

DEPARTMENT OF CSE, CSE(AI&ML) & CSE(DS)

GO PROGRAMMING (20-CS-PC-411)

Mid – 1 Assignment – Questions

IV – B.TECH I– SEM

SUBMISSION DEADLINE: 26-08-2023

ANSWER ALL THE QUESTIONS

SET-1

S.No	Question	BTL	CO	PO	Unit
1	What are some of the distinguishing features of the Go programming language that set it apart from other languages such as Python, Java, or C++?	1	CO1	PO2, PO3, PO6, PO12, PO13	I
2	Go does not support classes in the traditional object-oriented sense. How does it achieve similar functionalities?	1	CO1	PO2, PO3, PO6, PO12, PO13	I
3	How is string concatenation performed in Go?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
4	What is the difference between short variable declaration and regular variable declaration in Go?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
5	How does defer, panic and recover statements work in Go functions?	1	CO3	PO2, PO3, PO6, PO12, PO13	III

ANSWER ALL THE QUESTIONS

SET-2

S.No	Question	BTL	CO	PO	Unit
1	What are the key features of Go's concurrency model? How does it differ from the concurrency models in other languages?	1	CO1	PO2, PO3, PO6, PO12, PO13	I
2	Discuss the ways in which Go promotes simplicity and readability in its syntax and how this might be beneficial to a developer or a team of developers.	2	CO1	PO2, PO3, PO6, PO12, PO13	I
3	What are the naming conventions for variables in Go?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
4	What is the scope of a variable in Go? How does it change when the variable is declared inside a function versus outside?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
5	How do you pass a function as an argument to another function in Go?	1	CO3	PO2, PO3, PO6, PO12, PO13	III

SET-3

S.No	Question	BTL	CO	PO	Unit
1	How does memory management work in Go? Discuss how the garbage collector operates in the context of Go programming.	1	CO1	PO2, PO3, PO6, PO12, PO13	I
2	Why was Go created? What were some of the problems its creators were trying to solve, and how has it succeeded or failed in solving these problems?	1	CO1	PO2, PO3, PO6, PO12, PO13	I
3	What is the difference between a local and a global variable in Go?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
4	Explain the concept of type inference in Go. How is it used when declaring variables?	2	CO2	PO2, PO3, PO6, PO12, PO13	II
5	Explain the use of variadic functions in Go. Provide an example.	2	CO3	PO2, PO3, PO6, PO12, PO13	III

SET-4

S.No	Question	BTL	CO	PO	Unit
1	Discuss the use of Go in modern software development. What types of applications or services might particularly benefit from being written in Go?	2	CO1	PO2, PO3, PO6, PO12, PO13	I
2	Discuss the tools and libraries that Go provides for testing and debugging. How do these contribute to the overall developer experience?	2	CO1	PO2, PO3, PO6, PO12, PO13	I
3	How can you use a variable to store the result of a function that returns multiple values in Go?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
4	What are the advantages of using maps over other data structures in Go?	1	CO2	PO2, PO3, PO6, PO12, PO13	II
5	How do you create anonymous functions (closures) in Go? Provide an example.	1	CO3	PO2, PO3, PO6, PO12, PO13	III