

BVOCAS252- Introduction To Go
Programming (Question Bank)

Module – 1
Introduction, Types, Variables Introduction: Getting Setup: Machine Setup, Text Editors,
The Terminal, Environment, Go- Your First Program, How to Read a Go Program Types:
Numbers, Strings, Booleans Variables: How to Name a Variable, Scope, Constants,
Defining Multiple Variables, An Example Program.
Module – 2
Control Structures, Arrays, Slices and Maps and Functions Control Structures: The for
Statement, If Statement, Switch Statement, Arrays, Slices and Maps : Arrays, Slices-append,
Copy, Maps, Functions: Your Second Function, Variadic Functions, Closure, defer, panic
and recover, panic and recover, pointers, The * and & Operators, new.
Module – 3
Structs and Interfaces, Concurrency, Packages structs and Interfaces: structs , Methods,
Interfaces, Concurrency: Go routines, Channels, Packages: Creating Packages,
Documentation
Module –4

Packages and the Go Tool, Testing, Reflection Packages and the Go Tool: Introduction,
Import Paths, The package Declaration. Import Declaration, Blank Imports, Packages and
Naming, The Go Tool, Testing: The go test Tool, Test Functions, Coverage, Benchmark
Functions, Profiling, Example Functions, Reflection: Why Reflection, reflect. Type and
reflect. Value, Display, a Recursive Value Print, Example: Encoding S-E xpressions, Setting
Variables with reflect. Value, Example: DecodingS-E xpressions, Accessing Struct Field
Tags , Displaying the Methods of a Type, A Word of Caution

PART-A

Two Marks Question.

1. What is Golang?
2. What are some important pros and cons of Golang?
3. How to write to a file in Golang?
4. How to add a line to an existing file in Golang?
5. What is a slice Golang?
6. What is a struct in Golang?
7. What is the context in Golang?
8. What is a flag in Golang?
9. How to get input from user in Golang?
10. How to debug Golang?
11. What is Golang rune?
12. Explain the difference between switch and select in Golang?
13. Which Garbage Collection is used by Golang?
14. Why Golang has pointers?
15. What are some best ides for Golang?
16. What is recursion in Golang?
17. What are GOROOT and GOPATH?
18. What is FMT Golang?
19. What are Go Interfaces?

20. How do you compare two interfaces in Golang?
21. What is the malloc threshold of the Map Project, and how can you modify it?
22. When does Go Runtime allocate memory from the heap and when does it allocate memory from the stack?
23. How can you compare two structures? Give an example.
24. How can you check if two slices are equal in Golang?

PART-B

MODULE -1

QUESTION BANK

1. Define Go programming language.
2. Explain Go Tools and write a simple program to print hello world using lang.
3. Explain two types of go program.
4. Explain Package Main, import fmt, and fmt.Println with example.
5. Explain This statement components.
6. what is a comment? what are the two types of writing a comment.
7. Explain Numbers & Integers in go lang with example.
8. Explain floating point Numbers, integers with example.
9. Explain strings with example.
10. Explain Boolean with example.
11. Explain variables in -lang with example.
12. Explain different variables in go-lang with example.
13. Explain how to name a variable with example.
14. Explain scope in go lang.
15. Explain constant & different multiple variables in variable go lang.

MODULE -2

QUESTION BANK

1. Explain control structure in Arrays with example.
2. Explain for statement in go lang explain with example.
3. Explain If in go lang Explain with example.
4. Explains switch in go lang with syntax and with example.
5. write a program that prints out all the numbers clear divisible by 3 between 1& 100.
6. Explain Arrays, slices & Maps In go lang with example.
7. Write a program that uses arrays.
8. Explain slices in go lang with example.
9. Explain slices function in go with example.
- 10.Explain Maps in go with example.
- 11.How do you access the 4th element of element of an array or slice.
- 12.Explain function with example.
- 13.How to return multiple values in variable function with example.
- 14.Example closure & recursive with example.
- 15.Write a function with are variable paraments that finds the greater numbers in a list of numbers.

MODULE -3

QUESTION BANK

1. Explain structures in go lang with example.
2. Write a program to declaring a structure in go lang.
3. How to define a structure explain with example.
4. How to access fields of a struct explain with example.
5. Explains pointers to a struct with example.
6. Explain Nested structure in go lang with Syntax & example.
7. Explain Anonymous structure and field in go lang, Explain with the help of example
8. Explains Anonymous fields. explain with the help of example.
9. Explain goroutines with example.
- 10.how to create a goroutines explain with syntax & example.
- 11.list the advantage of goroutines.
- 12.Explain Anonymous goroutine with syntax and example.
- 13.explain go - range keyword and write a program to show how to use a range.

- 14.Explain go-Maps and how to define a go Map with example.
- 15.Example Go - recursion with example.
- 16.Write a program of Fibonacci series using recursion in go.

MODULE -4

QUESTION BANK

1. Explain package in Go language.
2. Explain import path and Package Declaration in Go language.
3. Explain Import Declaration & Blank Import in Go language.
4. Explain Nested packages & Giving names to the packages.
5. Write a go program to illustrate the concept of packages in package declaration.
6. Explain the Reflection Package and explain reflect. Copy() with example.
7. List the different Golang tools play an essential role when it comes to design web application.
8. Explain the test functions in Golang and code Coverage.
9. Explain the profiling and Benchmark and explain the Benchmark rules in go.