

QP CODE: 24900026



Reg No:.....

Name:.....

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
FIRST SEMESTER MGU-UGP (HONOURS) REGULAR
EXAMINATION NOVEMBER 2024

First Semester

Discipline Specific Core Course - MG1DSCBIF100 - FUNDAMENTAL IT FOR
BIOINFORMATICS

(2024 ADMISSION ONWARDS)

Duration: 2 Hours

Maximum Marks: 50

**Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Interest (I),
Appreciation (Ap), and Skill (S)**

*Students should attempt atleast one question from each course outcome to enhance their overall
outcome attainability.*

[Learning Domain][CO No(s)]

Part A

Short Answer Questions

Answer any 5 questions.

Each question carries 2 marks

- | | | |
|---|---|---------|
| 1 | State the key features of the fourth generation of computers. | [K] [1] |
| 2 | State the function of a cache memory. | [K] [1] |
| 3 | Describe the role of a DNS server. | [U] [2] |
| 4 | List two advantages of using a high-level programming language. | [U] [3] |
| 5 | Name the primary purpose of XML. | [K] [3] |
| 6 | Name two advantages of using CSS in web development. | [K] [3] |
| 7 | Identify difference between genomics and proteomics. | [K] [4] |

(5 × 2 = 10)

Part B

Short Essay Type Questions

Answer any 4 questions.

Each question carries 5 marks

- | | | | |
|----|--|-----|-----|
| 8 | Compare and contrast the characteristics and functions of RAM and ROM. | [U] | [1] |
| 9 | Outline the differences between XML and HTML. | [K] | [3] |
| 10 | Explain how the if statement works in JavaScript with an example. | [U] | [3] |
| 11 | Define text formatting in CSS and explain its significance. | [K] | [3] |
| 12 | Explain the role of Bioinformatics in medicine and agriculture. | [U] | [4] |
| 13 | Discuss the role of biological database in bioinformatics. | [U] | [4] |

(4 × 5 = 20)

Part C

Long Essay Type Questions

Answer any 2 questions.

Each question carries 10 marks

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|----|--|-----|-----|
| 14 | Discuss the different layers of the OSI model. | [K] | [2] |
| 15 | Explain the structure of an HTML table and describe the use of tags. | [U] | [3] |
| 16 | Explain how bioinformatics evolved from early 90's and what are the major milestones in its development. | [U] | [4] |
| 17 | Explain human genome project, its primary goals and achievements. | [U] | [4] |

(2 × 10 = 20)

END OF THE QUESTION PAPER
