

Paper Reference(s)

6689/01

Edexcel GCE

Decision Mathematics D1

Advanced/Advanced Subsidiary

Thursday 16 June 2005 – Afternoon

Answer Book

2. Hamiltonian cycle

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4.

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5.

Figure 3

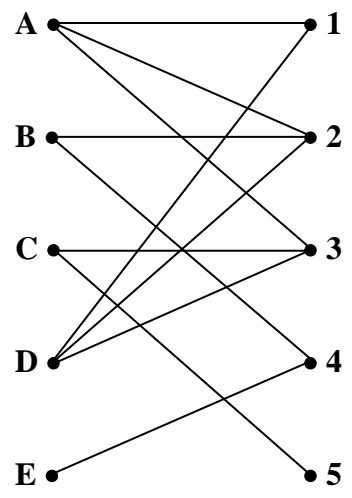
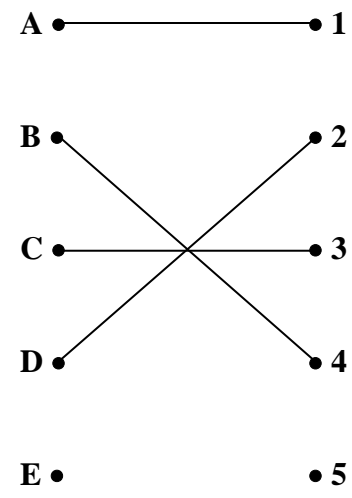


Figure 4



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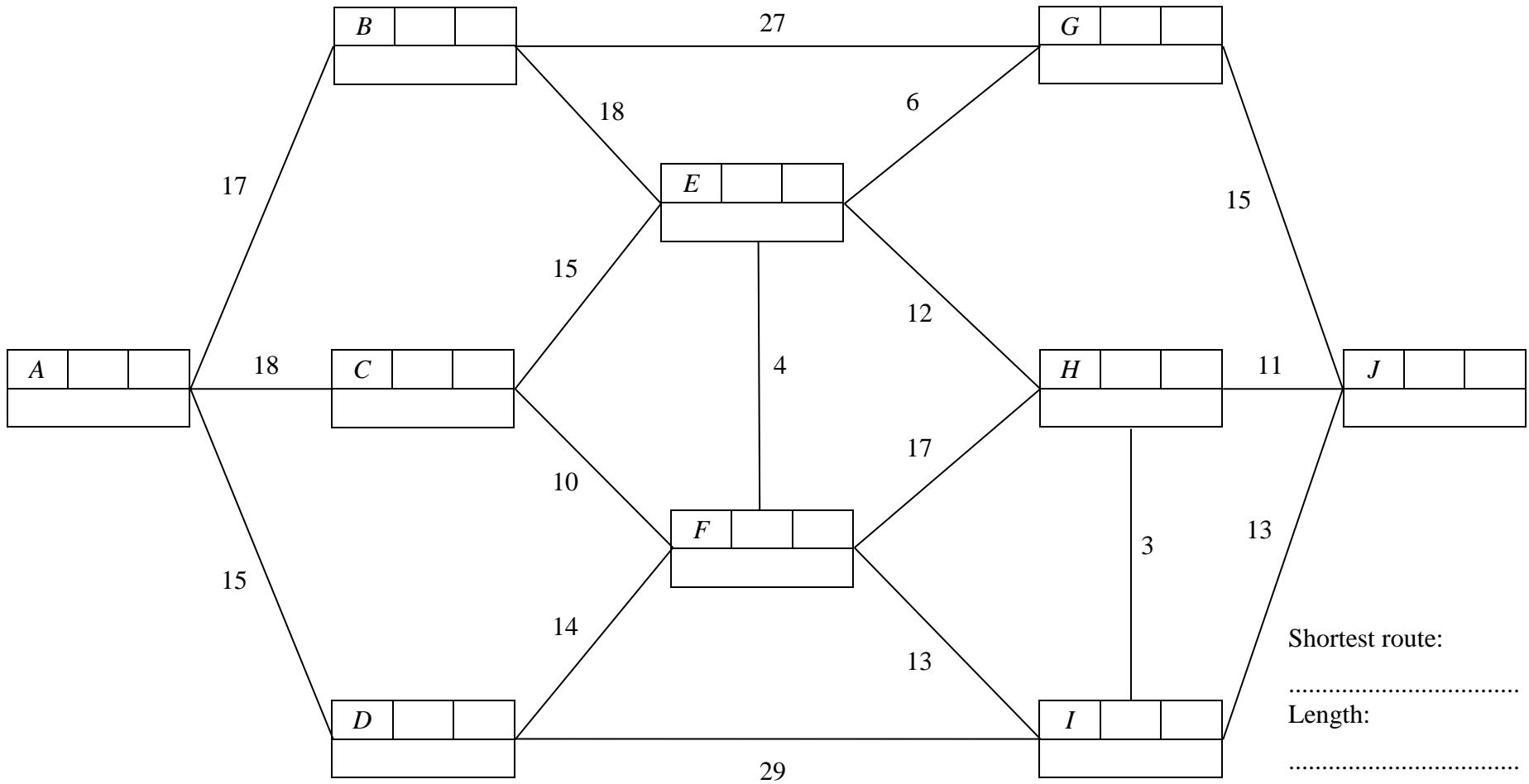
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6.



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7.

Basic variable	x	y	z	r	s	t	Value
r	4	5	10	1	0	0	140
s	2	1	4	0	1	0	60
t	1	2	3	0	0	1	60
P	-350	-350	-650	0	0	0	0

You may not need to use all of these tableaux.

b.v.	x	y	z	r	s	t	Value

b.v.	x	y	z	r	s	t	Value

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8. (a) and (b)

Diagram 1

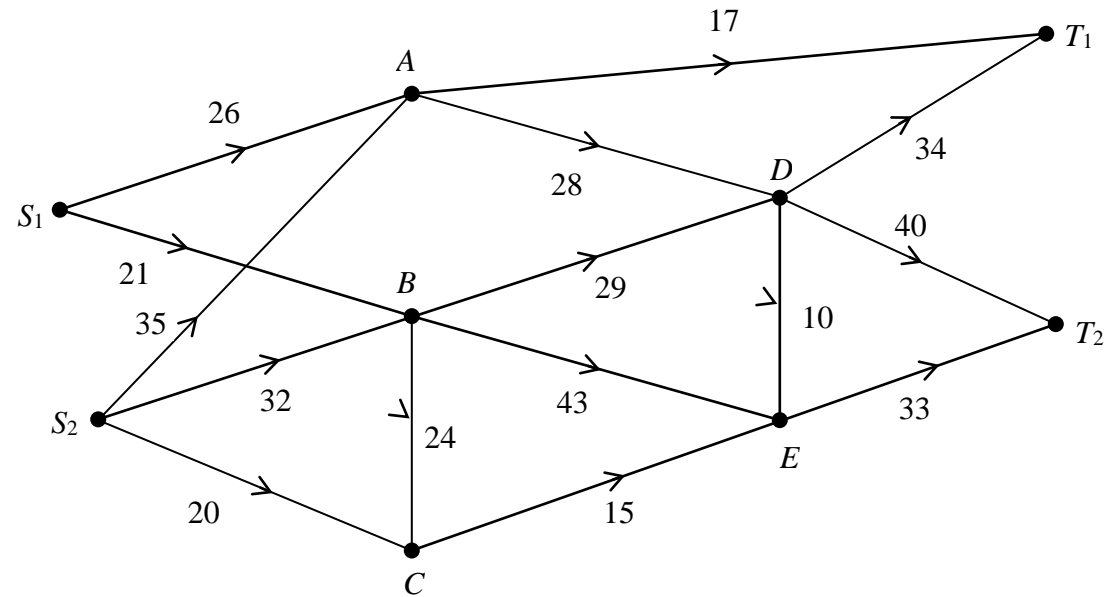
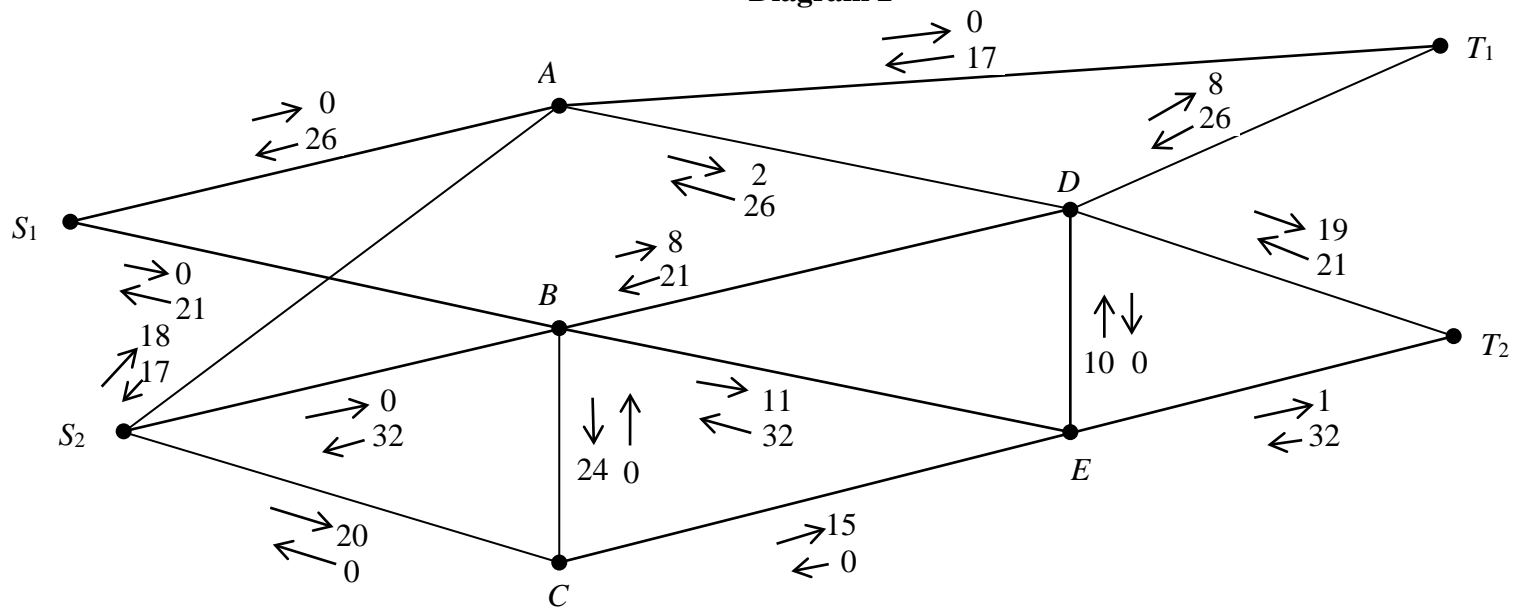


Diagram 2



(c)

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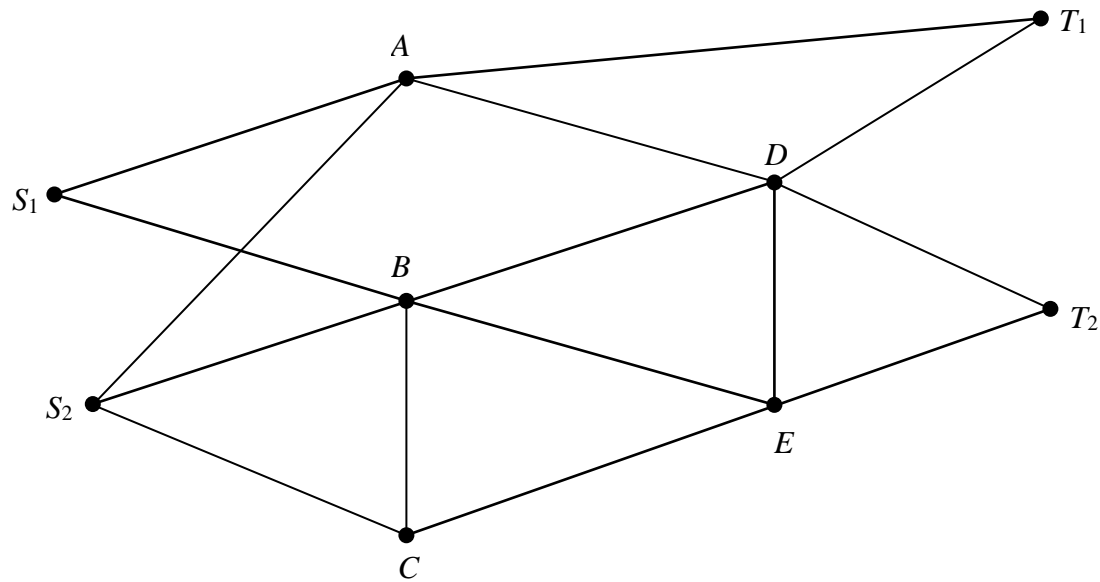
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Max flow

(d)



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(e)

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(f)

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