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ASSIGNMENT 1: FUNDAMENTS OF IT AND PROGRAMMING

SWATHI | CCA

CCA-101: Fundamentals of IT & Programming

Assignment – 1

Name	:	Swathi
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Subject Name	:	Fundamentals of IT & Programming

Q1: What are the four fundamental parts of computer? Explain it with the help of diagram.

The four fundamental parts of a computer are:

1. Input Unit – Accepts data (e.g., keyboard, mouse)
2. Central Processing Unit (CPU) – Processes data (ALU + CU)
3. Memory Unit – Stores data
4. Output Unit – Displays results

Diagram:

[Input Unit] → [CPU (ALU + CU)] ←→ [Memory] → [Output Unit]

Q2: Classification of computers based on size and capacity.

1. Microcomputer – Small, personal use
2. Mini Computer – Multi-user, used in small organizations
3. Mainframe Computer – Large, handles many users
4. Supercomputer – Extremely fast, used for research

Q3: What is the meaning of computer generation? How many generations are defined?

Computer generation refers to the evolution of computers:

1st: Vacuum tubes

2nd: Transistors

3rd: ICs

4th: Microprocessors

5th: AI and future tech

Q4: Difference between Volatile & Non-Volatile Memory:

Volatile Memory: Loses data without power (e.g., RAM)

Non-Volatile Memory: Retains data (e.g., ROM, HDD)

Q5: System Software vs Application Software vs Open Source Software:

System Software – Controls hardware (e.g., OS)

Application Software – For users (e.g., MS Word)

Open Source – Free to modify (e.g., Linux)

Q6a: Steps to create a file in MS Word named "yourself":

1. Open MS Word
2. Type paragraph
3. File > Save As > yourself

Q6b: Steps to format text in MS Word:

Font style: Home > Font Style

Font size: Home > Font Size

Font color: Home > Font Color

Highlight: Home > Highlight tool

Q7: Create and save file 'ms_word':

1. Open MS Word
2. Type content
3. Save as ms_word

Q8: Create and save file 'equations':

1. Insert > Equation > Type formula
2. Save as equations

Q9: Convert text to table:

1. Highlight text
2. Insert > Table > Convert text to table
3. Save as text_to_table

Q10: Insert table in MS Word:

1. Insert > Table > Select size
2. Save file

Q11: Create Excel worksheet 'book1':

1. Open Excel
2. Enter data
3. Save as book1

Q12: Calculate in Excel:

Sum: AutoSum C2:C11

Average: =AVERAGE(C2:C11)

Max: =MAX(C2:C11)

Min: =MIN(C2:C11)

Q13a: Modify worksheet:

Column width: Right-click > Column Width

Row height: Right-click > Row Height

Delete: Right-click > Delete

Q13b: Excel terms:

Absolute: A1

Relative: A1

Cell address: B2

Q14a: Tools to customize PowerPoint:

Themes, Animations, Slide layouts, Master slide

Q14b: Create presentation:

1. Open PowerPoint > Blank
2. Save as Lab1.pptx
3. Title: College name
4. Subtitle: Your name
5. Add new slide

Q15: PowerPoint demo:

Title + bullet list

Insert Excel sheet

Clip art + text

Add slide effects

Q16: Machine vs High-Level Language:

Machine: Binary code

High-Level: English-like, easy

Q17: Data types in C:

int, float, char, double, void

Q18: Output of expressions:

a) 33

b) 24

c) 16

Q19: Syntax of control statements:

if-else:

if () { } else { }

for:

for (init; cond; upd) { }

while:

while () { }

do-while:

do { } while ();

Q20: Output of code:

a) IMS Ghaziabad

b) IMS Ghaziabad (2 times)

c) Largest number is 100