

Mark Scheme (Results)

Summer 2016

Pearson Edexcel GCE in Applied ICT (6953)

Unit 3: The Knowledge Worker

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2016
Publications Code 6953_01_1606_MS
All the material in this publication is copyright
© Pearson Education Ltd 2016

General Marking Guidance

- All candidates must receive the same treatment.
 Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

	Арр	lied GCE ICT	Unit 3 – Mark	s Scheme – Jui	ne 2016 POSS.	
Act	ivity			MARK	MAX	
Activi	tv 1	Understanding	the Situation			
(a)						
		Attraction	Minimum tidal water	Maximum tidal water		
	A1	Bird Sanctuary	1.8	N/A (20)	1	
	A2	Seal Flats	N/A (-20)	3.8	1	
	A3	Bridge of Sighs	2.5	6	1	
	A4	Upton Manor	N/A (2.5)	N/A (6)	1	
	A5	Matilda's Secret	N/A (-20)	4	1	
	A6	Wilson Falls	1.6	N/A (20)	1	
	A7	Fingal's Cave	2.5 table but subtract o	6	1	
						7
(b)	D.1	Any 7 of	*			
	B1	Organise boat tr	ips visited (at least) on		1	
	B2	1				
	B3	<u> </u>	assing attractions (on viewing route)	1	
	B4	8 knots passing 15 knots elsewh			1	
	B5				1	
	B6 B7		/ednesday and Frida nes 09:00, 10:00;	-	1	
	B8		t using (phase) an		1	
					1	
	B9		finish at the maring		1	
	B10		ntified (in local area	•	1	
	B11	Trip <u>times</u> and o of) the tide	rder of <u>visits</u> depen	d on (the height	1	
	B12	Seasonal work			1	
	B13	To get to Upton Sighs	Manor must go pas	t the Bridge of	1	
					max	7
(c)		Must have ider marks	ntified data source	e and data for		
		Any 2 sources fr	om:			
	C1	Tommy Jr Tir	mes between each a	attraction	1,1	
	C2	Harbour Ju Master	ly Tide Data		1,1	
	C3		st of attractions		_ ,_	
		or Tilly			1,1	

Table 13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide 25 Height	A1 Ale	Y N	Data Entrol d correctly B14 and 3 B 01/07/2016 3 3 13 15 45 5.445427266 14:00	el ry) y 1.5691306 c 02/07/2016 4 4 14	AC 28/07/2016 6 6 10	-	AE 30/07/201	1	18 18 18 107/2016 9
13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	A1 Ale	July Tides (D Data imported Look for 3 in E	Data Entrol d correctly B14 and 3 B 01/07/2016 3 3 13 15 45 5.445427266 14:00	el ry) y 1.5691306 c 02/07/2016 4 4 14	06 in AF27 AC 28/07/2016 6 6 10	AD 29/07/2016 7 6	AE 30/07/201	1 1 55 31/3	18 1 AF 07/2016
13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	A1 Ale	July Tides (D Data imported Look for 3 in E	Data Entrol d correctly B14 and 3 B 01/07/2016 3 3 13 15 45 5.445427266 14:00	el ry) y 1.5691306 c 02/07/2016 4 4 14	06 in AF27 AC 28/07/2016 6 6 10	AD 29/07/2016 7 6	30/07/201	5 31/	AF /07/2016
13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	A1 Ale	July Tides (D Data imported Look for 3 in E	Data Entrol d correctly B14 and 3 B 01/07/2016 3 3 13 15 45 5.445427266 14:00	el ry) y 1.5691306 c 02/07/2016 4 4 14	06 in AF27 AC 28/07/2016 6 6 10	AD 29/07/2016 7 6	30/07/201	5 31/	AF /07/2016
13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	A1 Ale	July Tides (D Data imported Look for 3 in E	Data Entrol d correctly B14 and 3 B 01/07/2016 3 3 13 15 45 5.445427266 14:00	ry) y 1.5691306 c 02/07/2016 4 4 14 Y N	AC 28/07/2016 6 6 10	AD 29/07/2016 7 6	30/07/201	5 31/	AF /07/2016
13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	A le nt	Data imported Look for 3 in E	B14 and 3 B 01/07/2016 3 3 13 N 5.445427266 14:00	y 1.5691306 c 02/07/2016 4 4 14 Y	AC 28/07/2016 6 6 10	AD 29/07/2016 7 6	30/07/201	5 31/	AF /07/2016
13 Date 14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	le it	Look for 3 in E	B14 and 3 B 01/07/2016 3 3 13 13 N 5.445427266 14:00	1.5691306 c 02/07/2016 4 4 14 Y N	AC 28/07/2016 6 6 10	AD 29/07/2016 7 6	30/07/201	5 31/ 3	AF /07/2016
14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	le it	Y N	01/07/2016 3 3 13 13 N 5.445427266 14:00	02/07/2016 4 4 14 Y	28/07/2016 6 6 10	29/07/2016 7 6	30/07/201	5 31/ 3	07/2016
14 Day in Cycle 15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angle 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	nt	N 5	3 3 13 N 5.445427266 14:00	4 4 14 Y N	6 6 10	7 6		3	
15 Adjustment 16 Phase 17 In Line 18 Out Line 19 Phase Angl 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	nt	N 5	3 13 N 5.445427266 14:00	4 14 Y N	6 10	6			9
16 Phase 17 In Line 18 Out Line 19 Phase Angl 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide		N 5	13 N 5.445427266 14:00	14 Y N	10	_)	
17 In Line 18 Out Line 19 Phase Angl 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	le	N 5	, N 5.445427266 14:00	Y N			13		13
19 Phase Angl 20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	le		5.445427266 14:00		Υ		Υ	Υ	10
20 High Tide 21 Height 22 Low Tide 23 Height 24 High Tide	le		14:00	5.86/206207	N	N	N	N	
21 Height 22 Low Tide 23 Height 24 High Tide		4			4.188790205				
22 Low Tide 23 Height 24 High Tide		2	4 005202762		13:50	14:54	15:5		16:56
23 Height 24 High Tide			4.885282762	5.389895035 08:45	07:45	08:49	09:5		3282762 10:51
24 High Tide		1		2.113545458		1.095471537			
25 Height			01:45	02:35	01:35	02:39	03:4	2	04:41
		4		5.389895035					
26 Low Tide 27 Height			20:30	21:20 1.813545458	20:20	21:24 0.795471537	22:2		23:26
27 Height			1507150000	1.013343430	0.4	0.755471557	1.20301033	+ 1.50.	J130000
(h)		Selection (St	tatistics	Monday)	1				
(b)		Cell I14 cont		Pioliday)					
		=COUNTIF(\$A		19 H14)					
		(Accept mean		•)				
	B1	Working form			•	ıa)		1	
	B2	Correct minim						1	
	B3	Formula will re							
		addressing)	Spiredic C	correctly (1	asc nave	35501460		1	
	B4	Working form	ulae in I1	.5:I19 (mu	st have ab	solute			
		addressing)		`				1	
		Cell J14 conta	ains:						
		=VLOOKUP(H							
		Accept meaning					le.		
	B5	Working form						1	
	B6	Correct minim						1	
	B7	Formula will re		correctly (n	nust have	absolute			
		addressing on	range)					1	
	B8	False/0 used						1	
	B9	Working formaddressing on		.5:J19 (mu	st have ab	solute			

	ed GCE ICT Unit 3 – Mark	Scheme 3u	HE ZUI	J	
Activity	ANSWER		POSS MARK		MAX
B10	Cell K14 contains: =VLOOKUP(H14,\$A\$14:\$E\$19,5,F Accept meaningful named range; Working formula (ignore absolute	other ranges possi addressing)	ble.	1	
B11	Formula will replicate correctly (m addressing on range)			1	
B12	Working formulae K15:K19 (must addressing on range)	have absolute		1	
					1

13	Visits	Tide Start	Tide End
14	=C OU NTIF(\$A\$14:\$A\$19,H14)	=VLOOKUP(H14,\$A\$14:\$E\$19,4,0)	=VLOOKUP(H14,\$A\$14:\$E\$19,5,0)
15	=COUNTIF(\$A\$14:\$A\$19,H15)	=VLOOKUP(H15,\$A\$14:\$E\$19,4,0)	=VLOOKUP(H15,\$A\$14:\$E\$19,5,0)
16	=C OU NTIF(\$A\$14:\$A\$19,H16)	=VLOOKUP(H16,\$A\$14:\$E\$19,4,0)	=VLOOKUP(H16,\$A\$14:\$E\$19,5,0)
17	=COUNTIF(\$A\$14:\$A\$19,H17)	=VLOOKUP(H17,\$A\$14:\$E\$19,4,0)	=VLOOKUP(H17,\$A\$14:\$E\$19,5,0)
18	=COUNTIF(\$A\$14:\$A\$19,H18)	=VLOOKUP(H18,\$A\$14:\$E\$19,4,0)	=VLOOKUP(H18,\$A\$14:\$E\$19,5,0)
19	=COUNTIF(\$A\$14:\$A\$19,H19)	=VLOOKUP(H19,\$A\$14:\$E\$19,4,0)	=VLOOKUP(H19,\$A\$14\$E\$19,5,0)

(C)		Selection (Statistics Monday) 2								
	Cell L14 contains:									
		=IF(J14>=Sights!D12,"Y","N")								
	C1	Correct condition in L14 J14 <sights!d12 j14="" or="">=Sights!D12</sights!d12>								
	t way round for condition used	1								
	C3	Formula in L14 replicated to L15:L19								
	C4	Correct formula in M14	=IF(K14>=Sights!D12,"Y ","N")	1						
	C5	Correct formula in N14	=IF(J14<=Sights!E12,"Y ","N")	1						
	C6	Correct formula in O14	1							
	C7	All formulae correct in cells M15:019								

	L	М	N	0
13	Depth In	Depth Out	Clearance In	Clearance Out
14	=IF(J14>=Sights!D12,"Y","N")	=IF(K14>=Sights! D12, "Y", "N")	=IF(J14<=Sights!E12,"Y","N")	=IF(K14<=Sights!E12,"Y","N")
15	=IF(J15>=Sights!D13,"Y","N")	=IF(K15>=Sights! D13, "Y", "N")	=IF(J15<=Sights!E13,"Y","N")	=IF(K15<=Sights!E13,"Y","N")
16	=IF(J16>=Sights!D14,"Y","N")	=IF(K16>=Sights! D14, "Y", "N")	=IF(J16<=Sights!E14,"Y","N")	=IF(K16<=Sights!E14,"Y","N")
17	=IF(J17>=Sights!D15,"Y","N")	=IF(K17>=Sights! D15, "Y", "N")	=IF(J17<=Sights!E15,"Y","N")	=IF(K17<=Sights!E15,"Y","N")
18	=IF(J18>=Sights!D16,"Y","N")	=IF(K18>=Sights! D16, "Y", "N")	=IF(J18<=Sights!E16,"Y","N")	=IF(K18<=Sights!E16,"Y","N")
19	=IF(J19>=Sights!D17,"Y","N")	=IF(K19>=Sights! D17, "Y", "N")	=IF(J19<=Sights!E17,"Y","N")	=IF(K19<=Sights!E17,"Y","N")

(d) Selection (Statistics Wednesday & Friday)

Columns I to K

		J	K
24	Visits	Tide Start	Tide End
25	=COUNTIF(\$A\$24;\$A\$30,H25)	=VLOOKUP(H25,\$A\$24:\$E\$31,4,FALSE)	=VLOOKUP(H25,\$A\$24;\$E\$31,5,FALSE)
26	=COUNTIF(\$A\$24;\$A\$30,H26)	=VLOOKUP(H26,\$A\$24:\$E\$31,4,FALSE)	⇒√LOOKUP(H16,\$A\$14:\$E\$31,5,FALSE)
27	=COUNTIF(\$A\$24;\$A\$30,H27)	=VLOOKUP(H27,\$A\$24;\$E\$31,4,FALSE)	=VLOOKUP(H27,\$A\$24;\$E\$31,5,FALSE)
28	=COUNTIF(\$A\$24;\$A\$30,H28)	=VLOOKUP(H28,\$A\$24:\$E\$31,4,FALSE)	=VLOOKUP(H28,\$A\$24;\$E\$31,5,FALSE)
29	=COUNTIF(\$A\$24:\$A\$30,H29)	=VLOOKUP(H29,\$A\$24:\$E\$31,4,FALSE)	=VLOOKUP(H29,\$A\$24:\$E\$31,5,FALSE)
30	=COUNTIF(\$A\$24:\$A\$30,HB0)	=VLOOKUP(H30,\$A\$24:\$E\$31,4,FAL5E)	⇒VLOOKUP(H30,\$A\$24:\$E\$31,5,FALSE)
31			
35	Visits	Tide Start	Tide End
36	=COUNTIF(\$A\$35;\$A\$42,H36)	=VLOOKUP(H36,\$A\$35:\$E\$42,4,FALSE)	=VLOOKUP(H36,\$A\$35:\$E\$42,5,FALSE)
37	=COUNTIF(\$A\$35;\$A\$42,H37)	=VLOOKUP(H 37,\$A\$ 35 :\$E\$ 42,4,FAL5E)	=VLOOKUP(H3T,\$A\$35:\$E\$4Z,5,FALSE)
38	=COUNTIF(\$A\$35;\$A\$42,H38)	=VLOOKUP(H38,\$A\$35;\$E\$42,4,FALSE)	⇒VLOOKUP(H38,\$A\$35;\$E\$42,5,FALSE)
39	=COUNTIF(\$A\$35;\$A\$42,H39)	=VLOOKUP(H39,\$A\$35:\$E\$42,4,FALSE)	=VLOOKUP(H39,\$A\$35;\$E\$42,5,FALSE)
40	=COUNTIF(\$A\$35;\$A\$42,H40)	=VLOOKUP(H40,\$A\$35:\$E\$42,4,FALSE)	⇒VLOOKUP(H40,\$A\$35;\$E\$42,5,FALSE)
41	=COUNTIF(\$A\$35;\$A\$42,H41)	=VLOOKUP(H41,\$A\$35;\$E\$42,4,FALSE)	=VLOOKUP(H41,\$A\$35;\$E\$42,5,FALSE)

D1	Correct formulae in Row 25	1	
D2	Replicated and correct formulae in Row 30	1	
D3	Correct formulae in Row 36	1	
D4	Replicated and correct formulae in Row 41	1	

	L	M	N	0
24	Depth In	Depth Out	Clearace In	Clearance Out
25	=IF(J25>=Sights!D12,"Y","N")	=IF(K25>=Sights!D12, "Y","N")	=IF(J25<=Sights!E12,"Y","N")	=IF(K25<=Sights!E12,"Y","N")
26	=IF(J26>=Sights!D13," Y","N")	=IF(K26>=Sights!D13, "Y","N")	=IF(J26<=Sights!E13,"Y","N")	=IF(K26<=Sights!E13,"Y","N")
27	=IF(J27>=Sights!D14,"Y","N")	=IF(K27>=Sights!D14, "Y", "N")	=IF(J27<=Sights!E14,"Y","N")	=IF(K27<=Sights!E14,"Y","N")
28	=IF(J28>=Sights!D15," Y","N")	=IF(K28>=Sights!D15, "Y","N")	=IF(J28<=Sights!E15,"Y","N")	=IF(K28<=Sights!E15,"Y","N")
29	=IF(J29>=Sights!D16," Y","N")	=IF(K29>=Sights!D16, "Y", "N")	=IF(J29<=Sights!E16,"Y","N")	=IF(K29<=Sights!E16,"Y","N")
30	=IF(J30>=Sights!D17,"Y","N")	=IF(K30>=Sights!D17, "Y", "N")	=IF(J30<=Sights!E17,"Y","N")	=IF(K30<=Sights!E17,"Y","N")
31				
35	Depth In	Depth Out	Clearace In	Clearance Out
36	=IF(J36>=Sights!D12,"Y","N")	=IF(K36>=Sights!D12, "Y","N")	=IF(J36<=Sights!E12,"Y","N")	=IF(K36<=Sights!E12,"Y","N")
37	=IF(J37>=Sights!D13,"Y","N")	=IF(K37>=Sights!D13, "Y", "N")	=IF(J37<=Sights!E13,"Y","N")	=IF(K37<=Sights!E13,"Y","N")
38	=IF(J38>=Sights!D14,"Y","N")	=IF(K38>=Sights!D14, "Y","N")	=IF(J38<=Sights!E14,"Y","N")	=IF(K38<=Sights!E14,"Y","N")
39	=IF(J39>=Sights!D15,"Y","N")	=IF(K39>=Sights!D15, "Y","N")	=IF(J39<=Sights!E15,"Y","N")	=IF(K39<=Sights!E15,"Y","N")
40	=IF(J40>=Sights!D16," Y","N")	=IF(K40>=Sights!D16, "Y", "N")	=IF(J40<=Sights!E16,"Y","N")	=IF(K40<=Sights!E16,"Y","N")
41	=IF(J41>=Sights!D17,"Y","N")	=IF(K41>=Sights!D17, "Y","N")	=IF(J41<=Sights!E17,"Y","N")	=IF(K41<=Sights!E17,"Y","N")

	Columns L to O all formulae must be correct		
D5	Correct formulae in Row 25 (ignore absolute addressing)	1	
D6	Replicated formulae in Rows26 to 30 (no absolute addressing)	1	
D7	Correct formulae in Row 36 (ignore absolute addressing)	1	
D8	Replicated formulae in Rows 37 to 41 (no absolute addressing)	1	
			8

	A	В	С	н	1	\neg	1	K	L	M	N	0
11	Week Beginning	25/07/2016	Time									
12	Monday	TimeIn	Time Out				Statistics	Monday				
13	Marina	12:00	12:00		Visits		Tide Start	Tide End	DepthIn	Depth Out	Gearance In	Clearance Out
14		12:18	12:37	Bird Sanctuary		1	2.176615758	2.40948476	Y	Y	Y	Y
15	Matildas Secret	13:28	13:43	Seal Flats		1	0.247129736	0.535443739	Y	Υ	Y	Y
		14:28	14:44	Upton Manor		1	4.915598789	5.181734792	Y	Y	Y	Y
17	Wilson Falls	15:35	15:51	Fingals Cave		1	4.194813781	4.427682783	Y	Y	Y	Y
	Fingals Cave	16:45	17:00	Matildas Secret		1	1.289495748	1.51127575	Y	Y	Y	Y
19	Upton Manor	17:33		Wilson Falls		1	3.163536769	3.396405772	Y	Y	Y	Y
20	Marina	18:00	18:00									
21 22 28												
72		27/07/2016										
28	Wednesday	TimeIn	Time Out				Statistics	Wednesday				
24		09:00	09:00		Visits		Tide Start	Tide End	Depth In	Depth Out	Gearance In	Clearance Out
	_	09:15		Bird Sanctuary		1	3.311586771		-	Y	Y	Y
		09:51		Seal Flats		1	1.618028928			Y	Y	Y
	Upton Manor	10:37		Upton Manor		1	2.810096341			Y	Y	Y
_		11:13		Fingals Cave		1	3.714423345			Y	Y	Y
	Seal Flats	12:26		Matildas Secret		1	0.845240898			Y	Y	Y
31	Matildas Secret Marina	13:36		Wilson Falls		1	2.415480922	2.242836676	Y	Y	Y	Y
31	Marina	14:15	14:15									
32 33		20.02.0045	_									
20	Friday	29/07/2016 Time In	Time Out				Statistics	Friday				
35	Marina	09.00	09.00		Visits		Tide Start	Tide End	Depth In	Depth Out	Gearance In	Clearance Out
35		09:09		Bird Sanctuary	AIDIED	1	3.020227081		_	Y	V	Clearance Out
37	Fingals Cave	10:00		Seal Flats		-	3.309875681			· v	ý	v
	Wilson Falls	11:09		Upton Manor		1	4.217282458			v	Ý	v
_		12:22		Fingals Cave		1	4,5062,508,33		•	Ý	Ý	Ý
	Bird Sanctuary	12:57		Matildas Secret		1	2.510193677			v	Ý	v
	Matildas Secret	13:57		Wilson Falls		1	3.920656425		-	ý	Ý	Ý
	Marina	14:36	1436				5.00000725	225				
42	IVI al'III a	1400	1430									

		All required printouts in the right order are needed to be eligible for marks F1 to F3. Do not award for screen shots.		
(f)		Printouts (should be 6)		
				6
	E6	Friday - all sites visited and 0 red cells (columns L to O)	1	
	E5	Friday – all sites visited and <2 red cells (columns L to O)	1	
	E4	Wednesday - all sites visited and 0 red cells (columns L to O)	1	
	E3	Wednesday – all sites visited and <2 red cells (columns L to O)	1	
	E2	Monday - all sites visited and 0 red cells (columns L to O)	1	
(e)	E1	Monday – all sites visited and <2 red cells (columns L to O)	1	
		MUST see date and time. Do not award marks if previous formulae are clearly incorrect.		

F1	Row and column headings and gridlines on (all 6 worksheets)	1	
F2	Correct header & footer (all 6 worksheets)	1	
F3	Correct rows and columns printed on a single sheet (all 6 worksheets)	1	
			3
	Total Marks for Activity 2		37

Activity	y 3	August Tides		
(a)		Cell B19 contains: =4*PI()*B16/30		
	A1	Working formula in B19 Pi (π) can be the function, 3.14 or a number which rounds to 3.14 or multiply by 22 and divide by seven.	1	
	A2	PI function used	1	
	А3	Correct formula replicated to AF19	1	
		Cell B21 contains: =IF(B17="Y",6+1.5*SIN(B19),6+1.2*SIN(B19)) (can be reversed)		
	A4	Correct condition used in B21 and B25	1	
	A5	Correct True value	1	
	A6	Correct False Value	1	
	A7	Correct formula replicated to AF21 and AF25	1	
		Cell B23 contains: =IF(B18="Y",1.5+0.7*COS(B19),1.2+COS(B19)) (can be reversed)		
	A8	Correct condition used in B23 and B27	1	
A9 A10 A11		Correct True value	1	
		Correct False Value	1	
		Correct formula replicated to AF23 and AF27	1	
				1
A 19 Ple scAngle 20 High Tide 2 Height 20 Low Tide 21 High Tide 2 Height 21 High Tide 20 Height 21 Height 22 Height	032086111111 =15(818=141,0.1 0.07291666666 =15(817=141,1.5 0.2541,0000000	FRI(ED)(6)	TIME(0.4, 35) + KT/A EZX-TIME (D.38,0) + A \$5, 150 (A \$45, 150 (A	16 (0.4.13) 16 (0.4.13)

1	A	T	В	С	н	1	J	K	L	M	N	0	
13 Marina		nning (Time									
		by											
S Upon Marce 13:03 13:					Ried Sanctuary				_				Out
1 1 1 1 1 1 1 1 1 1						1							
13 Marina 1503 1518 Marina 1736	16 Wilson Falls	s	13:39	13:55	Upton Manor	1	3.312931507	3.125534247	Y	Y	Y	Y	
19 Statistics										Y	Y	Y	
30 Marina 17:36						1				Ť	, ,	Y	
12 22 23 Wednesday Time Direct Wednesday Time Direct Dir		a.ry			Wilson Falls	•	2.556150560	2.774104304					
Wednesday Time n Time Out Statistics Wednesday Marina 1100 11													
		sday				More			Donald In	Donah Ora	Cl	CI	
15		arv							_		Clearance In	Clearance V	Out
3											Ÿ	Ÿ	
39 Sea Flats 14.11 14.30 Maridas Serret 1.266.106695 2.45.04.69569 V	27 Wilson Falls	5	12:39	12:55	Upton Manor	1	5.385668869	5.137976876	Y	Y	Y	Y	
15		e			_					Y	Y	Y	
15										, y	, ,	Y	
33		Liet				-	4.000204000	4.0/333403					
Time	32												
35 Murina 12:00 12:00 Visits Title Start Murina 12:18 12:38 inc Sanctuary 1 6.07555552 6.34472409 V V V V V V V V V													
Selectary 12.18 12.33 8nd Sanctuary 1 6.60755552 6.344724629 7		y				Minim		•	Donah In	Donah Ova	Cl	C!	0.4
		a.rv											Out
September 14.39 15.05 Fingsla Cave 1 4.096786668 3.813655744 V V V V V V V V V					,						Ý	Ÿ	
Must see date and time Do not award marks if previous formulae are clearly incorrect.	38 Upton Man	юг	13:58	14:16	Upton Manor	1	4.928829659	4.628108603	Y	Y	Y	Y	
Must see date and time Do not award marks if previous formulae are clearly incorrect. Must see date and time Do not award marks if previous formulae are clearly incorrect. Monday - all sites visited <2 red cells					_					Y	Y	Y	
Must see date and time Do not award marks if previous formulae are clearly incorrect. (b) B1 Monday - all sites visited < 2 red cells 1 B2 Monday - all sites visited 0 red cells 1 B3 Wednesday - all sites visited < 2 red cells 1 B4 Wednesday - all sites visited 0 red cells 1 B5 Friday - all sites visited 0 red cells 1 B6 Friday - all sites visited 0 red cells 1 B7 Friday - all sites visited 0 red cells 1 B8 Friday - all sites visited 0 red cells 1 B9 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1 B1 Friday - all sites visited 0 red cells 1		ecret								Y	Y	Y	
Must see date and time Do not award marks if previous formulae are clearly incorrect. (b) B1 Monday – all sites visited <2 red cells B2 Monday - all sites visited 0 red cells B3 Wednesday – all sites visited 0 red cells B4 Wednesday - all sites visited 0 red cells B5 Friday – all sites visited <2 red cells B6 Friday – all sites visited <2 red cells 1 CC) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)					Wilson Falls		3.492081038	5.229550/14	,		,	,	
(b) B1 Monday – all sites visited <2 red cells B2 Monday – all sites visited 0 red cells B3 Wednesday – all sites visited <2 red cells B4 Wednesday – all sites visited 0 red cells B5 Friday – all sites visited <2 red cells B6 Friday – all sites visited <2 red cells C0 Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)									arks if				
B2 Monday - all sites visited 0 red cells B3 Wednesday - all sites visited < 2 red cells B4 Wednesday - all sites visited 0 red cells B5 Friday - all sites visited < 2 red cells B6 Friday - all sites visited 0 red cells 1 C0 Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)			prev	ious fo	ormulae a	are c	learly in	correct.					
B2 Monday - all sites visited 0 red cells B3 Wednesday - all sites visited <2 red cells B4 Wednesday - all sites visited 0 red cells B5 Friday - all sites visited <2 red cells B6 Friday - all sites visited 0 red cells 1 (c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)	(b)	B1	Mo	onday	- all site	s vis	sited <2	red cells	5			1	
B3 Wednesday - all sites visited <2 red cells B4 Wednesday - all sites visited 0 red cells B5 Friday - all sites visited <2 red cells B6 Friday - all sites visited 0 red cells 1 (c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)	(-)	B2											
B4 Wednesday - all sites visited 0 red cells B5 Friday - all sites visited <2 red cells B6 Friday - all sites visited 0 red cells 1 (c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets) 1													
B5 Friday – all sites visited <2 red cells B6 Friday - all sites visited 0 red cells 1 (c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)					<u> </u>							1	
B6 Friday - all sites visited 0 red cells (c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)		B4	We	ednes	day - all	site	s visited	0 red ce	ells			1	
B6 Friday - all sites visited 0 red cells (c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)		B5	Fri	iday –	all sites	visit	ed <2 re	ed cells				1	
(c) Printouts Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets)		B6											
Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets) 1		ВО	111	iuay	an sites	VISI	led o rec	i Celis					
Both required printouts in the right order are needed to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets) 1	(c)		Dr	intou	tc								
to be eligible for mark C1. Do not award for screen shots. C1 Row and column headings and gridlines on (both worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets) 1	(=)					! !		**************************************	h.l				
worksheets) and correct header and footer (both worksheets) and correct rows and columns printed (both worksheets) 1			to	be el									
and correct rows and columns printed (both worksheets) 1		C1	wo	orkshe	ets)		_	_	•				
								•		•	ets)	1	
Total Marks for Activity 3				- Je.,			22.2	- р	(=====		/		
Total Marks for Activity 3													
Total Marks for Activity 3													

Activity 4 Handover document

Indicative content

A handover document, not a memo or a letter.(Limited to Level 2 if not a handover document.)

Suitable title e.g. "LML Model Handover document"

Description of how to use the model and what to look for.

Selecting the week beginning date and the start time.

How to make the choice of where initially to place visits.

Description of tips on how to use the model efficiently.

Evaluative statements on how easy the model is to use.

Suggestions for improvement. e.g. "It would be possible to change the drop down list to show which of the visits could be accommodated in a particular tidal values"

Level	Marks	
Level 0	0 marks	No rewardable content
Level 1	1-5	The candidate will have described how to use the model. It will probably be a simple explanation of the drop-down boxes and limit itself to Monday. They may not have included setting the week beginning date. They will be unable to give any tips other than trial and error and checking there are no red boxes. There will be little evaluative comment about the model although there may be the usual objections to the colour scheme. The candidate may include diagrams but these will not be explained. The candidate uses everyday language and the response lacks clarity and organisation. Spelling, punctuation and the rules of grammar are used with limited accuracy.
Level 2	6-10	The candidate will have described how to use the model. There will be a good explanation of the drop down boxes and how they work. They will have included setting the week beginning date. They will have some strategy for choosing the start time and may look for places to put the most difficult to place first (Fingals Cave, Upton Manor). There will be some evaluative comment about the model other than colour scheme. The candidate will include diagrams and these will be briefly explained. The candidate uses some specialist terms and shows some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.
Level 3	11-15	The candidate will have described how to use the model and their description will show the order of doing things. It will focus on how the user will use the model rather than how things are done. They will have included setting the week beginning date. They will have a good strategy for choosing the start time and will probably look to put the most difficult place first (Fingals Cave, Upton Manor). They will have recognised that in many cases the same order of trips can be done an hour later on the next day. There will be extensive evaluative comment about the model, other than colour scheme. The candidate will include diagrams and these will be comprehensively explained. The candidate uses a range of appropriate specialist terms and shows good focus and organisation. Spelling, punctuation and the rules of grammar used with considerable accuracy.

		Total Marks for Activity 4		15
CVAVVAV				
SWW				
	S1	Authenticating Work (All WP pages have task number, Name, centre number).	1	
	S2	Appropriate Structure (Pages in correct order & folder assembled correctly)	1	
		Total for SWW		2
		Total for Paper		90