JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech-VI Semester (CS&IT)

COURSE CODE: 20B1WCI732

COURSE NAME: From Graph to knowledge Graph

COURSE CREDITS: 2

MAX. MARKS: 15

MAX. TIME: 1 Hour

Note: All questions are compulsory.

1. Show a tree in which its diameter is not equal to twice the radius.
2. Can you construct a graph if you are given all its spanning trees? How?
3. Prove or disprove: Every u, v walk contains a u, v path.
4. Explain the following terms: (i) Knowledge Graphs (ii) RDF Nodes
5. Show that the graph on the right (Figure 1) is isomorphic to the complement of the graph on the left.
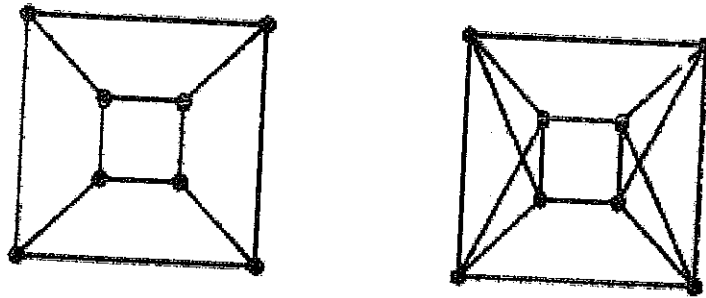

Figure 1