Assignment_12

Zhang Huakang | D-B92760-6

2.

The nmber of vertices is 5

The number of edges is 13

Vertex	Degree
a	6
b	6
c	6
d	5
e	3

There is no isolated vertex.

There is no pendant vartex.

22.

It is bipartite.

24.

It is bipartite.

50.

4.

Initial vartices	Termeinal vertices
a	b,d
b	a,c,d,e
c	b,c
d	a,e
e	c,e

8.

$$
\begin{matrix}
0 & 1 & 0 & 1 & 0 \\
1 & 0 & 1 & 1 & 1 \\
0 & 1 & 1 & 0 & 0 \\
1 & 0 & 0 & 0 & 1 \\
0 & 0 & 1 & 0 & 1
\end{matrix}
$$

16.

40.

Not isomorphic

2.

It exists a Euler circuit.

a,b,c,f,i,h,f,e,h,g,d,e,b,d,a.

20.

It exists a Euler circuit.

a,d,b,d,e,b,e,c,b,a.

26.

a) $n \in \{2k + 1, k \in \mathbb{Z}\}$

b) $n \in \{a | a \geq 3\}$

c) $n \in \emptyset$

d) $n \in \{2k, k \in \mathbb{Z}\}$