Class: S.Y. B.Sc. (C.S.) (2) Duration: 2:30 hrs Marks:- 75 Note:-1) All questions are compulsory. 2) Figures to the right indicate maximum marks. Q.1) Answer the following Questions (Any Four) (20 Marks) a) Compare between Java and C++? [CO1-A] b) Write a short note on JVM. [CO1-R] c) Write a short note on Java Comments. [CO1-R] d) What is constructor and its type? [CO1-R] c) Different in between abstract class and interface. [CO1-A] f) Write a short note on tokens in Java [CO1-U] Q.2) Answer the following Questions (Any 4) (20 Marks) a) What is collection framework? List it's advantages. [CO2-RU] b) Explain interface sort set with example. [CO2-UA] c) Explain the use of class Vector to store dynamic sized constrains. [CO2-U] d) Explain swing its need and features. [CO2-U] e) Write program to demonstrate KeyListner and its methods [CO2-E] f) Write a short note on driver manager class [CO2-R] O.3) Answer the following Questions: - (Any 4) (20 Marks) a) Write a short note on CGT describe its advantage and disadvantage. [CO3-RU] b). Discuss the advantage of servlets [CO3-U] [CO3-U] c) Explain Common Gateway Interface d) Differentiate between JSP and servlet [CO3-U] e) Enlist the implicit object of JSP. Explain any four of them in detail [CO3-RU] [CO4-R] f) List and Explain valid JSON data types (15 Marks) Q.4) Answer the following Questions: - (Any 5) [CO1-U] a) Compare between Java and C++ [CO1-U]

[CO2-E]

[CO2-R]

[CO3-U]

[CO3-U]

b) Explain final Keyword

d) Describe JDBC driver

e) Explain the lifestyle of JSP

f) Explain the JSP architecture

c) Write a program to demonstrate use of iterator