Centre Number					Candidate Number				
Surname									
Other Names									
Candidate Signature									

AQA

General Certificate of Education
Advanced Level Examination
January 2010

Mathematics   MD02

Unit Decision 2

Insert

Instructions
- Insert for use in **Questions 1, 5 and 6**.
- Fill in the boxes at the top of this page.
- Fasten this insert securely to your answer book at the end of the examination.

Turn over for Figure 1

Turn over ▶

Figures 1 and 2 (for use in Question 1)

Figure 1

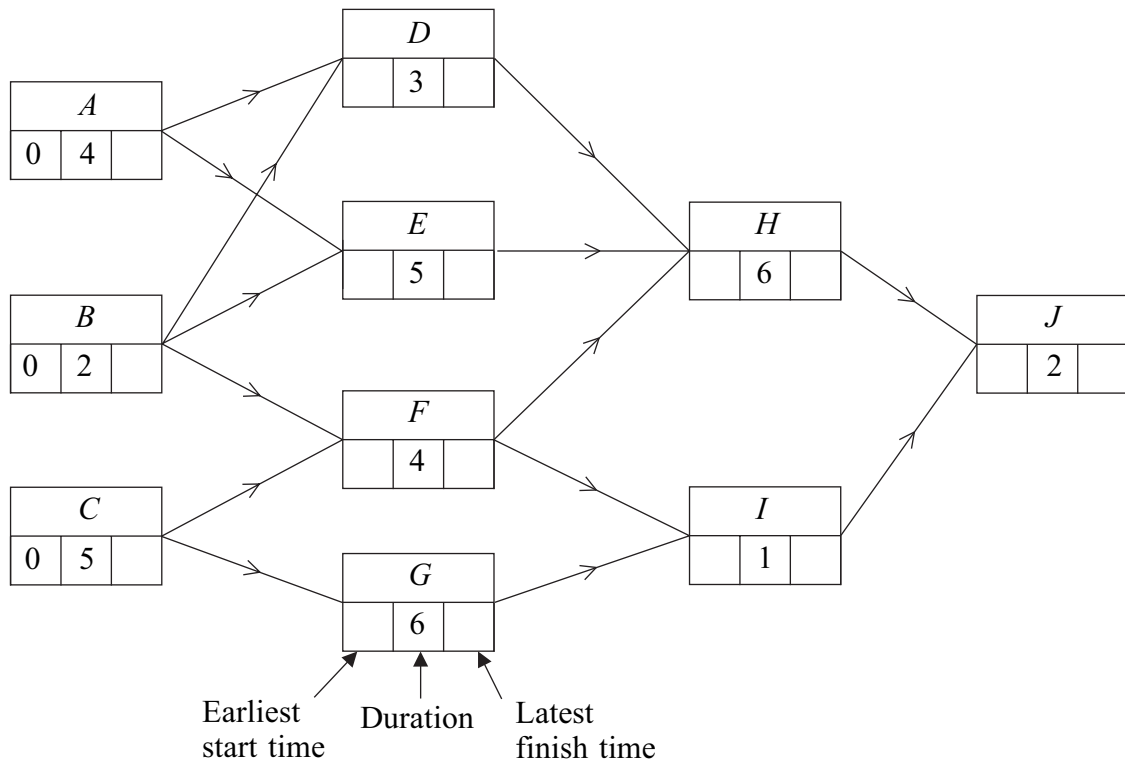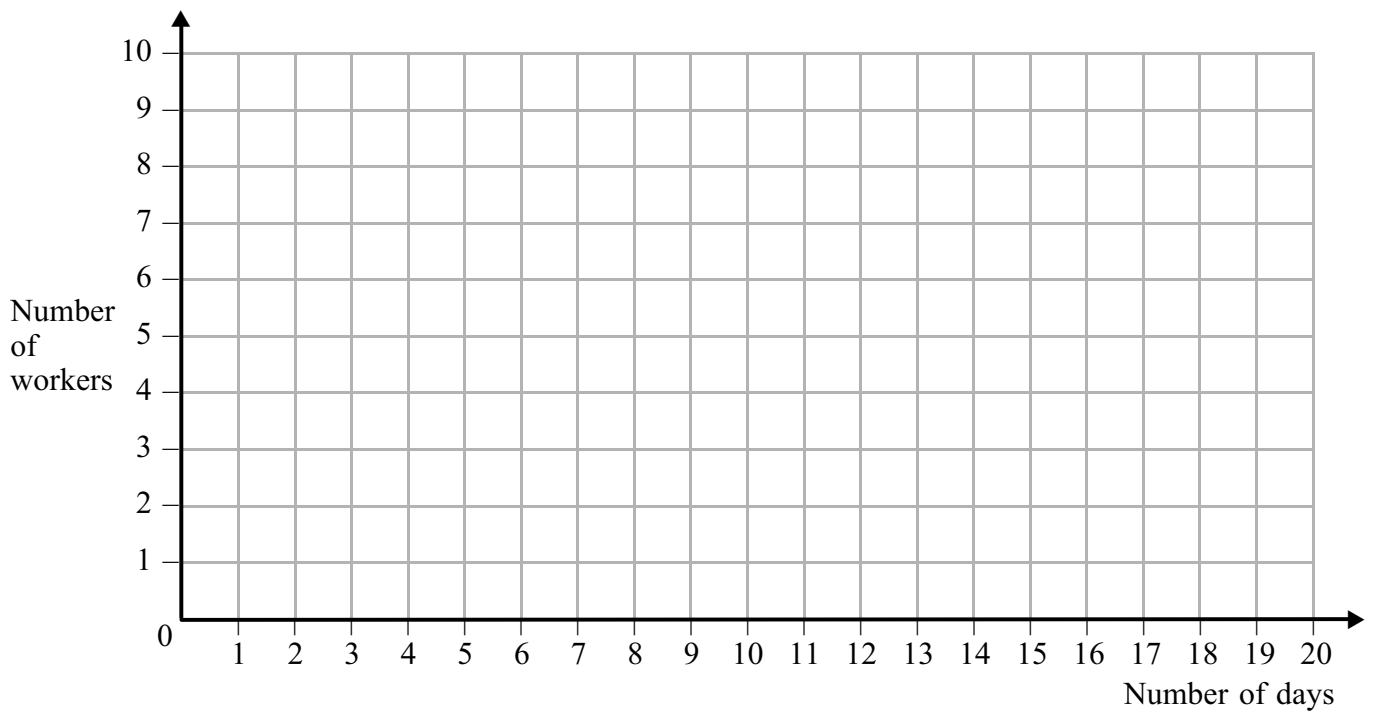Earliest start time Duration Latest finish time

Figure 2

Figure 3 (for use in Question 5)

(*0* in the Action column is used to represent no projects.)

Stage (month)	State (projects already done)	Action (project to do)	Calculation	Cost in thousands of pounds
August	*A, B, C*	*0*		0
	A, B	*C*		14
	A, C	*B*		10
	B, C	*A*		16
July	*A, B*	*0*	$0 + 14$	14
		C	$15 + 0$	15
	A, C	*0*		
		B		
	B, C	*0*		
		A		
	A	*B*	$12 + 14$	26
		C		
	B	*A*		
		C		
	C	*A*		
		B		
June	*A*	*0*		
		B		
		C		
May				

Schedule

	May	**June**	**July**	**August**
Project				

Figures 4, 5, 6 and 7 (for use in Question 6)

Figure 4

Cut		Value
{S}	{A, B, C, T}	63
{S, A}	{B, C, T}	
{S, B}	{A, C, T}	
{S, C}	{A, B, T}	97
{S, A, B}	{C, T}	53
{S, A, C}	{B, T}	87
{S, B, C}	{A, T}	
{S, A, B, C}	{T}	

Figure 5
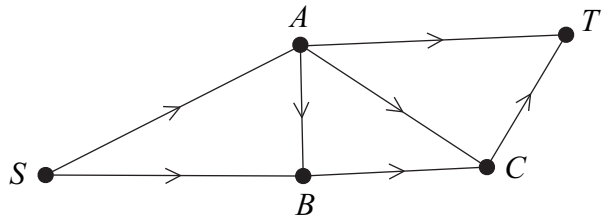
Figure 6
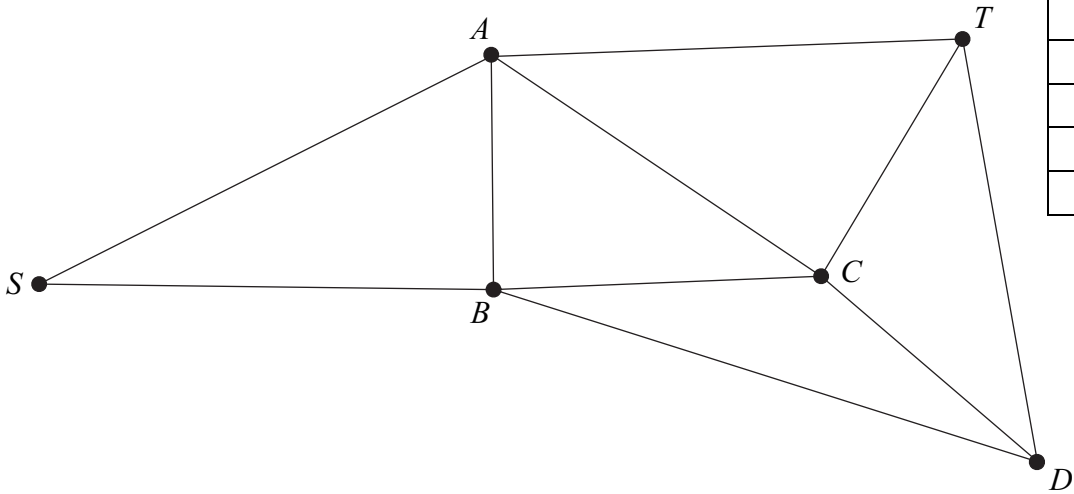
Path	Additional flow

Figure 7

New maximum flow is _____