

Time: 40 Min Max. Marks: 40

1] All questions are Compulsory

2] Assume suitable data wherever required

=====

MCQ_SECTION

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	What is a programming paradigm?
Option A:	Method to do some task.
Option B:	Approach to solve problem using some programming language
Option C:	Approach to solve some problem
Option D:	Method to write program
2.	Which of the following is the advantage of declarative languages over imperative languages?
Option A:	Can use abstract data type
Option B:	Easy to verify the properties of the program
Option C:	Can be strong-typed
Option D:	Can be implemented by an interpreter or compiler
3.	A language is statically typed if the type of a variable is checked during _____
Option A:	Compile time
Option B:	Run Time
Option C:	Program writing Type
Option D:	Load Time
4.	What formal system provides the semantic foundation for Prolog?
Option A:	Predicate calculus

Option B:	Hoare logic
Option C:	Lambda calculus
Option D:	Propositional logic
5.	In Scheme language, which of the following is not a higher-order function?
Option A:	map
Option B:	apply
Option C:	member
Option D:	compose
6.	Which of the following language follow declarative programming paradigm?
Option A:	JAVA
Option B:	C++
Option C:	C
Option D:	Prolog
7.	Identify type for Input and output of given function func:: Num a -> [a] ->a
Option A:	Input-Num,Output-List
Option B:	Input-list,Output-Num
Option C:	Input-Num,Output-Num
Option D:	Input-List,Output-List
8.	Which of the following is not Storage Allocation mechanisms for Object lifetimes
Option A:	Static
Option B:	Heap
Option C:	Stack
Option D:	Dynamic
9.	A template is a blueprint or formula for creating
Option A:	Event
Option B:	Generic Class
Option C:	Program
Option D:	Function

10.	Critical section is that part of code where
Option A:	Data is shared
Option B:	There is no data present
Option C:	There are libraries
Option D:	Where there is preprocessing directories
11.	Which is not the feature of static type system
Option A:	Faster execution
Option B:	Better error checking
Option C:	flexible
Option D:	Easier to read and maintain
12.	Which of the following is disadvantage of prolog
Option A:	Sometimes input and output is not easy.
Option B:	Doesn't need a lot of programming effort.
Option C:	Search is recursion based.
Option D:	It has built in list handling.
13.	The script that runs on user's computer is called as
Option A:	Server side script
Option B:	Client side script
Option C:	User code
Option D:	Servlet code
14.	Syntax for creating thread using JAVA Thread class
Option A:	<code>class MyThread{ }</code>
Option B:	<code>class MyThread implements Thread{ }</code>
Option C:	<code>class MyThread extends Thread{ }</code>
Option D:	<code>class MyThread extends Runnable { }</code>

15.	Mutual exclusion is
Option A:	All Thread executing together
Option B:	Only one Thread or process can enter into critical section
Option C:	No thread executing
Option D:	Only exclusive threads executing
16.	Print all numbers from 1 to 100 which is divisible by 2 ?
Option A:	filter even [1..100]
Option B:	even [1..100]
Option C:	filter(even [1..100])
Option D:	filter[1..100]even
17.	Which of the following is a mechanism by which object acquires the properties of another object?
Option A:	Encapsulation
Option B:	Polymorphism
Option C:	Inheritance
Option D:	Abstraction
18.	Which of the following is a garbage collection technique for automatically deallocates heap storage?
Option A:	First fit
Option B:	Copying
Option C:	Space management model
Option D:	Best fit
19.	Thread is also called as _____
Option A:	Light weight process
Option B:	Heavy weight process
Option C:	Medium weight process
Option D:	Strong Process

20.	Which operator is used to get an element out of a list by index
Option A:	##
Option B:	&&
Option C:	!!
Option D:	\$\$

DESCRIPTIVE_SECTION

Time: 1.20 Hrs.

Max. Marks: 40

Attempt all questions.

Q2.	Solve any four	5 marks each
A)	Briefly describe the process of resolution in logic programming.	
B)	What is a subroutine calling sequence? What does it do?	
C)	Explain the concept and types of polymorphism	
D)	Describe the Prolog search strategy.	
E)	Demonstrate Lazy Evaluation with an example?	

Q3	Solve any Two	10 marks each
A)	Explain the concept of Multithreading with an Example using JAVA	
B)	Explain static and dynamic type checking with example	
C)	Write a Haskell function to reverse a list. What is the type of this function?	