## BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION MO/2023)

SEMESTER: VII

CLASS:

**BTECH** 

**BRANCH:** CSE/IT SESSION: MO/2023 SUBJECT: IT436 SOFTWARE TESTING TIME: 02 Hours **FULL MARKS: 25 INSTRUCTIONS:** 1. The question paper contains 5 questions each of 5 marks and total 25 marks. 2. Attempt all questions. 3. The missing data, if any, may be assumed suitably. 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates \_\_\_\_\_\_ CO BL Q.1(a) What is software testing? Discuss the role of software testing during software life cycle [2] R and why is it so difficult? Q.1(b) Define the following terms: [3] 1 R (a) fault (b) failure (c) bug (d) mistake Q.2(a) Define Test plan ,Test suite and Test case [2] 2 R Explain the boundary value analysis and Equivalence class testing technique with the Q.2(b) help of an example. Q.3(a) How to calculate cyclomatic complexity explain with graph example [2] [3] Read P Q.3(b) Α Read Q If P+Q>100 THEN Print "large" **ENDIF** IF P>50 THEN Print" P Large" END IF Calculate Statement coverage(SC), Branch Coverage(BC) and Path coverage(PC) Q.4(a) Define Bottom Up Integration testing with flow diagram. Q.4(b) What is Data Driven Testing explain with flow diagram. Q.5(a) Define Regression testing and stress testing. Q.5(b) Define level of testing.

:::::20/09/2023 M:::::