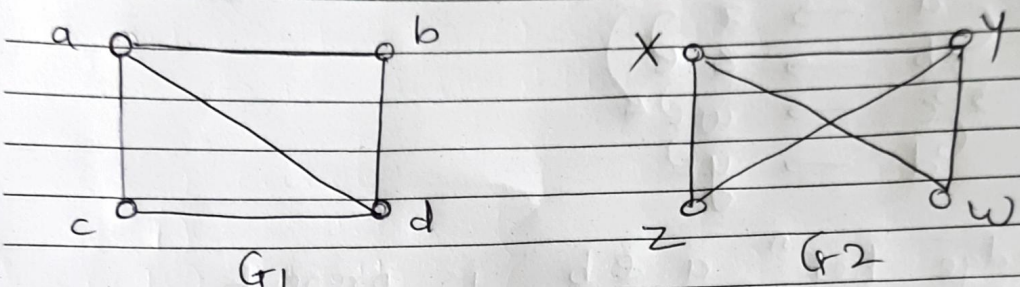
Semester : III Subject : DSGT Academic Year: 2022-2023

* Isomorphic graph & homomorphic graph.



⇒ i) degree(a) = 3.
degree(b) = 2
degree(c) = 2
degree(d) = 3
degree(x) = 3
degree(y) = 3
degree(z) = 2
degree(w) = 2

ii) No. of vertex = 4 of Graph G1
—11— of G2 = 4

iii) No. of edges of G1 = 5
—11— of G2 = 5

iv) Mapping of G1 & G2

mapping (a) → x	x
(b) → z	y.
(c) → w	z
d → y	w

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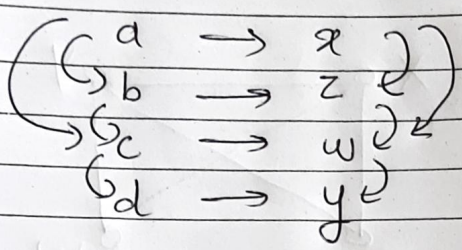
Now we have to validate mapping.



edge betⁿ a & b is present
edge betⁿ x & z " —
~~edge betⁿ~~ b & c not present
edge betⁿ z & w not present
edge betⁿ c & d present
edge betⁿ w & y present
edge betⁿ a & c present
edge betⁿ x & w present
edge betⁿ a & d present
edge betⁿ x & y present
edge betⁿ b & d present
edge betⁿ z & y present.

In this way, we can say that both the graphs are isomorphic.