Daffodil International College
HSC Exam 2021
Suggestions
Information and Communication Technology

Chapter-01 (Information and Communication Technology): World and Bangladesh Perspective)
For Question 1 and No. 2
What is Global village? What is biometrics? Virtual Reality? What is artificial intelligence? What is bioinformatics? What is genetic engineering? What is nanotechnology? What is a smart home? What is the digital office? What is outsourcing and freelancing? What is information and communication technology? What is Expert System? What is telemedicine? What is robotics?

For question 3 and 4
1. Write about the effect of VR in everyday life.
2. Describe the process and usage of cryosurgery.
3. Discuss the usage and application of biometrics.
4. Discuss the process and the impact of outsourcing.
5. Explain video conferencing.
6. Explain the use of genetic engineering and nanotechnology.
7. Write the use of bioinformatics (DNA, process description of fingerprint).
8. Writing about the importance of genetic engineering and communication technology.
9. Explain the ethics of using computer.
10. What advantage do we get by using the little technology?

Chapter 02: Communication Systems and Networking
For Question 1 and No. 2
What is Data Communications? What is bandwidth or data communication speed? What is Data Communications Channel? What is the data transmission mode? What is Fiber Optic Cable? What is Wi-Fi? What is WiMAX? What is Blue-tooth? What is a computer network? What is network topology? What is computing? Explain that the data is flowing rapidly in optical fiber. Define: hub, switch, repeater, router, bridges, gateway, intranet, extranet, intranet, satellite, GSM, CDMA, microwave, modem,

For questions 3 and 4
1. Describe how many kinds of network topology and what are the advantages and disadvantages. Especially star, bus, ring topology.
2. Describe the types of bandwidth with examples.
3. Discuss the features advantages and disadvantages of synchronous and asynchronous data transmission.
4. Describe the microwave and satellites.
5. Discuss the details of the data transmission mode.
6. Describe the structure, advantages, and disadvantages of fiber optic cables.
7. Discuss the features advantages and disadvantages of the Wi-Fi.
8. Discuss the features advantages and disadvantages of Wi-MAX.
9. Discuss the type of computer network.
10. Describe the uses and functions of the modem.
11. Discuss the difficulties of the cloud computing.
12. Describe the different generations of mobile phones. Specially 3rd and 4th generation

3rd chapter number system and digital device

For Question 1 and No. 2

What is the number system? What is signed number? What is the code? 1010 What kind of numbers, explains. What is 2's complement? D7 what type of number is it? Explain. What is the parity bit? Alphanumeric, ASCII, Uni code, BCD code explain? 10 comes after 1, explain.

For questions 3 and 4

1. Convert different types of number system.
2. Describe the reasons for using binary number methods in computer systems.
3. Discuss different types of codes.
4. Make the difference between the BCD code and the binary code.
5. Binary System is used in all kinds of digital device, explain.
6. 2's compliment, Binary addition , Binary Subtraction.

Binary Addition and Subtraction (such as)

1. Add $(11101.101)_2$ and $(1001.001)_2$
2. Subtract $(1001.001)_2$ from $(11101.101)_2$
3. Add $(2A)_{16}$ and $(12)_8$
4. Add $(2AB.12)_{16}$ and $(456.35)_8$. Then convert the result in Decimal, Octal and Hexadecimal.

Addition and Subtraction in 2's compliment (such as)

1. Add $(+13)_{10}$ and $(-8)_2$ in 2's compliment.
2. Add $(-13)_{10}$ and $(+8)_2$ in 2's compliment.
3. Subtract $(+8)_2$ from $(+13)_{10}$ in 2's compliment.

Chapter 4: Introduction to Web Design and

For Question 1 and No. 2

What is webpage? What is web site? What is HTML? What is domain name? What is hyperlink? What is http? What is domain and hosting? Describe the static and dynamic web site. Give the benefit of the web site. What is home page? What is web portal? Why anybody has to buy domain name? Explain the structure of the web site's network of search engines. IP Address, URL, DNS, www, ICANN

For questions 3 and 4

1. Describe how many types of web pages and what they are.
2. What are the advantages of creating web pages using HTML?
3. Describe the basic things of HTML.
4. Describe the basic tag of HTML.
5. What is formatting tag of HTML? Describe the name and work of formatting tags.
6. Write HTML syntax. By using HTML syntax create a web page.
7. What is the difference between domain and hosting?
8. Creating a web page by using different tags (such as Font tag, table tag, hyperlink tag, image tag, formatting tag, superscript tag, subscript tag, order list tag, un order list tag etc.)
9. What is web browsing? To add images to the webpage, write the necessary tags.
10. What is Web Site Structure? Explain the easy way of creating a web site.
11. Describe how to create a web page.
12. How a website can be published. Explain with reason.
13. To create a table on the webpage, write the necessary tags.
14. For hyperlinking on different pages on the webpage, write the necessary tags.
15. Describe the logic of static and dynamic web pages.