Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 80424

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2024.

Sixth/Seventh/Eighth Semester

Computer Science and Engineering

CS 8078 – GREEN COMPUTING

(Common to : Computer and Communication Engineering/Information Technology)

(Regulations – 2017)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   Express SMART approach in terms of green policies.

2.   Mention the environmental challenges in the use of mobile technologies.

3.   State the factors influencing Green Data center.

4.   Highlight the major phases of GIS.

5.   How will you reduce the energy consumption in air conditioner?

6.   What is the difference between refurbishing and recertifying?

7.   Define green washing.

8.   Deduce the role of nanotechnologies in reducing carbon emissions.

9.   State the green business objectives of a hospital.

10. Mention the practices to be adopted in order to save energy in an organization.

PART B — (5 × 13 = 65 marks)

11. (a)   Discuss how information technology influences the business, society and environment and list the green IT strategies which are beneficial for an organization.

Or

     (b)   Explain the carbon footprint of an organization based on coverage, intensity and duration with diagram.

12. (a) Discuss the role of mobile technologies in business processes that aid in achieving better carbon efficiency.

Or

(b) With a neat sketch, describe the content providers and consumers of Green ICT information portal in Green Enterprise Architecture.

13. (a) Describe the different types of communication methods employed for conveying information and specify the characteristics of an effective green team.

Or

(b) Elaborate the best ways of making Green PC and enumerate the differences between CRT and LCD monitors.

14. (a) Explain the various elements of Green ICT framework with a neat diagram.

Or

(b) Summarize the features of climate change protocols and list the primary focus of ISO 14000 family of standards for environment management systems.

15. (a) Elaborate the major actions in enactment and review phases of GET for packaging industry.

Or

(b) Explain the GET approach of a company operating in the telecommunications domain.

PART C — (1 × 15 = 15 marks)

16. (a) Consider green HR and changing organizational structures and suggest potential mapping of green skills to SFIA levels by applying SFIA skill set for positioning green IT roles.

Or

(b) Analyze collaborative environmental intelligence and specify future investigations in relation with collaborative EI.