



#### CENTRE FOR DISTANCE AND CONTINUING EDUCATION



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Answer all questions in all the sections

Marks will be deducted for illegible hand writing.

**Duration: 3 hours** 

#### Instructions

- Examination consists of 3 sections (Part A, B and C)
- Answer all questions in all sections.
- Part A: Consists of 40 MCQ questions (40 X 1 marks). Underline the correct answer in the question paper.
- Part B: Consists of 3 structured questions (3 X 10 marks). Write answers in the space provided in the question paper.
- Part C: Consists of 3 Essay questions (3 X 10 marks). Write answers by clearly indicating the question number. Answers should be relevant to the question. No marks will be awarded for writing background information or writing outside the scope of the questions.

### Part A: MCQ

- 1. Which of the following device is used for both input and output?
  - a. Mouse
  - b. Printer
  - c. Joystick
  - d. Touch screen
- 2. What is the device used to temporarily store data in a computer?
  - a. Magnetic tape
  - b. Cache
  - c. Hard disk
  - d. Floppy disk
- 3. Which storage device does not have moving components?
  - a. Hard disk
  - b. Blu ray disk
  - c. Magnetic tape
  - d. Flash drive

4.	What is	s the software that should be first installed into a computer?
	a.	OS
	b.	Application software
	c.	Virus guard
	d.	Defragmentation software
5.	Which	of the following is an example for utility software?
	a.	Disk scanner
	b.	Ubuntu
	c.	Windows 10

- 6. The speed of modern processors are measured in:
  - a. KHz

d. Compiler

- b. GHz
- c. GB
- d. MHz
- 7. Which of the following statement regarding primary storage is **incorrect**?
  - a. Low storage volume
  - b. Low access speed
  - c. Low access time
  - d. Not volatile
- 8. What is the advantage of solid-state storage devices over magnetic storage?
  - a. Takes less physical space
  - b. Has more storage volume
  - c. More reliable
  - d. Can store any type of data
- 9. A word processing file is known as:
  - a. Worksheet
  - b. Document
  - c. Presentation
  - d. Workbook
- 10. Which of the following is a word processing software?
  - a. Libre office Writer
  - b. MS Excel
  - c. Libre office Impress
  - d. Libre office Calc

- 11. Select the correct keyboard shortcut
  - a. Alt+ F5: Close file
  - b. Ctrl + Y: Undo
  - c. Ctrl + P : Paste
  - d. Ctrl + O: Open existing file
- 12. Which of the following statement shows access speed in ascending order?
  - a. Hard disk, Magnetic tape, Optical storage, Pen drive
  - b. Pen drive, Hard disk, , Optical storage, Magnetic tape
  - c. Magnetic tape, Optical storage, Pen drive, Hard disk
  - d. Magnetic tape, Optical storage, Hard disk, Pen drive
- 13. What is the port used to connect a network cable?
  - a. USB
  - b. RJ45
  - c. DVI
  - d. Serial
- 14. Select the incorrect statement with regard to word processing documents
  - a. Page number can be inserted on either header or footer
  - b. Page numbers can be specified as roman numbers (i, ii, iii)
  - c. Section break feature can only create a maximum of 3 sections
  - d. Ctrl + enter will insert a blank page into a document
- 15. Choose the **incorrect** statement
  - a. Functions are in-built.
  - b. Formulas are user defined.
  - c. Formulas are not supported in spreadsheets.
  - d. Formula used in one worksheet can be copied to another worksheet.
- 16. Choose the statement that violates data validation rules.
  - a. A student scores 85 for ICT, but marks are entered as 65.
  - b. A student's first name is typed in the place where his last name should be typed.
  - c. A person's age is entered in the place where his email address should be typed.
  - d. Saman's ICT marks are entered for Sunil.

# Answer questions 17-19 based on the following diagram and equations

Gross value=Unit price X Quantity

Discount value Gross Value X Discount

Net Value= Gross value-Discount value

	A	В	C	D	E	F.	G
1	Product	Unit Price	Quantity	Gross Value	Discount (%)	Discount Value	Net Value
2	CPU	8500	12		3		
3	RAM	11000	73		5		
4	Monitor	13000	15		6		

- 17. What is the suitable formula to calculate gross value of Monitor in D4 cell?
  - a. =B4\*C4
  - b. =B4 X C4
  - c. =SUM(B4\*C4)
  - $d. = SUM(B4 \times C4)$
- 18. What is the suitable formula to calculate discount value for CPU?
  - a. =D2\*E2/100
  - b. =D2\*E2
  - c. =D2\*F2/100
  - d. =D2-E2/100
- 19. What is the suitable formula to calculate net value of RAM?
  - a. =(B3\*D3)-F3
  - b. =D3-F3
  - c. =B3\*C3/100
  - d. =D3-D3/100
- 20. Select the correct choice related to functions and formulas
  - a. Both functions and formulas are user created.
  - b. Functions are user created and formulas are in-built.
  - c. Functions are in-built and formulas are user created.
  - d. Both functions and formulas are in-built.
- 21. Marks of 100 students need to be entered into a spreadsheet. What is the suitable tools to ensure that user can only enter marks in the range 0-100?
  - a. Data validation
  - b. Conditional formatting
  - c. What if analysis
  - d. Symbols
- 22. A spreadsheet consists of a collection of :
  - a. Pages
  - b. workbooks
  - c. Worksheets
  - d. Tables

	at is the keyboard shortcut used to insert a new page into a document?  a. Ctrl + N  b. Ctrl + M  c. Ctrl + Enter  d. Alt + M
follo	presentation red colour bullets need to be applied to 50 slides. Which of the owing facility should be used to perform this task most efficiently?  a. Slide sorter  b. Notes master  c. Slideshow rehearsal  d. Slide master
25. Wh	ich of the following is an open source software?

- - a. Libre office Calc
  - b. MS Office PowerPoint
  - c. Adobe Photoshop
  - d. Norton Antivirus
- 26. What is the key used to start a slideshow?
  - a. F1
  - b. Esc
  - c. F5
  - d. Ctrl
- 27. Which of the following instruction will print slides 2,5,6,7,8,13 and 14?
  - a. 1-14
  - b. 2-14
  - c. 2,5-14
  - d. 2,5-8,13-14
- 28. What is the top level domain of URL https://www.abs.org
  - a. https
  - b. www
  - c. abs
  - d. org
- 29. Which of the following is a protocol
  - a. Ik
  - b. Dropbox
  - c. http
  - d. Proxy
- 30. Skype is an example for:
  - a. Grid computing
  - b. Cloud computing
  - c. Mobile computing
  - d. Video conferencing

- 31. Which of the following top level domain does not relate to a particular country?
  - a. .net
  - b. .lk
  - c. .au
  - d. .jp
- 32. Networking several branches in a single city is known as:
  - a. LAN
  - b. MAN
  - c. WAN
  - d. CAN
- 33. Which of the following software can be used to compress files and folders
  - a. MS Access
  - b. Ubuntu
  - c. WinZip
  - d. Opera
- 34. What is the incorrect statement with regard to URL <a href="http://www.xyz.com">http://www.xyz.com</a>?
  - a. It is a website developed for commercial purpose
  - b. Protocol used in the URL is "http"
  - c. It is safe to enter credit card details in this page
  - d. Service offered in this URL is "www"

# Answer questions 35-37 based on the following table.

SID	Sname	Marks	ModCode	TelNo
E123	Perera	53	FNDE103	0811234567
E456	Fernando	18	FNDE103	0771234567
E800	Silva	87	ECNE100	0711234577

- 35. What is the primary key of the table?
  - a. SID
  - b. SName
  - c. ModCode
  - d. TelNo
- 36. What is the suitable data type for TelNo?
  - a. Number
  - b. Text
  - c. Currency
  - d. Yes/No
- 37. What is the foreign key of the table?
  - a. SID
  - b. SName
  - c. ModCode
  - d. TelNo

- 38. Which of the following is most suitable to filter data from a DB?
  - a. Reports
  - b. Forms
  - c. Tables
  - d. Queries
- 39. Select the correct statement related to Databases
  - a. Forms can be used to enter data into a table.
  - b. Reports can be used to enter data into a table.
  - c. Queries cannot be created for databases with only one table.
  - d. Tables without any relationships can exist in relational databases.
- 40. Select a field that is **not** suitable for a database
  - a. Age
  - b. FirstName
  - c. TelephoneNo
  - d. Fax

## Part B: Structured Questions

1. Write down keyboard shortcuts for the following tasks:

(10X1 marks)

- a. To insert a new page into a word processing document:
- b. To minimise all windows:
- c. To move to first page in a document:
- d. To select all files inside a folder:
- e. To display charms bar in Winows 8:
- f. To start a sublist:
- g. To insert a new slide to a presentation
- h. To refresh a web page
- i. To close a window
- i. To underline a word

2. Consider the following tables that belong to the same Database.

### Student

SID	SName	DOB	Gender	SubID			
A111	Jayasinghe	23/11/1998	M	AR100			
A230	Silva	02/02/1999	F	AR220			
A300	Perera	16/01/1997	M	AR220			
A400	Fernando	23/08/1998	M	AR300			
A561	Weerakoon	11/11/2000	F	AR300			

### Subject

Subjec	:1		
SubID	Title	Credits	LID
AR100	Maths	3	L2
AR220	English	3	L5
AR300	ICT	3	L2

#### Lecturer

<u>LID</u>	LName	Email	Tel	Salary
L2	Perera		0811234567	180,000
L5	Jayawarderna	Jaya123@gmail.com	0711234567	184,000

- a) Write down data types for the following fields
  - i. DOB:
  - ii. Tel:
  - iii. Salary
  - iv. LID
  - v. LName

(5 marks)

- b) Write down the primary key of each table:
  - i. Student:
  - ii. Subject:
  - iii. Lecturer:

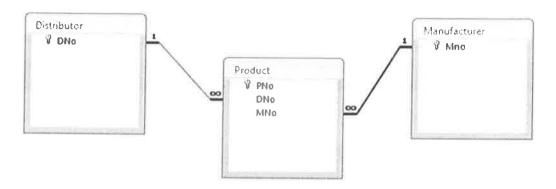
(3 marks)

c) According to the following diagram what is the type of relationships between:

### (2 marks)

Product and Manufacturer tables:

Product and Distributor Tables:



### 3. a)

E	Α	В	C	D	E E	Constraint of Favorian contra
1	Name	ICT	Maths	English	Average	Rank
2	Sunil	56	78	21		
3	Nimal	88	78	23		
4	Anusha	97	56	45		

- i. Write a suitable function inside E2, E3 and E4 cells to calculate Average
- ii. Write a suitable function inside F2, F3 and F4s cell to calculate Rank(6 marks)
- b) Write suitable functions inside C2 and C3 cells to calculate grade based on following criteria:

80-100: "Distinction"

70-79: "Merit"

40-69: "Pass"

0-39: "Fail"

(4 marks)

	A	В	C	we sel
1	Student	Marks	Grade	
2	Vimal	78		
3	Namali	56		
4	11			

## Part C: Essay Questions

- 1. Explain the following terms using examples where it is necessary. (4X2.5 marks)
  - a. Register memory
  - b. Optical storage
  - c. Keyboard shortcuts
  - d. Network topologies
- 2. Explain benefits of using Spreadsheet software for calculations instead of calculators (10 marks)
- 3. Explain how Open source Software be useful for following: (2X5 marks)
  - a. Education
  - b. A country's economy