysqli_connects_error()
mysql_connect() does not take following parameter	1. database host 2. user ID 3. password 4. database names
Which one of the following methods is responsible for sending the query to the database?	1. mysqlquery() 2. send_query() 3. sendquery() 4. mysqli_query()
A function that takes no arguments and return a string, which is unique key corresponding to a particular session	1. session_name() 2. session_params() 3. session_id() 4. id()

Questions	Choices
If the directive session.cookie_lifetime is set to 3600, the cookie will live until _____	1. 3600 sec 2. 3600 min 3. 3600 hrs 4. the browser is restarted
_____ address is an internetwork address with universal jurisdiction.	1. Physical 2. Logical 3. MAC Address 4. IC Address
In _____, a table associating a logical address with a physical address is updated manually	1. static mapping 2. dynamic mapping 3. physical mapping 4. Social mapping
The target hardware address on an Ethernet is _____ in an ARP request	1. 0x000000000000 2. 0.0.0.0 3. variable 4. class dependent

Questions	Choices
An ARP request is normally _____	<ol style="list-style-type: none"> 1. broadcast 2. unicast 3. multicast 4. semi multicast
The ARP component that sends an IP packet to a queue is the _____.	<ol style="list-style-type: none"> 1. cache controller 2. input module 3. output module 4. Processor Module
TCP assigns a sequence number to each segment that is being sent. The sequence number for each segment is the number of the _____ byte carried in that segment.	<ol style="list-style-type: none"> 1. first 2. last 3. middle 4. between
A TCP segment is encapsulated in _____.	<ol style="list-style-type: none"> 1. an IP datagram 2. an Ethernet frame 3. a UDP user datagram 4. Token ring Frame
Which of the following functions does UDP perform?	<ol style="list-style-type: none"> 1. Process-to-process communication 2. Host-to-host communication 3. End-to-end reliable data delivery 4. Interface-to-interface communication.

Questions	Choices
UDP packets have fixed-size header of bytes.	<ol style="list-style-type: none"> 16 8 32 64
The address resolution protocol (ARP) is used for	<ol style="list-style-type: none"> Finding the IP address from the DNS Finding the IP address of the default gateway Finding the IP address that corresponds to a MAC address Finding the MAC address that corresponds to an IP address
Which of the following assertions is FALSE about the Internet Protocol (IP)	<ol style="list-style-type: none"> It is possible for a computer to have multiple IP addresses IP packets from the same source to the same destination can take different routes in the network packet source cannot set route of an outgoing packets;the route is determined only by the routing tables in the routers on the way IP ensures that a packet is discarded if it is unable to reach its destination within a given number of hops
Which one of the following fields of an IP header is NOT modified by a typical IP router?	<ol style="list-style-type: none"> Checksum Source address Time to Live (TTL) Length

Questions	Choices
In class C , if subnet mask is 255.255.255.224 then calculates number of subnet?	1. 6 2. 8 3. 4 4. 12
The transport layer protocols used for real time multimedia, file transfer, DNS and email, respectively are:	1. TCP, UDP, UDP and TCP 2. UDP, TCP, TCP and UDP 3. UDP, TCP, UDP and TCP 4. TCP, UDP, TCP and UDP
Which of the following system calls results in the sending of SYN packets?	1. Bind 2. Listen 3. socket 4. Connect
What is the value of opad in the HMAC structure?	1. 00111110 2. 00110010 3. 10110110 4. 01011100

Questions	Choices
<p>When a hash function is used to provide message authentication, the hash function value is referred to as</p>	<p>1. Message Field</p> <p>2. Message Digest</p> <p>3. Message Score</p> <p>4. Message Leap</p>

Questions	Choices
What is a one-way password file?	<p>1.</p> <p>A scheme in which the password is jumbled and stored</p> <p>2.</p> <p>A scheme in which the password is XOR with a key and stored</p> <p>3.</p> <p>A scheme in which the hash of the password is stored</p> <p>4.</p> <p>A scheme in which the password is passed through a PRF, which is then stored</p>

Questions	Choices
Which one of the following is not an application hash functions?	<div>1. One-way password file</div> <div>2. Key wrapping</div> <div>3. virus Detection</div> <div>4. Intrusion detection</div>

Questions	Choices
<p>For a 150-bit message and a 10-bit MAC, how many values are the MAC value dependent on?</p>	<p>1.</p> <p>2^{140}</p> <p>2.</p> <p>2^{150}</p> <p>3.</p> <p>2^{15}</p> <p>4.</p> <p>2^{10}</p>

Questions	Choices
For a 100 bit key and a 32 bit tag, how many possible keys can be produced in the 3rd round?	<div><div>1.</div><div>2.⁴</div><div>2.</div><div>2⁸</div><div>3.</div><div>2¹⁶</div><div>4.</div><div>2³²</div></div>

Questions	Choices
<p>In SHA-512, W16 is dependent on</p>	<p>1.</p> <p>W0,W3,W7,W13</p> <p>2.</p> <p>W3,W7,W11,W15</p> <p>3.</p> <p>W0,W1,W9,W14</p> <p>4.</p> <p>W0,W1,W10,W13</p>

Questions	Choices
PGP makes use of which cryptographic algorithm?	1. DSA 2. AES 3. ECC 4. RSA
Which of these systems use timestamps as an expiration date?	1. Public-Key Certificates 2. Public announcements 3. Publicly available directories 4. Public-Key authority

Questions	Choices
Which system uses a trusted third party interface?	1. Public-Key Certificates 2. Public announcements 3. Publicly available directories 4. Public-Key authority
Cryptographic hash functions execute faster in software than block ciphers.	1. Statement is correct 2. Statement is incorrect 3. Depends on the hash function 4. Depends on the processor
Which mode of operation is used in the DAA (Data Authentication Algorithm)?	1. output feedback mode 2. electronic code block mode 3. cipher block chaining mode 4. cipher feedback mode
What is the value of ipad in the HMAC structure?	1. 00111110 2. 00110010 3. 10110110 4. 01110110

Questions	Choices
Another name for Message authentication codes is	1. cryptographic codebreak 2. cryptographic codesum 3. cryptographic checksum 4. cryptographic checkbreak
In CMAC (cipher based MAC), which scenario is a different key K2 is used instead of K1?	1. If the tag is larger than the key length 2. If the tag is shorter than the key length 3. In the last step of the algorithm 4. If the plaintext/message is not an integer multiple of the cipher clock length
Which of the following is true about Public Key Infrastructure?	1. PKI is a combination of digital certificates, public-key cryptography, and certificate authorities that provide enterprise wide security. 2. PKI uses private and public keys but does not use digital certificates. 3. PKI uses two-way symmetric key encryption with digital certificates, and Certificate Authority. 4. PKI uses CHAP authentication.

Questions	Choices
Which of the following describes APIs for devices such as smartcards that contain other cryptographic information?	1. PKCS #1 2. PKCS #5 3. PKCS #7 4. PKCS #11
For a 100 bit key and a 32 bit tag, how many possible keys can be produced in the 3rd round?	1. 2 ⁴ 2. 2 ³² 3. 2 ¹⁶ 4. 2 ⁶⁴
In asymmetric key cryptography, the private key is kept by	1. sender 2. receiver 3. sender and receiver 4. all the connected devices to the network
Which one of the following is a cryptographic protocol used to secure HTTP connection?	1. stream control transmission protocol (SCTP) 2. transport layer security (TSL) 3. explicit congestion notification (ECN) 4. resource reservation protocol

Questions	Choices
Voice privacy in GSM cellular telephone protocol is provided by	1. A5/2 cipher 2. b5/4 cipher 3. b5/6 cipher 4. b5/8 cipher
Divide (HAPPY) ₂₆ by (SAD) ₂₆ . We get quotient –	1. KD 2. LD 3. JC 4. MC
The time required to convert a k-bit integer to its representation in the base 10 in terms of big-O notation is	1. O(log ² n) 2. O(log n) 3. O(log ² 2n) 4. O(2log n)
The estimated computations required to crack a password of 6 characters from the 26 letter alphabet is-	1. 308915776 2. 11881376 3. 456976 4. 8031810176

Questions	Choices
Caesar Cipher is an example of	1. Poly-alphabetic Cipher 2. Mono-alphabetic Cipher 3. Multi-alphabetic Cipher 4. Bi-alphabetic Cipher
DES follows	1. Hash Algorithm 2. Caesars Cipher 3. Feistel Cipher Structure 4. SP Networks
The DES Algorithm Cipher System consists of _____ rounds (iterations) each with a round key	1. 4 2. 8 3. 16 4. 24
The DES algorithm has a key length of	1. 32 2. 128 3. 64 4. 256
The Initial Permutation table/matrix in DES is of size	1. 8x8 2. 16x16 3. 32 x32 4. 64 x64

Questions	Choices
In the DES algorithm the Round Input is 32 bits, which is expanded to 48 bits via	1. Scaling of the existing bits 2. Duplication of the existing bits 3. Addition of zeros 4. Addition of ones
The main disadvantages of packet-filtering Router:	1. Simplicity 2. Transparency to users 3. Lack of Authentication 4. Durability
What is the number of operation required to come up with 2 messages having the same message digest in SHA-512?	1. 2256 2. 2152 3. 21024 4. 2128
The second pre-image resistant property is	1. It is computationally infeasible to find any pair (x, y) such that $H(x) = H(y)$ 2. For any given block x, it is computationally infeasible to find y not equal to x, with $H(y) = H(x)$ 3. For any given hash value h it is computationally infeasible to find y such that $H(y) = h$ 4. $H(x,y) = H(y,x)$

Questions	Choices
Suppose that everyone in a group of N people wants to communicate secretly with the $N-1$ others using symmetric key cryptographic system. The communication between any two persons should not be decodable by the others in the group. The number of keys required in the system as a whole to satisfy the confidentiality requirement is	1. $2N$ 2. $N(N-1)$ 3. $N(N-1)/2$ 4. $(N-1)^2$
Anarkali digitally signs a message and sends it to Salim. Verification of the signature by Salim requires	1. Anarkali's public key. 2. Salim's public key. 3. Salim's private key. 4. Anarkali's private key.
Exponentiation is a heavily used operation in public key cryptography. Which of the following options is the tightest upper bound on the number of multiplications required to compute $b^n \bmod m, 0 \leq b, n \leq m$?	1. $O(\log n)$ 2. $O(\sqrt{n})$ 3. $O(n/\log n)$ 4. $O(n)$
If there are N people in the world and are using secret key encryption/decryption for privacy purpose, then number of secret keys required will be:	1. N 2. $(N-1)$ 3. $N(N-1)/2$ 4. $N(N+1)/2$

Questions	Choices
An attacker sits between customer and Banker, and captures the information from the customer and retransmits to the banker by altering the information. This attack is called as _____.	1. Masquerade Attack 2. Replay Attack 3. Passive Attack 4. Denial of Service Attack
In Challenge-Response authentication the claimant _____.	1. Proves that she knows the secret without revealing it 2. Proves that she doesn't know the secret 3. Reveals the secret 4. Gives a challenge
Which of the following encryption algorithms is based on the Fiestal struture?	1. Advanced Encryption Standard 2. RSA public key cryptographic algorithm 3. Data Encryption Standard 4. RC4
The standard for certificates used on internet is	1. X.25 2. X.301 3. X.409 4. X.509

Questions	Choices
How many distinct stages are there in DES algorithm, which is parameterized by a 56-bit key?	1. 16 2. 17 3. 18 4. 19
Consider that B wants to send a message m that is digitally signed to A. Let the pair of private and public keys for A and B be denoted K_A and K_B . Let E_K represent the operation of encrypting m with a key K and $H(m)$ represent the message digest. Which one of the following indicates the CORRECT way of sending the message m along with the digital signature to A?	1. A 2. B 3. C 4. D
The total number of keys required for a set of n individuals to be able to communicate with each other using secret key and public key cryptosystems, respectively are:	1. $n(n-1)$ and $2n$ 2. $2n$ and $((n(n-1))/2)$ 3. $((n(n-1))/2)$ and $2n$ 4. $((n(n-1))/2)$ and n
SHA-1 produces a hash value of	1. 256 bits 2. 160 bits 3. 180 bits 4. 128 bits
What is the number of round computation steps in the SHA-256 algorithm?	1. 64 2. 80 3. 128 4. 256

Questions	Choices
In SHA-512, the message is divided into blocks of size ____ bits for the hash computation.	1. 1024 2. 512 3. 256 4. 1248
In SHA-3, for a message digest size of 256, what is the bitrate 'r' (capacity = 512) ?	1. 576 2. 1088 3. 1152 4. 832
What is the effectiveness of an n-bit hash value?	1. 2n 2. 2-n 3. 22n 4. 2-2n
MD5 produces ____ bits hash data	1. 128 2. 160 3. 64 4. 256
In MD5, the process block divides the 512 bits into _____ sub blocks.	1. 16 2. 32 3. 48 4. 64

Questions	Choices
The RSA signature uses which hash algorithm?	1. MD5 2. SHA1 3. SHA2 4. MD5 and SHA-1
The digital signature standard uses which hash algorithm?	1. MD5 2. SHA1 3. SHA2 4. RC4
Which one of the following message digest algorithms is considered flawed and should no longer be used?	1. SHA-1 2. MD2 3. MD4 4. MD5
Which one of the following message digest algorithms is the current U.S. government standard in use by secure federal information processing systems?	1. SHA-1 2. MD2 3. MD4 4. MD5

Questions	Choices
Hashed message is signed by a sender using	<ol style="list-style-type: none"> 1. his public key 2. his private key 3. receiver's public key 4. receiver's private key
The responsibility of a certification authority for digital signature is to authenticate the	<ol style="list-style-type: none"> 1. hash function used 2. private keys of subscribers 3. public keys of subscribers 4. key used in DES
A hashing function for digital signature (i) must give a hashed message which is shorter than the original message (ii) must be hardware implementable (iii) two different messages should not give the same hashed message (iv) is not essential for implementing digital signature	<ol style="list-style-type: none"> 1. i and ii 2. ii and iii 3. i and iii 4. iii and iv
Which one of the following is not a public key distribution means?	<ol style="list-style-type: none"> 1. Public-Key Certificates 2. Hashing Certificates 3. Publicly available directories 4. Public-Key authority

Questions	Choices
Hash value encrypted by the sender's private key is _____	1. AES 2. digital signature 3. DES 4. 3DES algorithm
The standard used in digital signatures and defines its structure , fields, and values is	1. X509 2. Kerberos 3. Cryptography 4. PKI
A hash function guarantees integrity of a message. It guarantees that message has not be	1. Replaced 2. Over view 3. Changed 4. Violated
Which Authentication Encryption approach is taken by the SSL/TLS protocol?	1. Hashing followed by encryption ($H \rightarrow E$) 2. Encryption followed by authentication ($E \rightarrow A$) 3. Authentication followed by encryption ($A \rightarrow E$) 4. Independently encrypt and authenticate ($E + A$)

Questions	Choices
Kerberos is an authentication scheme that can be used for	1. Public key cryptography 2. Digital signature 3. Hash function 4. Single sign on
The _____ mode of IPsec, take the whole IP packet to form secure communication between two gateways	1. Transport 2. Tunnel 3. Either (a) or (b) 4. Both (a) and (b)
IPsec services are available in _____ Layer.	1. Application 2. Data link 3. Network 4. Transport
Encapsulating Security Payload (ESP) belongs to which Internet Security Protocol?	1. Secure Socket Layer Protocol 2. Secure IP Protocol 3. Secure Http Protocol 4. Transport Layer Security Protocol

Questions	Choices
Total no. of messages used in SSL Handshake Protocol is	1.12 2.10 3.8 4.14
X.509 certificate recommends which cryptographic algorithm?	1. RSA 2. DES 3. AES 4. Rabin
Name the network attack that floods it with useless traffic.	1. Spoofing 2. Trojan Horse 3. Denial of Service attack 4. Virus
Let us assume that a point $P=(4,2)$ lies on the Elliptic Curve $y^2 = x^3 + x + 1$, over Z_{13} , find the inverse of point P (-P),	1. (4, 1) 2. (4, 11) 3. (11, 4) 4. (1, 4)
Let us assume that points $P = (4, 2)$ and $Q = (10, 6)$ lies on the Elliptic Curve $y^2 = x^3 + x + 1$, over Z_{13} , find the slop value $\lambda = ((y_2 - y_1) / (x_2 - x_1)) \bmod p$ for the given points	1. 7 2. 4 3. 13 4. 5

Questions	Choices
If the points P=Q then the slop value λ for the P and Q is computed,	1. $\lambda = ((y_2 - y_1) / (x_2 - x_1))$ 2. $\lambda = ((3x_1^2 + a) / (2y_1))$ 3. $\lambda = ((x_2 - x_1) / (y_2 - y_1))$ 4. $\lambda = ((3y_1^2 + a) / (2x_1))$
What is the general equation for elliptic curve systems?	1. $y^3 + b_1xy + b_2y = 3x^3 + a_1x^2 + a_2x + a_3$ 2. $y^2 + b_1x + b_2y = x^2 + a_1x^2 + a_2$ 3. $y^2 + b_1xy + b_2y = x^3 + a_1x^2 + a_2x + a_3$ 4. $y^2 + b_1xy + b_2y = x^3 + a_1x^2 + a_2x + a_3$
For a 150-bit message and a 10-bit MAC, how many values are the MAC value dependent on?	1. 2150 2. 2140 3. 150 4. 140
For an n-bit tag and a k-bit key, the level of effort required for brute force attack on a MAC algorithm is	1. $2k$ 2. $2n$ 3. $\min(2k, 2n)$ 4. $2k/2n$

Questions	Choices
In Digital Signature, there is _____ relationship between signature and message.	1. Many to one 2. One to many 3. Many to many 4. One to One
Differential Cryptanalysis can be mounted on	1. DES encryption algorithm 2. AES encryption algorithm 3. RSA encryption algorithm 4. Deffie-Hellman key exchange algorithm
If an efficient algorithm for factoring large number is discovered which of this following schemes will be known to be not secure?	1. AES 2. Diffle-Hellman 3. RSA 4. El Gammal
Suppose that two parties A and B wish to setup a common secret key (D-H key) between themselves using the Diffie-Hellman key exchange technique. They agree on 7 as the modulus and 3 as the primitive root. Party A chooses 2 and party B chooses 5 as their respective secrets. Their D-H key is	1. 3 2. 4 3. 5 4. 6

Questions	Choices
<p>Alice and Bob agree to use the prime $p = 941$ and the primitive root $g = 627$. Alice chooses the secret key $a = 347$ and computes, $A \equiv 627^{347} \pmod{941} = X$. Similarly, Bob chooses the secret key $b = 781$ and computes $B \equiv 627^{781} \pmod{941} = Y$. Alice sends Bob the number X and Bob sends Alice the number Y. Both of these transmissions are done over an insecure channel, so both (X, Y) should be considered public knowledge. Then Alice and Bob are both able to compute the Secret Key value $SK = X^{781} \cdot Y^{347} \pmod{941}$, then what is the value of (X, Y, SK)</p>	<ol style="list-style-type: none"> 1. (390, 691, 470) 2. (351, 655, 357) 3. (378, 648, 397) 4. (389, 657, 465)
<p>In the Phase 2 of the Handshake Protocol Action, the step server_key_exchange is not required for which of the following cipher systems?</p>	<ol style="list-style-type: none"> 1. Fortezza 2. Anonymous Diffie-Hellman 3. Fixed Diffie-Hellman 4. RSA
<p>The DSS signature scheme uses, which of the Hash Algorithm</p>	<ol style="list-style-type: none"> 1. MD5 2. SHA-2 3. SHA-1 4. DSS does not use Hash Algorithms
<p>Which of the following are the possible size of MAC's I. 12 Bytes, II. 16 Bytes, III. 20 Bytes IV. 24 Bytes</p>	<ol style="list-style-type: none"> 1. I and III 2. II only 3. I and II 4. II, III and IV

Questions	Choices
If a 2,048-bit plaintext message was encrypted with the El-Gamal public key cryptosystem, how long would the resulting cipher text message be?	1. 1,024 bits 2. 2,048 bits 3. 4,096 bits 4. 8,192 bits
Acme Widgets currently uses a 1,024-bit RSA encryption standard companywide. The company plans to convert from RSA to an elliptic curve cryptosystem. If it wishes to maintain the same cryptographic strength, what ECC key length should it use?	1. 160 bits 2. 512 bits 3. 1,024 bits 4. 2,048 bits
John would like to produce a message digest of a 2,048-byte message he plans to send to Mary. If he uses the SHA-1 hashing algorithm, what size will the message digest for this particular message be?	1. 128 bits 2. 512 bits 3. 1,024 bits 4. 160 bits
Which of the following attempts to detect attacks based on known signatures or patterns?	1. Signature based IDSs. 2. Anomaly based IDSs. 3. Host based IDSs. 4. Network based IDSs.

Questions	Choices
Misuse signature Detection is used for _____	<ol style="list-style-type: none"> 1. Identifying the patterns of unauthorized behaviour to predict and detect subsequent similar attempts 2. Identifying the activities of unauthorized behaviour to prevent 3. Network Firewall design with behaviour analysis 4. Network monitoring and Traffic Pattern Analysis
What is an advantage of RSA over DSS?	<ol style="list-style-type: none"> 1. It can provide digital signature and encryption functionality 2. It uses fewer resources and encrypts as fast as possible 3. It is a block cipher versus a stream cipher scheme 4. It employs a one-time key generation phase
For digital signature generation needs :	<ol style="list-style-type: none"> 1. Public key system 2. Private key system 3. Public and private key system 4. Hash algorithms