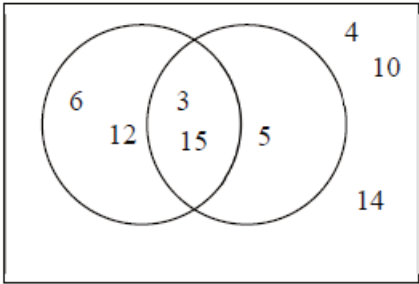
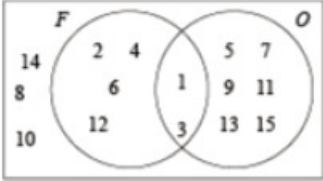
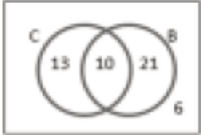
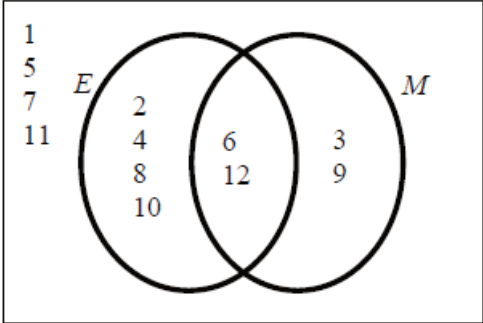
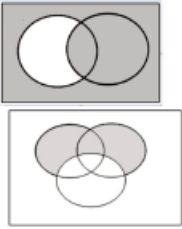
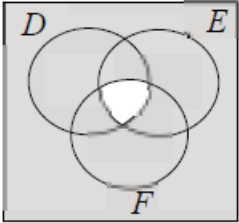
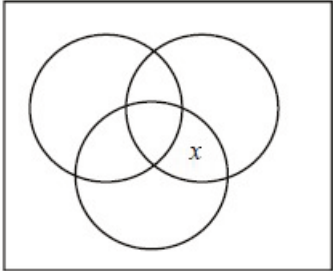
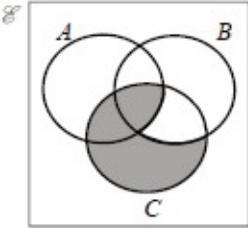
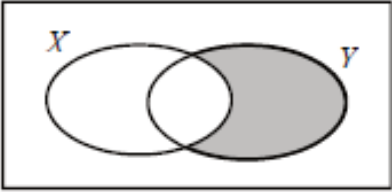


Question	Answer	Marks	AO Element	Notes	Guidance
1(a)	1 4 9 16	2		B1 for 3 correct and none incorrect or for all correct and one extra incorrect	
1(b)	2, 3, 5, 7, 11, 13	2		B1 for 5 correct and none or one incorrect	
1(c)(i)		2		B1 for 2 or 3 regions correct	
1(c)(ii)	7 11 13	1		FT <i>their</i> Venn diagram	
1(c)(iii)	2	1		FT <i>their</i> Venn diagram	
1(c)(iv)	$\frac{4}{16}$ oe	1		FT <i>their</i> Venn diagram for $\frac{n(F)}{16}$	
2	40	1			

Question	Answer	Marks	AO Element	Notes	Guidance
3	$A \cap B$	1			
4(a)		2		B1 for 2 or 3 correctly completed regions	
4(b)	One of 5, 7, 9, 11, 13, 15	1		FT <i>their</i> Venn diagram	
4(c)	12	1		FT <i>their</i> Venn diagram	
4(d)	$\frac{8}{15}$ oe	1		FT <i>their</i> Venn diagram	
5	7	1			
6	$C \cap D = \{10\}$	1			
7(a)		2		B1 for at least 2 figures in the correct places	

Question	Answer	Marks	AO Element	Notes	Guidance
7(b)	44	1		FT their 3 values from (a) or 50 – <i>their</i> 6, provided answer is between 0 and 50	
8(a)		2		B1 for 2 or 3 regions correct	
8(b)	8	1		FT <i>their</i> (a)	
8(c)	$\frac{1}{6}$ oe	2		FT <i>their</i> (a) B1FT for 2 or <i>their</i> $n(E \cap M)$	
9		2		B1 for each	

Question	Answer	Marks	AO Element	Notes	Guidance
10		1			
11	Intersection shaded	1			
12		1		Shade whole rectangle except for region containing x	
13		1			

Question	Answer	Marks	AO Element	Notes	Guidance
14		1			
[Total: 33]					