



বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

B.Sc. Honours Examination 2021

(CBCS)

1st Semester

COMPUTER SCIENCE

PAPER—GE1T & GE1P

COMPUTER FUNDAMENTALS

Full Marks : 60

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

THEORY : GE1T

Group - A

Answer any *three* questions.

3×12

1. (a) Why base-2 number system is used in digital computer?
(b) What is cache memory? Why is it necessary?

(c) Perform the subtraction operation using 1's and 2's complement of the following numbers

$$(101101)_2 \text{ and } (1110111)_2 \qquad 3+(3+2)+(2+2)$$

- 2.** (a) What are the differences between real and virtual memory?
 (b) Describe different types of computer system with their uses.
 (c) Write down the difference between RAM and ROM. 4+6+2
- 3.** (a) Give two differences between tape drive and magnetic disk.
 (b) Explain the working of different types of mouse.
 (c) Shortly explain system software, application software and utility software. 3+3+6
- 4.** (a) Write down a procedure to convert a Binary Number to a Decimal Number with a suitable example.
 (b) Briefly explain the register set in a CPU. 6+6
- 5.** (a) Briefly describe the memory hierarchy of computer system based on speed and size.
 (b) Differentiate between source code and object code. 8+4
- 6.** Write short notes on (any two) : 2×6
 (a) BCD number
 (b) Generations of Computer
 (c) Functions of Operating System.

Group – BAnswer any *two* questions.

2×2

7. Differentiate between computer hardware and software.
8. Convert $(1011011)_{16} = (?)_2$.
9. What is bit and byte? How many bits are present in 2 byte?
10. What do you mean by a virus in context to computer system?

PRACTICAL : GE1PAnswer any *one* question.

1×15

1. Write a 10 line paragraph and perform the following formatting on the page.
 - (a) All text should be left justified.
 - (b) Line spacing in the paragraph be 1.2".
 - (c) Use size 11 Calibri font.
 - (d) Edit your writing for spelling and grammar.
 - (e) Include a title page with your name, course number, and date of examination.
 - (f) Use Word Header & Footer to insert a header, including your last name and the page number, positioned at the top right side of the page.
2. Create a telephone directory
 - The heading should be 16-point Arial Font in bold
 - The rest of the document should use 10-point font size
 - Other headings should use 10-point Courier New Font
 - The footer should show the page number as well as the date last updated.

3. Create a spreadsheet like the one below. Enter all the numbers.

(a) Insert the title "Monthly Budget" and center and merge it.

i) Change the font to Times New Roman, size 14.

ii) Make the text white and the fill black.

(b) Insert the subtitle "January 2005 – June 2005."

i) Change the font to Calibri, size 10

ii) Make text white and fill black.

iii) Center and merge it.

(c) Center and bold the headings (months and average)

i) Change the font to BakerSignet on the headings

ii) Bold the headings in column A.

iii) Change the font to Arial.

	A	B	C	D	E	F	G	H
1		January	February	March	April	May	June	Average
2	House Payment	750	750	750	750	750	750	
3	Charity	200	200	200	200	200	200	
4	Groceries	300	425	425	290	325	350	
5	Car Payment	300	300	300	300	300	300	
6	Gasoline	45	45	50	55	45	60	
7	Clothing	100	75	60	50	100	85	
8	Utilities	95	85	95	90	80	90	
9	Total							
10	Income							
11								

Answer any *one* question.

1×5

4. Prepare a grocery list having four columns (Serial number, the name of the product, quantity and price) for the month of April, 21.

5. Create the following documents:

A newsletter with a headline and 2 columns in portrait orientation, including at least one image surrounded by text.

6. In MS word, wrap a text around the image.

Vidyasagar University