The systems life cycle – 2023 ICT IGCSE 0417

1.		ch/2023/Paper_0417/12/No.3 te three items that should be included in the technical documentation of a computer syster	m.
	1		
	2		
	3		
			[3]
2.		ch/2023/Paper_0417/12/No.17(a) ification and validation are used to check data.	
	(a)	Identify and describe two methods of verification.	
		Method 1	
		Description	
		Method 2	
		Description	
			[4]

Tawara Stores is a small company that does not make much profit. The managing director deciding whether to implement a new IT system using direct changeover or parallel running.	is
Describe the advantages and disadvantages of using direct changeover compared with parallerunning in this scenario.	el
	[6]
"" Par	

3. March/2023/Paper_0417/12/No.15

	A b	ook has an ISBN which is 330247204X	
	Tick	x (✔) the most appropriate data type for the ISBN.	
	A	Numeric: integer	
	В	Text	
	С	Boolean	
	D [Date	
5.		e/2023/Paper_0417/11/No.7 ystems analyst has been asked to carry out an analysis of a company's current computer syste	[1] em.
	(a)	State three methods of analysing the current system.	
		1	
		2	
		3	
	(b)	The systems analyst is working with a team to create some new software. The software documentation will be stored on the cloud.	[3] are
		Describe how the team can use the cloud to share the documentation.	
			[4]

4. June/2023/Paper_0417/11/No.1

(c)	Members of the team can use video-conferencing to join business meetings from differ locations around the world.	rent
	Describe, giving reasons, three disadvantages of using video-conferencing for business meetings rather than meeting in person.	
	20	
		[6]
June A bo	2/2023/Paper_0417/12/No.1 Dok contains a bar code whose number is 503619309903	
Tick	(✓) the most appropriate validation check to test the validity of the bar code.	
A c	check digit	
B f	ormat check	
C r	ange check	
D s	spell check	
		[1]

6.

7. June/2023/Paper_0417/12/No.7

A student is creating a spreadsheet that includes a formula to check a number entered in a cell is between two values.

- The number is entered in cell A10 as an integer.
- If the number is between the two values then a message 'OK' is displayed, otherwise 'error'

	is displayed.	
The	formula the student has created is:	
=IF((AND(A10>1,A10<32),"OK","error")	
Data	a will be used to test the formula.	
(a)	Identify two items of extreme test data the student should use and give the reason why the data was chosen.	his
	Extreme test data 1	
	Extreme test data 2	
	Reason	
		[3]
(b)	The student has entered an item of abnormal test data.	
	Explain why abnormal test data is used.	

		[3]

	A bo	book has an ISBN which is 0 330 24720 4				
	Tick	(✓) the most ap	propriate validation check to test the validity of the ISBN.			
	A c	haracter check				
	B format check					
	C length check					
	D ra	ange check		[4]		
9.	Nov/	/ 2023/Paper_0417/		[1]		
••	A te		p a database for a class library. The data about the books in the class libra	iry		
	(a)	The data can be	e verified by double data entry or visual verification.			
		Compare doubl differences.	le data entry with visual verification. Your answer must include similarities a	nd		
			Co			
		••				
				[4]		
	(b)	When data is e entered is 01/04	entered into a date field it is validated. An example of the data that could l 4/2023	be		
		State two valida	ation checks that could be used on this data.			
		1				
		2				

8. June/2023/Paper_0417/13/No.1

10. Nov/2023/Paper_0417/12/No.4

A teacher is creating a database for a class library. The teacher types the details of each book into the database. The teacher has entered a number of records.

Book_number	Name_of_book	Publisher	Date_acquired	ISBN
1101	Build a computer	JB Books	02/11/2020	9780119192065
1012	IT terms	MMA Books	16/05/2021	0893603944
1414	Databases are fun	Cam Press	01/10/2009	0090116393

Identify and describe a validation check based on the data shown in the database table, which could be applied to the data as it is entered into each of the fields. Each validation check must be different.

Book_number	
Validation check	
Description	
Date_acquired	
Validation check	-
Description	
ISBN	
Validation check	-
Description	

A hospital administrator enters data from medical forms into a database. Validation and verification are both used when entering data to minimise errors.	on
Explain what is meant by validation and verification and why they are both needed in this scenarion	io.
29	
Co	
	[6]
Pale	

11. Nov/2023/Paper_0417/12/No.9

12.	Nov/2023/Paper_0417/12/No.10(a) The manager of the Tawara Hotel has decided to computerise the hotel's room booking system. The new booking system will allow customers to book rooms online using an app on their smartphones.	
	The manager has employed a systems analyst who will carry out research into the current system by examining existing documentation and completed questionnaires from staff.	
	(a) One item of information that the systems analyst will need to identify is problems with the	

State three other items of information that the systems analyst will need to identify.

Peter needs to create a validation check for product numbers. Three examples of product numbers

[3]

[2]

2

3

Identify two validation checks he could use to check the numbers.

current system.

13. Nov/2023/Paper 0417/13/No.1

he needs to check are:

977135120127916

976143148163921

845132120651166

14. Nov/2023/Paper_0417/13/No.3(a)

A teacher is setting up a school shop. The teacher is setting up a spreadsheet to keep the accounts of the shop.

(a) Fig. 3.1 shows a box containing 50 Choco Bars to sell in the shop. The information on the box will be entered into the spreadsheet.

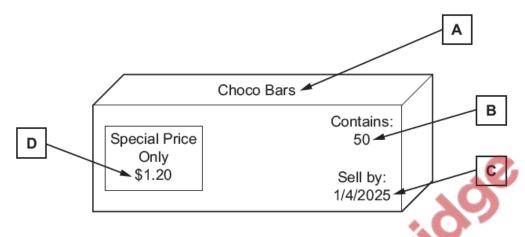


Fig. 3.1

State the most appropriate display format in the spreadsheet for each piece of data shown on the box. Your answer must be different in each case.

Д	
D	
	[4]

15. Nov/2023/Paper_0417/13/No.10

A school has employed a systems analyst to help update its computerised examination system.

(a) The systems analyst researches the current system to see what will be required in the new system.

State the methods of researching the current system that are described:

	(i)	talking to the network manager and examinations officer about the current system	
			[1]
	(ii)	watching the users operating the current system	
			[1]
	(iii)	forms sent out to all users to complete and return.	[1]
(b)		completing the analysis, the new system needs to be designed. One item that needs signed is a file structure.	s to
	Identif	y three other items that would need to be designed.	
	1		
	3		
	,		[3]

16. March/2024/Paper_0417/12/No.9 Compare a test strategy with a test plan. Your answer should include similarities and difference	ces.
	[6]
wii a Palpa	

When the database is completed, it needs to be verified. (a) Explain the importance of visual verification. [2] (b) An example of the date of birth stored on the database is: 15/05/2009 Describe three validation checks that could be carried out on the date of birth.

A form tutor at Tawara School is producing a database about the students in his class.

17. March/2024/Paper_0417/12/No.10

[6]