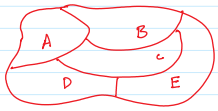
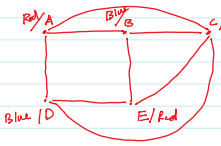
lec # 26 :- Graph Colouring

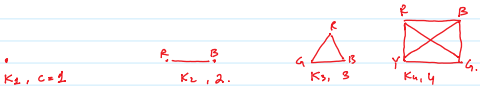




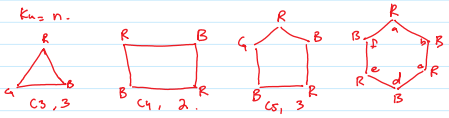
{Red, blue, Green}.

Chromatic # = 3.

Chromatic Number :- It is the minimum Number of Colours required to colour the graph with a property that no two adjacent Vertices should have the same Colour.



$K_n = n$.

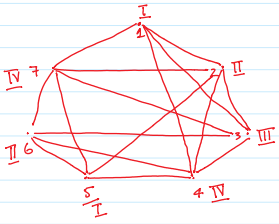


Do for wheels.

Scheduling.

Ex 5 Courses. 1, 2, 3, 4, 5, 6, 7. Minimum Number of Slots for Conducting Exam.
Pg 22.

1 & 2	3 & 4
1 & 3	3 & 6
1 & 4	3 & 7
1 & 7	
	4 & 5
2 & 3	4 & 6
2 & 4	
2 & 5	5 & 6
2 & 7	5 & 7
	6 & 7.

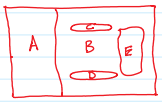


Slot I, II, III, IV.

I	1, 5
II	2, 6
III	3
IV	7, 4.

Quiz # 5 22-Nov-2023.

a).



Graph Colouring
find chromatic #.

b) A Simple Graph with 1000 Vertices & one edge.
Find chromatic # for Such a graph.