



**UCSC**

**University of Colombo, Sri Lanka**

*University of Colombo School of Computing*



**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY  
(EXTERNAL)**

Academic Year 2023— 1<sup>st</sup> Year Examination — Semester 1

**IT1306 — Free and Open Source Software for Personal Computing**

*Multiple Choice Question Paper*  
(2 Hours)

**Important Instructions**

- The duration of the paper is **2 Hours**.
- The medium of instructions and questions is English.
- This paper has **40 questions** on **11 pages**. Answer **all** questions.
- All questions are of the **MCQ** (Multiple Choice Questions) type.
- Each question will have **5 (five)** choices with **ONE OR MORE** correct answers.
- This paper consists of 100 marks and all the questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from -1 (All the incorrect choices are marked & no correct choices are marked) to +1 (All the correct choices are marked & no incorrect choices are marked). However, **the minimum mark per question would be zero**.
- Answers should be marked on the **special answer sheet** provided.
- Note that questions appear on both sides of the paper. If a page or part of a page is not printed, please inform the supervisor/invigilator immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**
- Any electronic device capable of storing and retrieving text, including electronic dictionaries, smartwatches, and mobile phones, is not allowed.
- Calculators are **not** allowed.
- *All Rights Reserved*. This question paper can NOT be used without proper permission from the University of Colombo School of Computing.

1). Which of the following is/are example(s) of Application Software?

- |               |               |           |
|---------------|---------------|-----------|
| a). Firefox   | b). Unix      | c). Linux |
| d). MS Office | e). Assembler |           |

2). Which of the following statements is/are correct about System Software?

- |  |
|--|
| a). Installed according to user's requirements.                                  |
| b). System software communicates with hardware devices to coordinate activities. |
| c). The user interacts with system software.                                     |
| d). It provides a platform for running application software                      |
| e). Used by the user to perform specific tasks                                   |

3). Consider the following statements.

- I. Oracle VM VirtualBox is a free and open-source hosted hypervisor for virtualization.
- II. Oracle VM VirtualBox is developed and maintained by Oracle Corporation.
- III. Oracle VM VirtualBox can be installed on Windows, macOS, Linux, Solaris, and Open Solaris.

Which of the above statement(s) is/are correct?

- |                    |                    |                   |
|--------------------|--------------------|-------------------|
| a). I only         | b). II only        | c). I and II only |
| d). I and III only | e). I, II, and III |                   |

4). Which of the following commands can be used to create 3 directories named dir1, dir2, and dir3?

- |                            |
|----------------------------|
| a). mkdir dir1 dir2 dir3   |
| b). mkdir dir1, dir2, dir3 |
| c). make dir1 dir2 dir3    |
| d). make dir1, dir2, dir3  |
| e). mkdir dir1/dir2/dir3   |

5). Which of the following commands can be used to change the directory to the Root Directory in the Ubuntu operating system using Command Line Interface?

- |          |               |              |
|----------|---------------|--------------|
| a). cd \ | b). cd home   | c). cd /home |
| d). cd / | e). cd   home |              |

6). Which of the following examples is/are (an) example(s) for word processing applications?

- |                        |                       |                       |
|------------------------|-----------------------|-----------------------|
| a). Google Docs        | b). Microsoft Word    | c). Apple iWork Pages |
| d). LibreOffice Writer | e). OpenOffice Writer |                       |

7). What is the default file format for saving documents in LibreOffice Writer?

- |           |          |          |
|-----------|----------|----------|
| a). .docx | b). .odt | c). .xls |
| d). .pdf  | e). .doc |          |

8). How to create a numbered list in LibreOffice Writer?

- |   |
|---|
| a). Press Ctrl + N.   |
| b). Use the shortcut Ctrl + B.                                |
| c). Select the text and press Ctrl + C.                       |
| d). Right-click and choose “Numbering” from the context menu. |
| e). Click the “Numbering” button on the Formatting Toolbar.   |

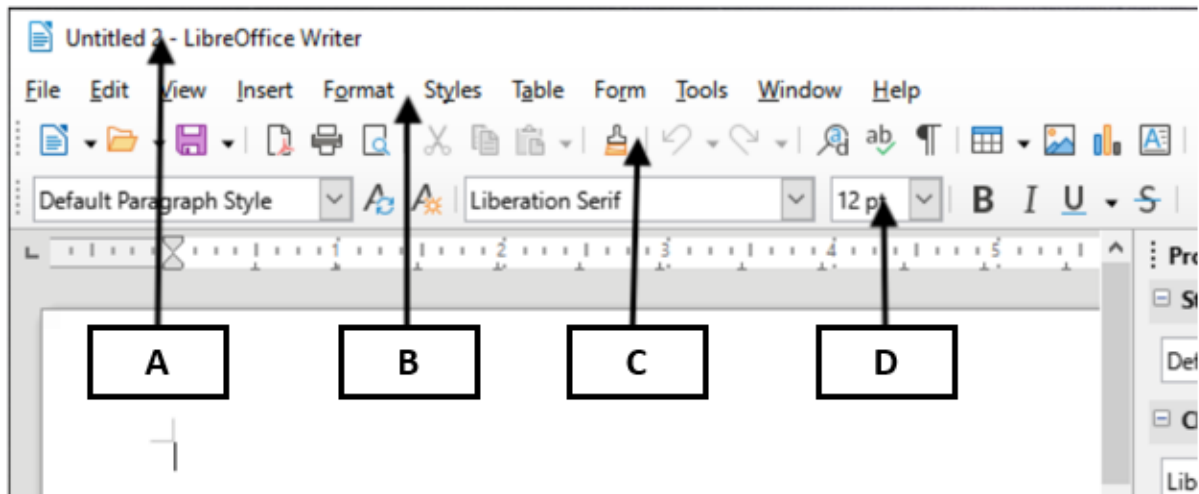
9). In LibreOffice Writer, which of the following features are part of the “Page Style” settings?

- |                      |                 |                  |
|----------------------|-----------------|------------------|
| a). Page orientation | b). Page layout | c). Page borders |
| d). Page sorting     | e). Page clone  |                  |

10). When inserting images into LibreOffice Writer, which of the following statements are true regarding image formatting?

- |   |
|---|
| a). Images can only be inserted in their original size.     |
| b). The “Wrap” option allows text to flow around the image. |
| c). The “Crop” tool is not available for images.            |
| d). Images cannot be resized after insertion.               |
| e). Images cannot be rotated after insertion.               |

11). Consider the following document segment in LibreOffice Writer.



Identify the parts of the main Writer window from A to D.

- a). A-Title Bar, B-Standard Toolbar, C-Formatting Toolbar, D-Menu Bar
- b). A-Menu Bar, B-Formatting Toolbar, C-Title Bar, D-Standard Toolbar
- c). A-Title Bar, B-Menu Bar, C-Standard Toolbar, D-Formatting Toolbar
- d). A-Menu Bar, B-Title Bar, C-Formatting Toolbar, D-Standard Toolbar
- e). A-Standard Toolbar, B- Title Bar, C-Menu Bar, D-Formatting Toolbar

12). Consider the following statements.

- I. Headers are portions of a document that appear at the top of every page.
- II. The standard alignment for page numbers in the footer is left-aligned.
- III. Headers/footers can be used to include page numbers, document information, etc.

Which of the above statements is/are correct?

- |                    |                    |                   |
|--------------------|--------------------|-------------------|
| a). I only         | b). II only        | c). I and II only |
| d). I and III only | e). I, II, and III |                   |

13). Consider the following table having information related to LibreOffice Writer.

Column A		Column B	
(i)	Open a new blank document	(A)	Ctrl + V
(ii)	Paste the copied text	(B)	Ctrl + X
(iii)	Copy the selected text in a document	(C)	Ctrl + P
(iv)	Cut the selected text in a document	(D)	Ctrl + N
		(E)	Ctrl + C
		(F)	Ctrl + B

Match the functionalities listed on Column A with the appropriate shortcut keys listed on Column B.

- a). (i) – (E), (ii) – (C), (iii) – (D), (iv) – (A)
- b). (i) – (A), (ii) – (D), (iii) – (C), (iv) – (E)
- c). (i) – (D), (ii) – (A), (iii) – (E), (iv) – (B)
- d). (i) – (B), (ii) – (F), (iii) – (A), (iv) – (E)
- e). (i) – (F), (ii) – (A), (iii) – (B), (iv) – (D)

14). Which of the following statements is/are correct about Digital Signing?

- a). It is used to validate the authenticity and integrity of a digital document.
- b). More than one signature cannot be added to a document.
- c). A personal key, known as a certificate is required to sign a document digitally.
- d). It can be used for mailing labels, labels for physical file folders, and similar purposes.
- e). A signed document shows an icon in the status bar. You should double-click the icon to view the certificate.

15). Which of the following types of links is/are available as an option in LibreOffice Writer?

- a). Cross-references
- b). Hyperlinks
- c). Bookmark links
- d). Web links
- e). URLs

16). Which of the following keyboard shortcuts can be used to move the cell focus from anywhere on the spreadsheet to Cell A1 on the same sheet in LibreOffice Calc?

- a). Ctrl+Home
- b). Enter
- c). Ctrl+Page Up
- d). Alt+Page Up
- e). Shift+Enter

17). Consider the following formula in LibreOffice Calc.

=IF(A2>=0,“Positive”,“Negative”)

In the given formula, what would be the result if the value of cell A2 is 0?

- |              |              |            |
|--------------|--------------|------------|
| a). Negative | b). Positive | c). #DIV0! |
| d). 0        | e). Err:508  |            |

18). Consider the following formula in LibreOffice Calc.

=SUM(B8,SUM(B10:B14))

Which of the following statements is/are true regarding the above formula?

- |   |
|---|
| a). Calculates the sum of cells B10 to B14 and adds the value to B8.            |
| b). Calculates B8 minus the sum of the cells B10 to B14.                        |
| c). Calculates the multiplication of cells B10 to B14 and adds the value to B8. |
| d). Calculates the sum of cells B10 to B14 and multiply the value by B8.        |
| e). Calculates the difference of cells B10 to B14 and adds the value to B8.     |

19). Consider the following error description.

“A cell or range used may have the wrong format, such as text instead of numbers”.

Which of the following LibreOffice Calc Error Code(s) is/are described by the above error description?

- |            |            |             |
|------------|------------|-------------|
| a). #NAME? | b). #VALUE | c). #ERROR! |
| d). #REF   | e). #NUM!  |             |

20). Which of the following options are types of conditional formatting available in LibreOffice Calc?

- I. Color Scales
- II. Icon Sets
- III. Data Bars
- IV. AutoFormat

- |                         |                          |                   |
|-------------------------|--------------------------|-------------------|
| a). I and III only      | b). II, III, and IV only | c). I and IV only |
| d). I, II, and III only | e). I, II, III, and IV   |                   |

21). Consider the following spreadsheet segment in LibreOffice Calc.

SUM <span>fx</span> <span>✖</span> <span>✓</span> = B2 & " " & C2 & ", " & D2								
	A	B	C	D	E	F	G	
1								
2		June	23	2010		= B2 & " " & C2 & ", " & D2		
3								
4								

Which of the following functions can be used to perform the same operation as in cell F2?

- |                 |             |         |
|-----------------|-------------|---------|
| a). SUM         | b). PRODUCT | c). ADD |
| d). CONCATENATE | e). AND     |         |

22). Consider following the LibreOffice Calc segment.

	A	B	C
1	Student No	Mark	
2	1	55	
3	2	78	
4	3	90	
5	4	83	
6	5	45	
7	6	61	
8	7	58	
9	8	80	
10	9	70	
11	10	75	
12		=COUNTIF(B2:B11,">75")	

What could be the output for cell B12?

- |       |       |           |
|-------|-------|-----------|
| a). 5 | b). 0 | c). ERROR |
| d). 4 | e). 6 |           |

23). Which of the following operator(s) is/are (a) comparative operator(s) in LibreOffice Calc?

- |        |       |       |
|--------|-------|-------|
| a). eq | b). = | c). & |
| d). <> | e). * |       |

24). Consider the following statements regarding formulas in LibreOffice Calc.

- I. A formula must begin with equals (=) symbol.
- II. Calc automatically adds the equals (=) symbol for the formula, when starting with the plus (+) or underscore (\_) character.
- III. You can enter formulas in two ways, either by using the Function Wizard or by typing directly into the cell or into the input line.

Which of the above statements is/are correct?

- |                     |                    |                    |
|---------------------|--------------------|--------------------|
| a). II and III only | b). I and II only  | c). I and III only |
| d). I only          | e). I, II, and III |                    |

25). Consider the following spreadsheet created in LibreOffice Calc. (Suppose that the cell C2 is formatted using percent value).

	A	B	C	D
1				
2		Discount Rate	10%	
3				
4				
5	Item Code	Price	Discount	
6	A001	\$500.00	\$50.00	
7	A002	\$200.00		
8	A003	\$700.00		
9	A004	\$1,000.00		
10	A005	\$250.00		
11				

Which of the following formulas should be entered in cell C6 and dragged downwards to fill out the column Discount?

- |                |              |            |
|----------------|--------------|------------|
| a). =B6*\$C\$2 | b). =B6*C\$2 | c). =B6*C2 |
| d). =B6*C2/100 | e). =B6*\$C2 |            |

26). Which of the following statements is/are true about MySQL databases LibreOffice Base?

- |   |
|---|
| <ul style="list-style-type: none"> <li>a). General access to MySQL for versions of LibreOffice from 3.5 onwards is via JDBC or ODBC.</li> <li>b). To be able to use JDBC, it is necessary to install mysql-connector-java.jar.</li> <li>c). Creation of a new database is only possible in the internal HSQLDB format.</li> <li>d). You can connect to a MySQL database using only ODBC.</li> <li>e). If the MySQL server is on the same computer as LibreOffice, then the Server name cannot be set as localhost.</li> </ul> |
|---|



**27).** Consider the following statements related to the graphical table design LibreOffice Base.

- I. The sequence of fields in a table can be changed after the database has been saved.
- II. Only the entry of direct SQL commands can insert a field into a specific position in the table.
- III. The properties of the tables must be set at the beginning.

Which of the above statements is/are correct?

- |                     |                    |                    |
|---------------------|--------------------|--------------------|
| a). I only          | b). I and II only  | c). I and III only |
| d). II and III only | e). I, II, and III |                    |

**28).** A student got some instructions to create a simple table in LibreOffice base and the following are those Instructions.

- i. Create a table with the name “Students”.
- ii. The first field is “ID” with the numeric type integer as the primary key.
- iii. The next field name is “Name” with the text type variable. Text length and the text size should be limited to 50 characters.

Which of the following query/queries is/are satisfying the above instructions?

- |  |
|--|
| a). CREATE TABLE “Students” (“ID” PRIMARY KEY, “Name” LENGHT(50));           |
| b). CREATE TABLE “Students” (“ID” INTEGER PRIMARY KEY, “Name” VARCHAR(50));  |
| c). CREATE TABLE “Students” (“ID” PRIMARY KEY, “Name” TEXT(50));             |
| d). CREATE TABLE “Students” (“ID” TYPEINT PRIMARY KEY, “Name” TYPETEXT(50)); |
| e). CREATE TABLE “Students” (“ID” INT PRIMARY KEY, “Name” VARCHAR(50));      |

**29).** Consider the following query.

DROP TABLE “University” [IF EXISTS] [RESTRICT | CASCADE];

Which of the following statement(s) is/are true about the CASCADE in the above query?

- |  |
|--|
| a). Only the values of the table “University” are deleted.         |
| b). The deletion of the table “University” is prevented.           |
| c). All links to the table “University” are deleted.               |
| d). In the linked tables, all foreign keys are set to NULL.        |
| e). All views referring to the named table are completely deleted. |

**30).** In LibreOffice Base, which elements can be included in a Query Design?

- |                  |                   |             |
|------------------|-------------------|-------------|
| a). Tables       | b). Forms         | c). Reports |
| d). SQL Commands | e). Relationships |             |

**31).** Which LibreOffice Base feature allows you to present data in a structured and organized manner?

- |             |              |             |
|-------------|--------------|-------------|
| a). Tables  | b). Forms    | c). Reports |
| d). Queries | e). SQL View |             |

**32).** Which of the following statements is/are correct about slide masters in LibreOffice Impress?

- |  |
|--|
| a). A slide master serves as a template or the starting point for other slides.                                    |
| b). A slide presentation can have only one slide master.   |
| c). Slide Master is similar to a page style in Writer: it controls the basic formatting of all slides based on it. |
| d). Slide masters have two types of styles associated with them: presentation styles and image styles.             |
| e). Changing a style in a slide master does not result in changes to all the slides based on that slide master.    |

**33).** Which types of files or documents can be embedded and linked into an Impress presentation using Object Linking and Embedding (OLE) technology in LibreOffice?

- |                               |
|-------------------------------|
| a). LibreOffice spreadsheets  |
| b). LibreOffice slide master  |
| c). LibreOffice presentations |
| d). LibreOffice formulas      |
| e). LibreOffice text          |

**34).** Which of the following views allow you to see and organize all your slides simultaneously in LibreOffice Impress?

- |                  |                       |                 |
|------------------|-----------------------|-----------------|
| a). Slide Master | b). Slide Show view   | c). Normal view |
| d). Outline view | e). Slide Sorter view |                 |

**35).** Which of the following features allow you to add narration, annotations, and timings to your presentation in LibreOffice Impress?

- |                       |                       |                   |
|-----------------------|-----------------------|-------------------|
| a). Slide Sorter view | b). Presenter Console | c). Speaker Notes |
| d). Custom Animation  | e). Slide Master      |                   |

**36).** Which of the following is/are (an) example(s) of graphic design applications?

- |                       |                     |          |
|-----------------------|---------------------|----------|
| a). Pixlr             | b). InkScape        | c). GIMP |
| d). Adobe Illustrator | e). Adobe Photoshop |          |

**37).** Which of the following tools can be used to remove unwanted objects from an image?

- |                      |                     |          |
|----------------------|---------------------|----------|
| a). Despeckling      | b). Garbage Removal | c). Junk |
| d). Removing Red-eye | e). Artifacts       |          |

**38).** GIMP stands for,

- |   |
|---|
| a). General Image Manipulation Platform |
| b). GNU Icon Manipulation Platform      |
| c). General Image Manipulation Program  |
| d). GNU Image Manipulation Program      |
| e). General Icon Manipulation Program   |

**39).** Which of the following selection tools can be used to select areas of the current layer or image based on color similarity?

- |                       |                     |                    |
|-----------------------|---------------------|--------------------|
| a). Free Selection    | b). Fuzzy selection | c). Ellipse Select |
| d). Foreground Select | e). Select by Color |                    |

**40).** Consider the following statements about The Main Toolbox in GIMP.

- I. Contains a set of icon buttons used to select tools.
- II. By default, it does not have the option to change the foreground and background colors.
- III. Use Edit → Preferences → Toolbox to enable, or disable the extra items.

Which of the above statements is/are correct?

- |                     |                    |                    |
|---------------------|--------------------|--------------------|
| a). I only          | b). I and II only  | c). I and III only |
| d). II and III only | e). I, II, and III |                    |

\*\*\*\*\*