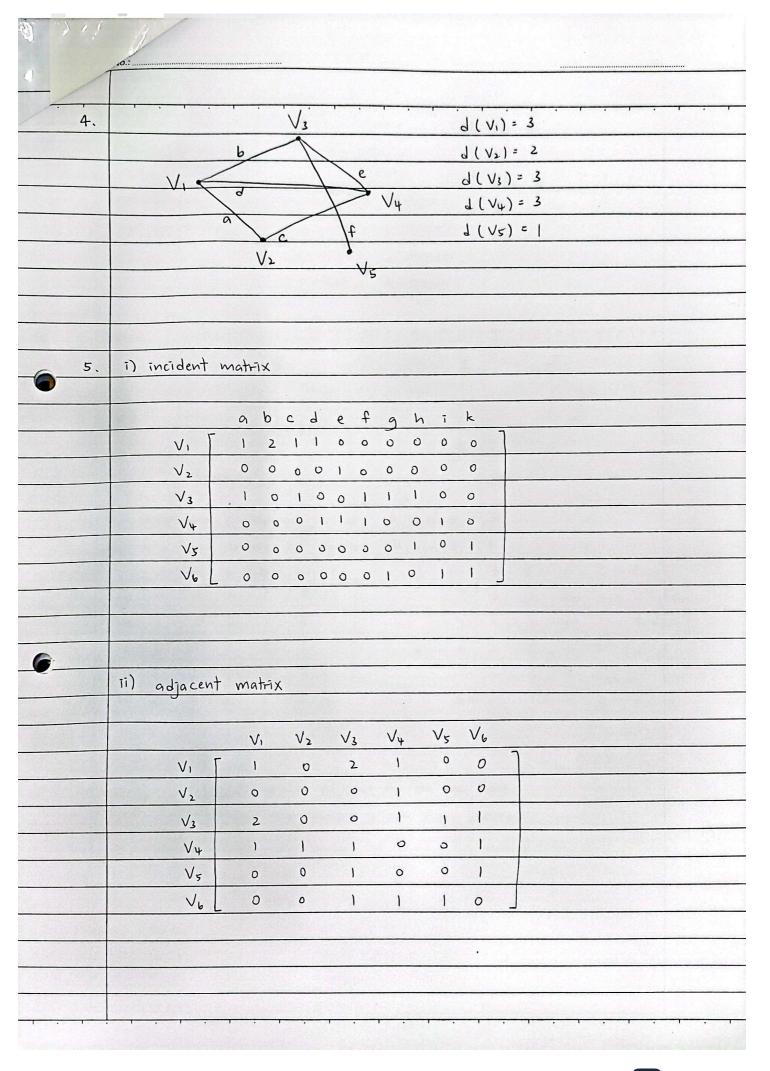
	nai. Dala.
Discret	e structure Assignment 3
	Group member:
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નુ.	Labra AL Harri billi Rad racin (17565 0104)
5	Question 1
(2)	Figeon: Students
(0)	Pigeonhole: Scores 0 to 100
	k = 2.
10	$\left \frac{n}{101}\right  = 2$
	n = 102.
(.)	
	Pigeon: Students.
15	Pigeonhole: £ A, B, C, D, F 3.
	$\frac{n}{5} = 6$
	(c) Halacoat scenars - vertices tilled over connected to the same topically
	n = 5 x (6-1) f1 22234 5 at trabant 3/5 1644 4/102 20 4/104 4/104
	n = 26 This is non-source on red and xirry tensor become
20	(A 1500 Elga that go out and end at the same wester
	Question 2.
(8)	$P(A) = \frac{70}{10+30} = 0.7$
	20
(b)	$P(B) = \frac{30}{70+30} = 0.3$
25	
(c)	P(W A) = 0.2
	P(Anw)
(1)	$P(W A) = \frac{P(A)}{P(A)}$
	$P(A \wedge W) = P(W   A) P(A)$
30	= 0.2 (0.7)
Δ	$P(A \cap W) = 0.14$

	Rei: Date		
	0.60 0.11)		A
(e)	$P(N B) = \frac{P(BNN)}{P(B)}$		
(0)	$P(B \cap W) = P(W \mid B) P(B)$		
	= 0.4 (0.3)		
	= 0.12.		
			3.2
(1)	P(W) = P(WIA) P(A) + P(WIB) P(B)	ethi)	
	= 0.2 (0.1) + 0.4 (0.3)	es VALIAZI.	
	P(W) = 0.26	1999	
	00111 21 0001	X - X	
(9).	$P(A W) = \frac{P(W A) - P(A)}{P(W)}$		(
	$ \frac{\rho(A \mid W) = \frac{\rho(W)}{\rho(W)}}{\rho(W)} = \frac{0.2 (0.1)}{0.26} $	1-1	
	P(AIN) = 0.5386.		À
	Question 3. destante and	(B) Pages	
(2)	Vertices : points in a graph.	POR	
	Edges : connecting line between vertices.		
(b)	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.		
(b) (c) (d)	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.	n n	
(b) (c) (d) (e)	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all	n n	
(b) (c) (d) (e) (f) <sub>20</sub>	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.	two	
(b) (c) (d) (e) (f) <sub>20</sub>	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all  Loop: edges that go out and end at the same vertex.	two	
(b) (c) (d) (e) (f) <sub>20</sub>	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all  Loop: edges that go out and end at the same vertex.  Parallel edges: two or more edges that are connected to the same vertices.  Parallel edges.	two	
(b) (c) (d) (e) (f) <sub>20</sub>	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all  Loop: edges that go out and end at the same vertex.  Parallel edges: two or more edges that are connected to the same vertices.  Parallel edges.  Loop—  Parallel edges.  Vertices.	two	-(
(b) (c) (d) (e) (f) <sub>20</sub>	Edges: connecting line between vertices.  Adjacent vertices: Vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: Vertex that has no connection at all  Loop: edges that go out and end at the same vertex.  Parallel edges: two or more edges that are connected to the same vertices.  Parallel edges.    Oop	two	
(b) (c) (d) (e) (f) <sub>20</sub> (g)	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all  Loop: edges that go out and end at the same vertex.  Parallel edges: two or more edges that are connected to the same vertices.  Parallel edges.  Loop  e, Parallel edges.  Vertices.	two	
(b) (c) (d) (e) (f) <sub>20</sub> (g)	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all  Loop: edges that go out and end at the same vertex.  Parallel edges: two or more edges that are connected to the same vertices.  Parallel edges.    Parallel edges   Parallel edges	(6) P(6)	
(b) (c) (d) (e) (f) <sub>20</sub> (g)	Edges: connecting line between vertices.  Adjacent vertices: vertices that are connected to the same edge.  Incident edges: edges that are incident to a vertex.  Isolated vertex: vertex that has no connection at all  Loop: edges that go out and end at the same vertex.  Parallel edges: two or more edges that are connected to the same vertices.  Parallel edges.    Parallel edges   Parallel edges	(6) P(6)	
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A 0 1 0 0 0 1 1 1	Chrest	Question 6.													
Both graphs have: $2 \text{ vertices} = 4 \text{ degrees}$ .  2 vertices = $2 \text{ degrees}$ .  2 vertices = $2 \text{ degrees}$ .  Define: $f(A) = 6$ , $f(B) = 5$ , $f(C) = 4$ , $f(D) = 8$ , $f(E) = 2$ , $f(F) = 1$ A B C D E F C Graph $E$ A B C D E F C $E$ A B C D E F $E$ A B C D E F $E$ A B C D E F $E$ B C D C D C D C D C D C D C D C D C D C	Both	Both graphs have 6 vertices and 9 edges.													
Solution of the proof of the p	the second secon								P	1					
Define: $f(A) = G$ , $f(B) = 5$ , $f(C) = 4$ , $f(D) = 8$ , $f(E) = 2$ , $f(F) = 1$ A B C D E F G 5 4 3 2 1  A B C D E F G 5 4 3 2 1  A B C D E F G 5 A 3 2 1  A D D D D D D D D D D D D D D D D D D	5														
A B C D E F C 5 4 3 2 1  A D I D D D D D D D D D D D D D D D D D		2 vertices = 2 degrees.													
Example Y  Chaple Y  Chap	Define	:	(A) 4	- 6	, 5	(B)	= 5 ,	f(c) = 4, f(D)	= 8	f(E)	) = 2	, f (	F)=1	Ĺi.	
Emaph Y  Graph Z  Shapp Y  Sha		A	•		В		8	6	- Y	_	5				
Chaph Y  Chaph Y  Chaph Y  Chaph Z  Is Ay rows and column are labeled: A, B, C, D, E, F  In rows and column are labeled: C, S, 4, 3, 2, 1  A B C D E F  A D 1 0 1 0 0 0 6 0 1 0 1 0 0  B 1 D D 1 1 1 0 0 0 0 0 1 1 1  C D D D 1 1 1 0 0 0 0 0 0 0 1 1 1  Page 4 0 0 0 1 1 1  E D 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10				4	\	E			/	7	2			
Examply Graph $\frac{1}{2}$ Ay rows and column are labeled: A, B, C, D, E, F  A B C D E F  A O I O I D O O O O O O O O O O O O O O O				_		_			/		4	ļ		- CAN	
Fraph Y  Graph $\frac{1}{2}$ Ay rows and column are labeled: A, B, C, D, E, F  A B C D E F  A D I O I D D D D D D D D D D D D D D D D			1			/	<u>C</u>								
Ay rows and column are labeled: A,B,C,D,E,F  The rows and column are labeled: $(6,5,4,3,2)$ , 1  A B C D E F  A D I O I D O I D I D O  B I D D I I I D O I I I  C O O O I I I I A <sub>2</sub> = 4 O O O I I I  E O I I D O O  E O I I D O O															
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Discrete Stry	cture Assignment 3.	, , , , , , , , , , , , , , , , , , , ,	1841236
Question 7			of the smill
	P		
Graph:	e5 e1 q	100000 0 10000	Syrup 1 1
	es es	5,000	042
5	, , , , , , , , , , , , , , , , , , ,	i daso e e	
	s e <sub>3</sub> r		
7) Path A	rom p to t: (p, ez, t)	2=690 F g (A)	1- 3032.00
	(p, e, , q, e, s, e	(a, t)	A
10	(p, e, q, e, r, e		
	(p,e,q,e,r,e3,		
	(p,e,,q,e6,s,e3		
			0
ii) Trail from	p +0 t: (p, es, t)		
15	(p,e,,q,e,,s,e,,t)	(1) 914 menulos 2000	seen par
	(p, e, q, e, r, ez, t)	El uvo com or demo	1944 28
	(p, e, , q, e21 r, e3, s, e4, t	t)	A
9 19	(p, e1, q, e6, s, e3, r, e7, t	)	6 A
	(p, es, t, e4, s, e3, r, e7,1	f)	1 9
20	(p, es, t, eq, v, e3, s, e4	, <del>t</del> )	
F - 000 FF 01	(p, es, t, e4, s, e6, 9, e2,	, r, eq, t)	
The Control of	(p, es, t, es, r, e, 19, eq	615, eq, t)	0 2
200 90 1	F 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1
in) Shorte	st path: (p, es, t)		
25 longest	path: (p,e,,q,ex,r,e3,s,e4,t	) and (p.e., q. e6, s	1 e3, r, e=, t)
	a se Mey talego an a second of	in May	
TV) Shortes	t trail: (p,es,t)		
Longest	trail: (p, es, t, e4, s, e6, 9, es,	r, eq, t) and	
	(p, es, t, ez, r, ez, q,	ec, s, e4, t)	
30			