

Centre No.					Paper Reference (complete below)		Surname	Initial(s)				
Candidate No.					<b>6</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>/</b>	<b>0</b>	<b>1</b>	Signature

Paper Reference(s)

**6689**

**Edexcel GCE  
Decision Mathematics D1**

**Advanced/Advanced Subsidiary**

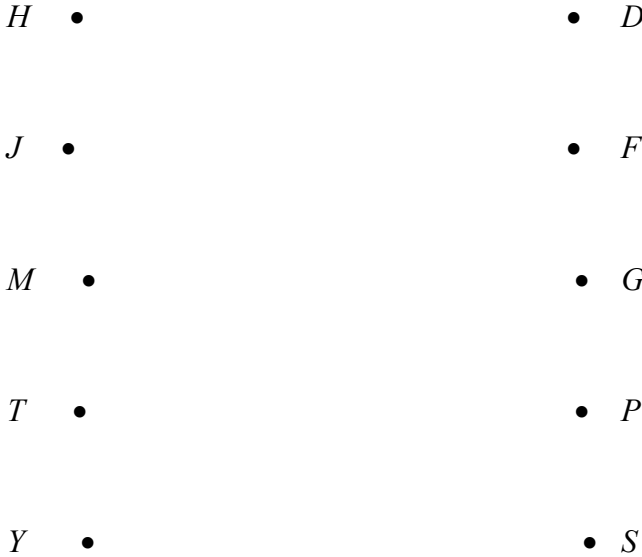
**January 2003**

**Answer Booklet**



*Leave  
blank*

2. (a)



(b) alternating path

complete matching



*Leave  
blank*

4. (a)

.....  
.....  
.....  
.....  
.....

(b)

.....  
.....  
.....  
.....  
.....

(c)

.....  
.....  
.....  
.....  
.....  
.....

(d)

.....  
.....  
.....  
.....  
.....

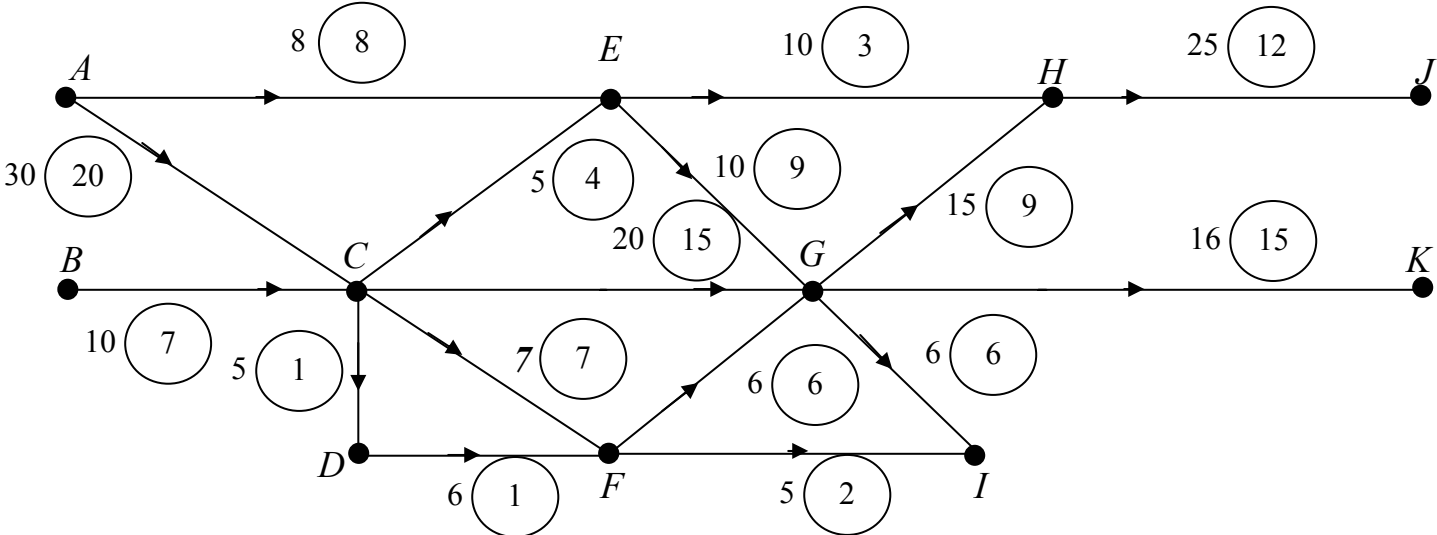
---



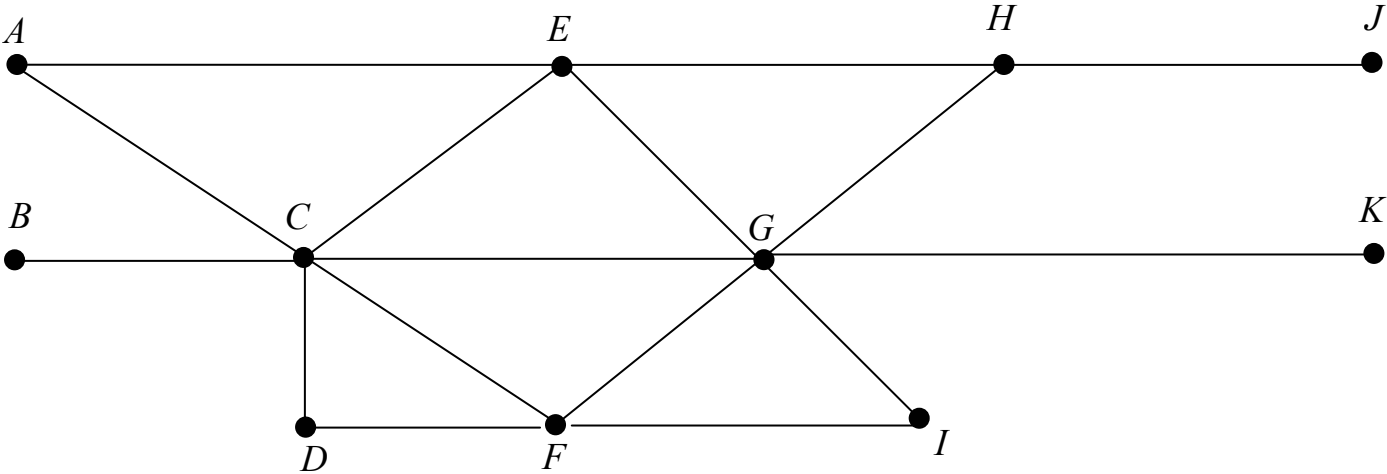


Leave blank

7. (a)



(b) (i)





*Leave blank*

Flow augmenting paths .....

.....

.....

.....

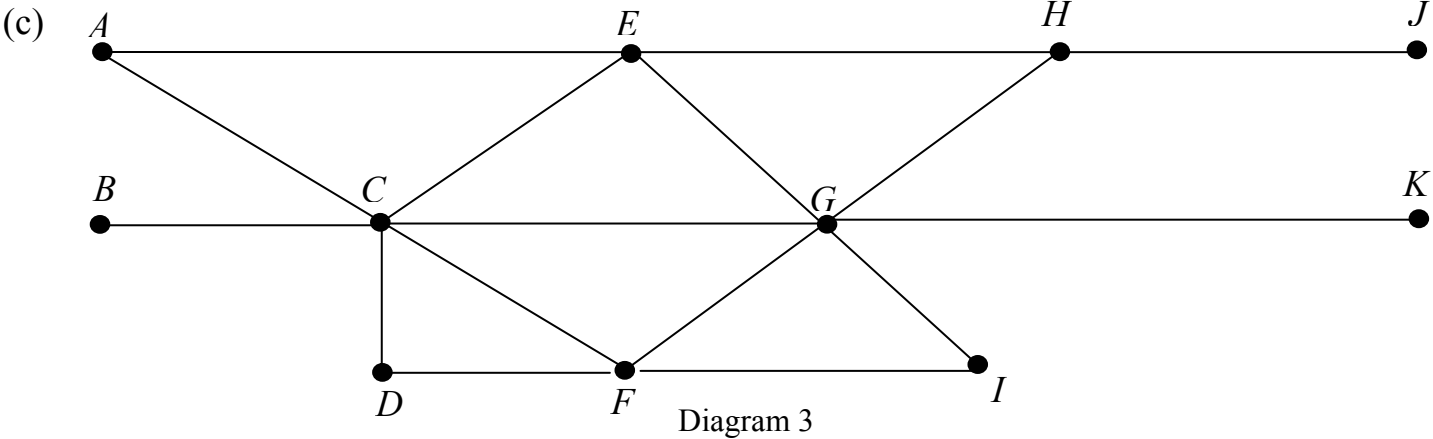
.....

Maximum flow = .....

(ii) .....

.....

.....



*Leave blank*

8. (a)

.....

.....

.....

(b) You may not need to use all these tableaux.

b.v.	$x$	$y$	$z$	$r$	$s$	Value
$P$						

b.v.	$x$	$y$	$z$	$r$	$s$	Value
$P$						

b.v.	$x$	$y$	$z$	$r$	$s$	Value
$P$						

b.v.	$x$	$y$	$z$	$r$	$s$	Value
$P$						

(c)

.....

.....

.....