

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of General Education

Session: 2020-21(Summer Semester)

B. Voc. Program, 1st Semester,1st In-Sem. Examination

Course Code: GEN1101

Time: 1 Hour

Course Name: English Language and Comprehension

Max. Marks: 20

Instructions:

1. All questions are compulsory.
2. The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section-A

(1*5=5)

Q1. Velu was a:

- (A) Washer man (B) Fisherman
(C) Milkman (D) Superman

Q2. Find the false one:

- (A) A noun is a naming word (B) An adjective defines nouns
(C) Word classes are 8 in number (D) A pronoun is the replacement of an adjective

Q3. The word **Success** is an example of a:

- (A) Noun (B) Verb
(C) Adjective (D) Adverb

Q4. The possessive form of the pronoun *You* is:

- (A) Your's (B) Yourself
(C) Your (D) You are

Q5. Which one of the following is not the example of pronoun?

- (A) One (B) Neither
(C) And (D) His

Section-B

(2*3=6)

Q6. Change the following words into noun forms:

- (A) Poor (B) Long (C) Intelligent (D) Observe

Q7. Why did people not like Velu?

Q8. Use the following pairs of words (homophones) in sentences to bring out their meanings distinctly:

(A) Write and Right

(B) Our and Hour

Section-C

(3*3=9)

Q9. Write the summary of the story, Velu.

Q10. Fill in the blank as per the instructions given in the bracket:

(i) I invited my brother for dinner yesterday and gave me a precious gift. (Use suitable pronoun)

(ii) My friend saw many..... in the farmhouse on last Sunday. (Use Plural form of Mouse)

(iii) She proved herself an efficient (Use feminine form of Manager.)

Q11. Find out the underlined words whether they are nouns/pronouns/adjectives/verbs:

As he grew up, he understood every rustle in the grass; every breath of the warm night air; each hoot of the owls above his head; every scratch of a bat's claws as it roosted for a while in a tree, and each splash of every little fish jumping in a pool.

Sp

School of General Education
Session: 2020-21(Summer Semester)
B. Voc. Program, 1st Semester,
1st In-Sem. Examination

Set-1

Course Code: GEN1101

Time: 1 Hour

Course Name: English Language and Comprehension

Max. Marks: 20

ANSWER KEY

Section-A

Q.1 B. Fisherman

Q.2 D. A pronoun is the replacement of an adjective

Q.3 A. Noun

Q.4 C. Your

Q.5 C. And

Section-B

Q.6 **Poor:** Poverty **Long:** Length **Intelligent:** Intelligence **Observe:** Observation

Q.7 Because Velu was greedy and selfish by nature. He was unkind too as he never liked to share his fish with other fishermen.

Q.8

Write: You must write all the answers.

Right: The right approach of teaching is appreciated .

Our: This is our university.

Hour: It takes one hour to reach at bus stand.

Section-C

Q.9

Velu was a fisherman who lived in a small house near the sea. He had good nets and a strong boat for fishing. Velu was greedy and selfish by nature. He was unkind too as he never liked to share his fish with other fishermen.

One day, Velu went fishing to the sea with his fellow fishermen. Velu, being greedy, went a long way into the sea and caught plenty of fish. The fish he caught were small in size. Suddenly, Velu saw many big fish and wanted to catch them. So, he threw away all his small fish and cast his net again to catch the bigger fish. The other fishermen offered to help him, but Velu refused to take their help. Hence, they all went away.

Velu caught a lot of big fish this time in his net. The net became so heavy that Velu could not pull it into his boat alone. The fish broke the net and escaped into the sea, damaging the fishing net. Velu realized his mistake and decided not to be greedy again. At night, Velu and his wife had nothing to eat. His friend fisherman offered them fish for dinner and also promised to help Velu mend his net.

Q.10 (I) He (ii) Mice (iii) Manageress

Q.11

He: Pronoun

Understood: Verb

Grass: Noun

Warm: Adjectives

Every: Adjectives

Pool: Noun



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Registration No.:

School of General Education Skills
Session: 2020-21 (Summer Semester)
B. Voc. Program, 1st Semester,
1st In-Sem. Examination

Course Code: GEN1102

Time: 1 Hour

Course Name: Office Software Tools

Max. Marks: 20

Instruction:

1. Answer all questions form section A, each question carries one mark.
2. Answer all questions form section B, all question carries five marks.
3. Answer all questions form section C, all question carries five marks.

Section – A

10X01 = 10 Marks

Q.1. Which of the following view is not available in LibreOffice Impress?

- a) Outline
- b) Notes
- c) Slide sorter
- d) Master

Q.2. Which of the following is a slide transition effect in LibreOffice Impress?

- a) Wipe all over
- b) Fine Dissolve
- c) Bit by bit
- d) None of the above

Q.3. What is PowerPoint known as in LibreOffice Impress?

- a) Draw
- b) Impress
- c) Calc
- d) writer

Q.4. In LibreOffice Writer, find the location of the footnote?

- a) Bottom of the page
- b) Top of the page
- c) Bottom of the document
- d) Top of the document



Q.5. What is the margin in the LibreOffice Writer document?

- a) 0.5
- b) 1.5
- c) 0
- d) 1

Q.6. The graphical control element on which screen buttons, icons, menus or other input and output elements are:

- a) Taskbar
- b) Toolbar
- c) Status bar
- d) Menu bar

Q.7. The LibreOffice writer can do a minimum zoom to what percentage?

- a) 30-40%
- b) 10-30%
- c) 5-20%
- d) 0-5%

Q.8. What is the full form of .Odt?

- a) Open Document text
- b) Office Document text
- c) Open Data text
- d) None of these

Q.9. What is the shortcut key of increasing font size in LibreOffice?

- a) Ctrl +]
- b) Ctrl + }
- c) Ctrl+[
- d) Both A and B

Q.10. What is the shortcut key for save as in LibreOffice Writer?

- a) Ctrl + Shift + S
- b) Ctrl + S
- c) F12
- d) None of the above



Section – B

05X01 = 5 Marks

Q.11. Implement the following in Libre writer-

- (a) A text box to write “Honesty is the best policy” in it.**
- (b) Color font with Brown**
- (c) Copy the above statement and paste below**
- (d) Bold the font with size 20**
- (e) Underline the above statement**

Section – C

05X01 = 5 Marks

Q.12. Implement the following in Libre writer-

- (a) Write a statement of five point about “My family”**
- (b) Write My Family bold with font size 18**
- (c) Write “My Family” with underline**
- (d) Write about “My Family” in bullet point**
- (e) Write your point with font size 14**



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Time: 1 Hour

Course Name: Office Software Tools

Max. Marks: 20

Instruction:

1. Answer all questions form section A, each question carries one mark.
2. Answer all questions form section B, all question carries five marks.
3. Answer all questions form section C, all question carries five marks.

Section – A

10X01 = 10 Marks

Q.1. What is the full form of. Odt?

- a) Open Document text
- b) Office Document text
- c) Open Data text
- d) None of these

Q.2. The shortcut keys for centered alignment are:

- a) Control + V
- b) Control + L
- c) Control + J
- d) Control + E

Q.3. Which of the following writer is the default extention of Libre Writer?

- a) .obt
- b) .Doc
- c) .odt
- d) .Docx

Q.4. The LibreOffice was founded by:

- a) The open source foundation
- b) The Data foundation
- c) The document foundation
- d) None of these



Q.5. What is the shortcut key for copy document in Libre writer?

- a) Control + V
- b) Control + C
- c) Control + Y
- d) Control + S

Q.6. The toolbar contains information about the current documents and offers various buttons with special functions:

- a) Title toolbar
- b) Side toolbar
- c) Menu toolbar
- d) Status toolbar

Q.7. The toolbar below title bar is:

- a) Formatting toolbar
- b) Side bar
- c) Menu bar
- d) Status bar

Q.8. The graphical control element on which screen buttons, icons, menus or other input and output elements are:

- a) Taskbar
- b) Toolbar
- c) Status bar
- d) Menu bar

Q.9. The LibreOffice writer can do minimum zoom to what percentage?

- a) 30-40%
- b) 10-30%
- c) 5-20%
- d) 0-5%

Q.10. The shortcut keys for Libre writer for paste is:

- a) Control + C
- b) Control + Q
- c) Control + V
- d) Control + Y



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Section – B

05X01 = 5 Marks

Q.11. Implement the following in Libre writer-

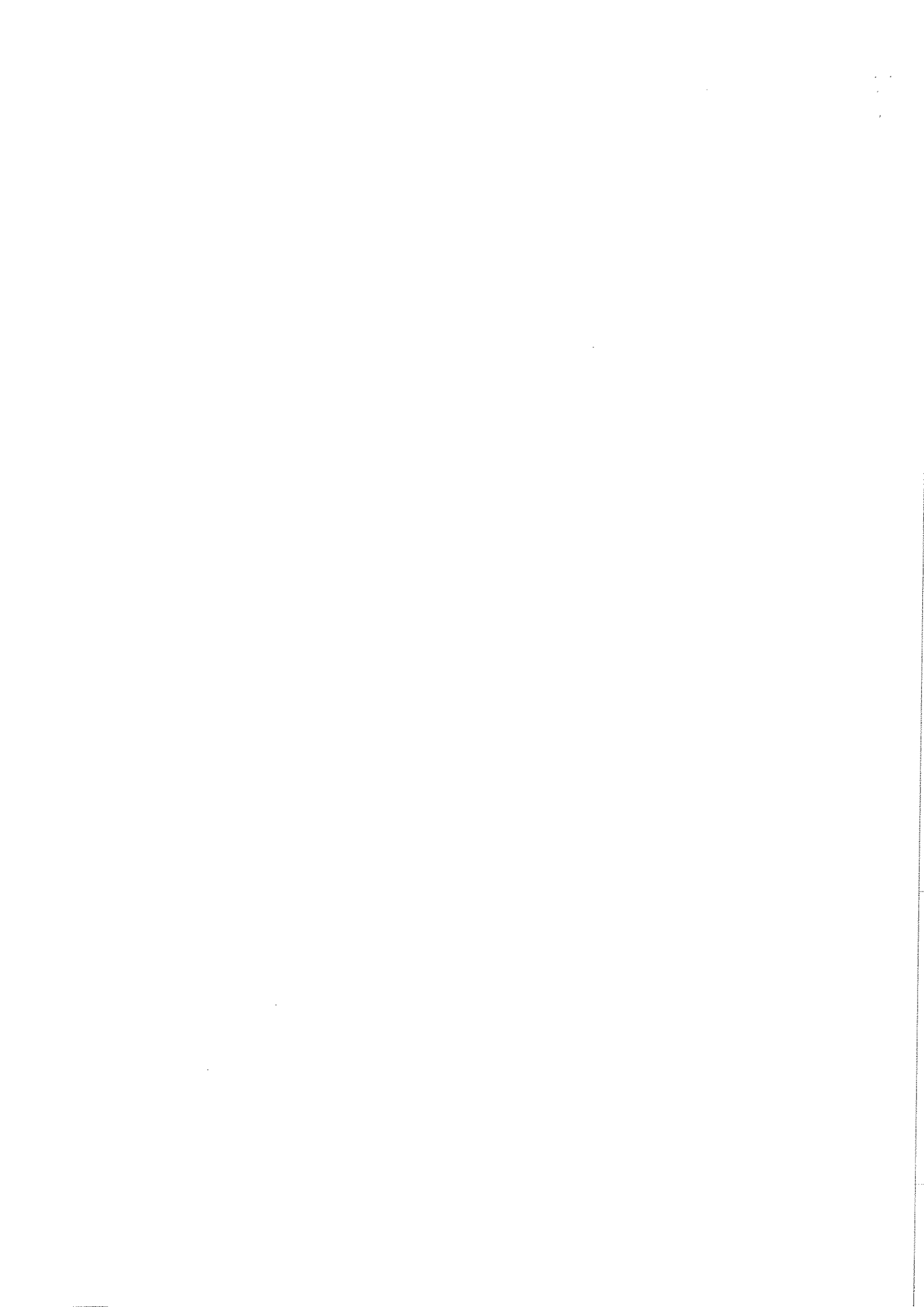
- (a) A text box to write “Library is a heart of an Institution” in it.
- (b) Color font with blue
- (c) Copy the above statement and paste below
- (d) Bold the font with size 24
- (e) Highlight the font with light green color

Section – C

05X01 = 5 Marks

Q.12. Implement the following in Libre writer-

- (a) Write a statement of five point about “My Introduction”
- (b) Write My Introduction bold with font size 18
- (c) Write My Introduction in Centre alignment
- (d) Write about yourself in bullet point
- (e) Write your point in Italics





BHARTIYA SKILL DEVELOPMENT UNIVERSITY

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School of General Education Skills
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1st In-Sem. Examination

Course Code: GEN1102

Time: 1 Hour

Course Name: Office Software Tools

Max. Marks: 20

Instruction:

1. Answer all questions form section A, each question carries one mark.
2. Answer all questions form section B, all question carries five marks.
3. Answer all questions form section C, all question carries five marks.

Section – A

10X01 = 10 Marks

Q.1. Which of the following writer is the default extention of Libre Writer?

- a) .obt
- b) .Doc
- c) .odt
- d) .Docx

Q.2. What is the shortcut key for copy document in Libre writer?

- a) Control + V
- b) Control + C
- c) Control + Y
- d) Control + S

Q.3. The toolbar below title bar is:

- a) Formatting toolbar
- b) Side bar
- c) Menu bar
- d) Status bar

Q.4. The graphical control element on which screen buttons, icons, menus or other input and output elements are:

- a) Taskbar
- b) Toolbar
- c) Status bar
- d) Menu bar



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- a) 30-40%
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- c) 5-20%
- d) 0-5%

Q.6. What is the full form of. Odt?

- a) Open Document text
- b) Office Document text
- c) Open Data text
- d) None of these

Q.7. The toolbar contains information about the current documents and offers various buttons with special functions:

- a) Title toolbar
- b) Side toolbar
- c) Menu toolbar
- d) Status toolbar

Q.8. The shortcut keys for centered alignment are:

- a) Control + V
- b) Control + L
- c) Control + J
- d) Control + E

Q.9. The shortcut keys for Libre writer for paste is:

- a) Control + C
- b) Control + Q
- c) Control + V
- d) Control + Y

Q.10. The LibreOffice was founded by:

- a) The open source foundation
- b) The Data foundation
- c) The document foundation
- d) None of these



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Section – B

05X01 = 5 Marks

Q.11. Implement the following in Libre writer-

- (a) A text box to write “Bhartiya Skill Development University” in it.
- (b) Color font with red
- (c) Copy the above statement and paste below
- (d) Bold the font with size 24
- (e) Highlight the font with yellow color

Section – C

05X01 = 5 Marks

Q.12. Implement the following in Libre writer-

- (a) Write a statement of five point about “My Introduction”
- (b) Write My Introduction bold with font size 18
- (c) Write My Introduction in Centre alignment
- (d) Write about yourself in bullet point
- (e) Write your point in Italics





**School of General Education Skills
Session: 2020-21 (Summer Semester)
B. Voc. Program, 1st Semester,
1st In-Sem. Examination**

Course Code: GEN1102

Time: 1 Hour

Course Name: Office Software Tools

Max. Marks: 20

Instruction:

1. Answer all questions form section A, each question carries one mark.
2. Answer all questions form section B, all question carries five marks.
3. Answer all questions form section C, all question carries five marks.

Section – A

10X01 = 10 Marks

Q.1. What is called a spreadsheet on LibreOffice?

- a) Libre Writer
- b) Libre Draw
- c) Libre Impress
- d) Libre Calc

Q.2. In Libre office PowerPoint is called

- a) Libre Calc
- b) Libre Impress
- c) Libre Draw
- d) Libre Writer

Q.3. In LibreOffice word document is called as

- a) Libre Draw
- b) Libre Database
- c) Libre Calc
- d) Libre Writer

Q.4. Extention used for Libre Calc is

- a) .odt
- b) .odp
- c) .ods
- d) None of these



Q.5. What are the shortcut keys to double underline?

- a) Control + U
- b) Control + L
- c) Control + D
- d) Control + Shift + L

Q.6. Which of the following is not shown in the status bar of LibreOffice Writer?

- a) Total Characters
- b) Current page number
- c) Total numbers of words
- d) Computer's name

Q.7. Ruler option is found in which menu?

- a) Home
- b) Insert
- c) View
- d) Tools

Q.8. Thesaurus option is in which menu of LibreOffice?

- a) Format
- b) Tools
- c) View
- d) None of the above

Q.9. In LibreOffice Writer, find the location of the footnote?

- a) Bottom of the page
- b) Top of the page
- c) Bottom of the document
- d) Top of the document

Q.10. In LibreOffice Writer, mail merge option is in which menu?

- a) Insert
- b) Format
- c) Tools
- d) Form



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Section – B

05X01 = 5 Marks

Q.11. Implement the following in Libre writer-

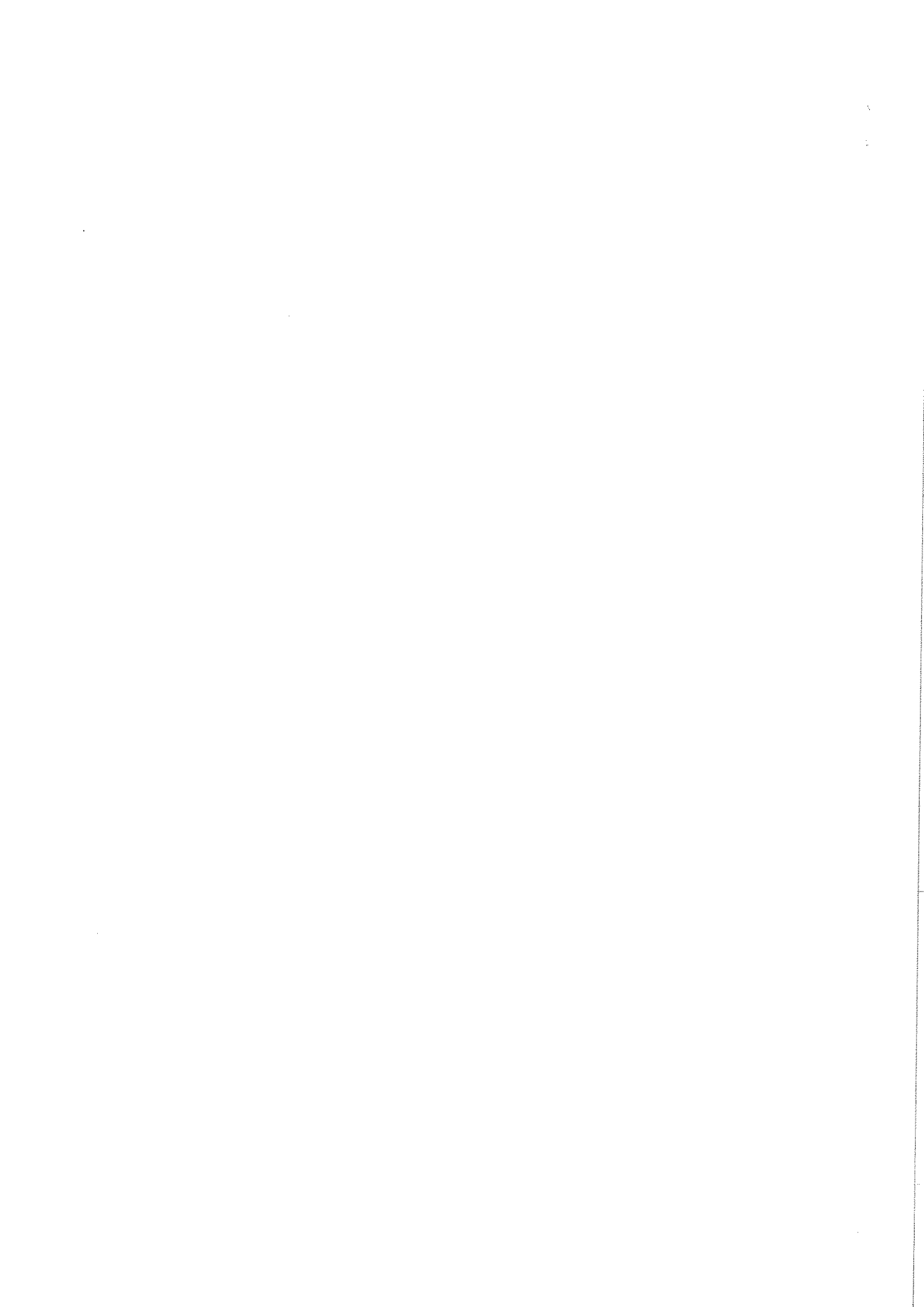
- (a) A text box to write “I Love my country” in it.
- (b) Color font with Green
- (c) Copy the above statement and paste below
- (d) Italic the font with size 20
- (e) Highlight the font with yellow color

Section – C

05X01 = 5 Marks

Q.12. Implement the following in Libre writer-

- (a) Write a statement of five point about “My best friend”
- (b) Write My best friend bold with font size 18
- (c) Write My best friend in Centre alignment
- (d) Write about “My Country” in bullet point
- (e) Write your point with font size 12





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1st In-Sem. Examination

Course Code: GEN1102

Time: 1 Hour

Course Name: Office Software Tools

Max. Marks: 20

Instruction:

1. Answer all questions form section A, each question carries one mark.
2. Answer all questions form section B, all question carries five marks.
3. Answer all questions form section C, all question carries five marks.

Section – A

10X01 = 10 Marks

Q.1. Which of the following is not shown in the status bar of LibreOffice Writer?

- a) Draw
- b) Impress
- c) Calc
- d) Writer

Q.2. In LibreOffice Writer, mail merge option is in which menu?

- a) Insert
- b) Format
- c) Tools
- d) Form

Q.3. What is the shortcut key of superscript in LibreOffice Writer?

- a) Ctrl + shift + P
- b) Ctrl +shift + B
- c) Ctrl +Shift + S
- d) None of Above

Q.4. What is the shortcut key of increasing font size in LibreOffice?

- a) Ctrl +]
- b) Ctrl + }
- c) Ctrl+[
- d) Both A and B



Q.5. What is the shortcut key for save as in LibreOffice Writer?

- a) Ctrl + Shift + S
- b) Ctrl + S
- c) F12
- d) None of the above

Q.6. The advantage of LibreOffice is:

- a) No Licensed fees and open source
- b) Licensed and open source
- c) Only open source
- d) Licensed

Q.7. The shortcut keys to exit LibreOffice are:

- a) Control + Z
- b) Control + E
- c) Control + J
- d) Control + Q

Q.8. Toolbar contains buttons representing commands such as New, Open, Save and Print etc is:

- a) Title toolbar
- b) Formatting toolbar
- c) Side toolbar
- d) Standard toolbar

Q.9. Vertical toolbar available on the side of the document is:

- a) Side toolbar
- b) Title toolbar
- c) Menu toolbar
- d) Status toolbar

Q.10. The LibreOffice can run on:

- a) Ms Windows, Linux and Mac
- b) Only Ms windows
- c) Only Ms window and Linux
- d) Only Linux and Mac



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Section – B

05X01 = 5 Marks

Q.11. Implement the following in Libre writer-

- (a) A text box to write “No Mask No Vaccine” in it.
- (b) Color font with Blue
- (c) Copy the above statement and paste below
- (d) Italic the font with size 26
- (e) Highlight the font with red color

Section – C

05X01 = 5 Marks

Q.12. Implement the following in Libre writer-

- (a) Write a statement of five point about “My Country”
- (b) Write My Country bold with font size 18
- (c) Write My Country in Centre alignment
- (d) Write about “My Country” in bullet point
- (e) Write your point in with red color



**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of General Education****Session: 2020-21(Summer Semester)****B. Voc. Program, 1st Semester,****1st In-Sem. Examination****Course Code: GEN 1103****Time: 1 Hour****Course Name: Applied Mathematics****Max. Marks: 20****Instruction:**

1. All questions are compulsory.
2. Missing data if any can be suitably assumed.
3. Calculator is not permitted.

Section – A

05 × 01 = 05 Marks

Q1. Which one of the following collections is not a set?

- (a) The collection of all the days of a month.
- (b) The collection of all spiritual books of India.
- (c) The collection of all the months of a year beginning with the letter 'D'.
- (d) The collection of all best players in Rajasthan.

Q2. If $A = \{1, 2, 3, 4, 5\}$, then which one is true?

- | | |
|---|--|
| (a) $A = \{x : x \in \mathbb{Z} \text{ and } x < 6\}$ | (c) $A = \{x : x \in \mathbb{N} \text{ and } x \leq 5\}$ |
| (b) $A = \{x : x \in \mathbb{N} \text{ and } x < 5\}$ | (d) $A = \{x : x \in \mathbb{N} \text{ and } x \leq 4\}$ |

Q3. If $A = \{3, 4, 5, 6\}$ and $B = \{2, 4, 6, 8\}$, then $A-B$ is

- | | |
|----------------------|----------------------|
| (a) $A-B = \{3, 4\}$ | (c) $A-B = \{2, 8\}$ |
| (b) $A-B = \phi$ | (d) $A-B = \{3, 5\}$ |

Q4. If $A = \{a, b, c, d\}$ and $B = \{b, c, d, e\}$, then $B-A$ is

- | | |
|----------------------------|-------------------|
| (a) $B-A = \{a, b, c, d\}$ | (c) $B-A = \{a\}$ |
| (b) $B-A = \phi$ | (d) $B-A = \{e\}$ |

Q5. Which one of the following number is not a prime number?

- | | |
|--------|--------|
| (a) 91 | (c) 7 |
| (b) 23 | (d) 71 |

Section – B

03 × 02 = 06 Marks

Q6. Write the set $A = \{3, 9, 27, \dots\}$ into set-builder form.Q7. If $A = \{1, 2, 3\}$ and $B = \{2, 3, 4, 5\}$, then find

- | | |
|----------------|-----------------|
| (i) $A \cup B$ | (ii) $A \cap B$ |
|----------------|-----------------|

Q8. Write the power set of following set:

$$A = \{-1, 0, 1\}$$

Section – C

03 × 03 = 09 Marks

Q9. Write the power set for the following sets:

(i) $A = \{-2, 0, 2\}$

(ii) $B = \{a, \{b, c\}, d\}$

Q10. Define subset with a suitable example.

Q11. If $U = \{a, b, c, d, e\}$, $C = \{a, b, c\}$ and $D = \{b, c, d, e\}$, then show that

$$(C \cup D)' = (C' \cap D').$$



Answer key (NEN 1103)

Q1 (D)

Q2 (C)

Q3 (D)

Q4 (D)

Q5 (A)

Q6 $A = \{319, 27, \dots\}$

Set Builder form

$$A = \{x = 3^n, n \in \mathbb{N}\}$$

Q7 $A = \{1, 2, 3\}$, $B = \{2, 3, 4, 5\}$

(i) $A \cup B = \{1, 2, 3, 4, 5\}$

(ii) $A \cap B = \{2, 3\}$

Q8 $A = \{-1, 0, 1\}$

$$P(A) = \{\emptyset, \{-1\}, \{0\}, \{1\}, \{-1, 0\}, \{-1, 1\}, \{0, 1\}, \{-1, 0, 1\}\}$$

Q9 (i) $P(A) = \{\emptyset, \{-2\}, \{0\}, \{2\}, \{-2, 0\}, \{-2, 2\}, \{0, 2\}, \{-2, 0, 2\}\}$

(ii) $P(A) = \{\emptyset, \{a\}, \{b, c\}, \{d\}, \{a, \{b, c\}\}, \{a, d\}, \{a, \{b, c\}, d\}\}$

Q10

Subset :-

A set "A" is said to be a subset of a set B if every element of A is also an element of B.

Ex. $A = \{1, 2, 3\}$
 $B = \{1, 2, 3, 4, 5\}$

A is subset of B i.e. $A \subset B$.

Q11

$$U = \{a, b, c, d, e\}, \quad C = \{a, b, c\}$$
$$D = \{b, c, d, e\}$$

$$(C \cup D)' = U - (C \cup D)$$
$$= \{a, b, c, d, e\} - \{a, b, c, d, e\}$$
$$= \phi$$

$$C' = \{d, e\}, \quad D' = \{a\}$$

$$C' \cap D' = \phi$$

hence

$$(C \cup D)' = (C' \cap D')$$

hence proved.



(A)

School of General Education
Session: 2020-21 (Summer Semester)
B. Voc. Program, First Semester,
1st In-Sem. Examination

Course Code: GEN1104

Time: 1 Hour

Course Name: Elementary Mathematics

Max. Marks: 20

Instructions:

1. All questions are compulsory.
2. Missing data if any can be suitably assumed

Section – A

05X01 = 05 Marks

1. Representation of hexadecimal is:
a. $(13)_{16}$
b. $(17)_{10}$
c. $(100)_{10}$
d. 1
2. How many centimeters are there in 1 m?
a. 10
b. 1000
c. 0.001
d. 100
3. 16m 257 cm in cm is:
a. 60025 cm
b. 625 cm
c. 6025 cm
d. 1857 cm
4. Binary numbers are represented as:
a. $(10)_2$
b. $(13)_{10}$
c. $(65)_2$
d. none of the above
5. How many kilometers are there in 25 meters?
a. 25000 km
b. 0.25 km
c. 0.0025km
d. 0.025 km

Section – B

03X02 = 06 Marks

6. Convert the following decimals to binary numbers:
a. $(364)_{10}$
b. $(78)_{10}$
7. Shalini purchased 67 m 1200 cm long rope and Jenny purchased 37 m 385 cm long rope. What is the total length of the ropes?
8. Convert the following binary numbers to decimals:
a. $(111001)_2$
b. $(111000)_2$



Section – C

03X03 = 09 Marks

9. Convert the following hexadecimals to decimals:
- $(2FF)_{16}$
 - $(3BD)_{16}$
 - $(2C)_{16}$
10. Convert the following Decimals to hexadecimals:
- $(132)_{10}$
 - $(288)_{10}$
 - $(256)_{10}$
11. Peter wants to fence the park in front of his house on three sides, which measure 526 m 40 cm, 285 m 70 cm and 315 m 75 cms. Find the total length that is to be fenced in centimeters.

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School of General Education Skills
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Course Code: GEN1104

Time: 1 Hour

Course Name: Elementary Mathematics

Max. Marks: 20

Answer Key

Section – A

05X01 = 05 Marks

- Representation of hexadecimal is:
a. **(13)₁₆** c. (100)₁₀
b. (17)₁₀ d. 1
- How many centimeters are there in 1 m?
a. 10 c. 0.001
b. 1000 d. **100**
- 16m 257 cm in cm is:
a. 60025 cm c. 6025 cm
b. 625 cm d. **1857 cm**
- Binary numbers are represented as:
a. **(10)₂** c. (65)₂
b. (13)₁₀ d. none of the above
- How many kilometers are there in 25 meters?
a. 25000 km c. 0.0025km
b. 0.25 km d. **0.025 km**

Section – B

03X02 = 06 Marks

- Convert the following decimals to binary numbers:
a. $(364)_{10} = (101101100)_2$

Divided by 2	Quotient	Remainder
364/2	182	0
182/2	91	0
91/2	45	1
45/2	22	1
22/2	11	0
11/2	5	1
5/2	2	1
2/2	1	0
1/2	0	1



b. $(78)_{10} = (1001110)_2$

Divided by 2	Quotient	Remainder
78/2	39	0
39/2	19	1
19/2	9	1
9/2	4	1
4/2	2	0
2/2	1	0
1/2	0	1

7. Shalini purchased 67 m 120 cm long rope and Jenny purchased 37 m 385 cm long rope. What is the total length of the ropes?

Length of rope Shalini have = 67 m 120 cm

Length of rope Jenny have = 37 m 385 cm

Total length of rope = 67 m 120 cm + 37 m 385 cm
= 104 m 505 cm

8. Convert the following binary numbers to decimals:

a. $(111001)_2$

$$\begin{aligned}(111001)_2 &= 1 \cdot 2^5 + 1 \cdot 2^4 + 1 \cdot 2^3 + 0 \cdot 2^2 + 0 \cdot 2^1 + 1 \cdot 2^0 \\ &= 32 + 16 + 8 + 0 + 0 + 1 \\ &= (57)_{10}\end{aligned}$$

b. $(111000)_2$

$$\begin{aligned}(111000)_2 &= 1 \cdot 2^5 + 1 \cdot 2^4 + 1 \cdot 2^3 + 0 \cdot 2^2 + 0 \cdot 2^1 + 0 \cdot 2^0 \\ &= 32 + 16 + 8 + 0 + 0 + 0 \\ &= (56)_{10}\end{aligned}$$

Section – C

03X03 = 09 Marks

1. Convert the following hexadecimal to decimals:

a. $(2FF)_{16}$

$$\begin{aligned}(2FF)_{16} &= 2 \cdot 16^2 + 15 \cdot 16^1 + 15 \cdot 16^0 \\ &= 512 + 240 + 15 \\ &= (767)_{10}\end{aligned}$$



b. $(3BD)_{16}$

$$\begin{aligned}(3BD)_{16} &= 3 \cdot 16^2 + 11 \cdot 16^1 + 13 \cdot 16^0 \\ &= 768 + 176 + 13 \\ &= (957)_{10}\end{aligned}$$

c. $(2C)_{16}$

$$\begin{aligned}(2C)_{16} &= 2 \cdot 16^1 + 12 \cdot 16^0 \\ &= 32 + 12 \\ &= (44)_{10}\end{aligned}$$

2. Convert the following Decimals to hexadecimal:

a. $(132)_{10} = (84)_{16}$

Divided by 16	Quotient	Remainder
132/16	8	4
8/16	0	8

b. $(178)_{10} = (B2)_{16}$

Divided by 16	Quotient	Remainder	hexadecimal
178/16	11	2	2
11/16	0	11	B

c. $(256)_{10} = (100)_{16}$

Divided by 16	Quotient	Remainder	hexadecimal
256/16	16	0	0
16/16	1	0	0
1/16	0	1	1

3. Peter wants to fence the park in front of his house on three sides, which measure 526 m 40 cm, 285 m 70 cm and 315 m 75 cms. Find the total length that is to be fenced in centimeters.

$$\begin{aligned}\text{Total Length of the fence} &= 526 \text{ m } 40 \text{ cm} + 285 \text{ m } 70 \text{ cm} + 315 \text{ m } 75 \text{ cms} \\ &= 1126 \text{ m } 185 \text{ cm} \\ &= 112785 \text{ cm}\end{aligned}$$

