19. (a) Explain how IoT is useful in Agriculture.

Or

(b) Summarize the working of Smart Energy.

20. (a) List various communication protocols used in cloud Computing.

Or

(b) Analyze SaaS, PaaS and laaS.

SECTION C — (3 × 10 = 30)

Answer any THREE Questions.

21. Describe the purpose of Embedded systems.

22. Discuss the general concept of Object Oriented Programming.

23. Explain the physical and logical design of IoT.

24. Illustrate how IoT is used in environmental Protection.

25. Discuss the working of Cloud Architecture.

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S.No. 2812 **P 22 ELE 1 A**

(For candidates admitted from 2022–2023 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Electronics — Elective

EMBEDDED SYSTEMS

Time : Three hours Maximum : 75 marks

SECTION A — (20 marks)

I. (A). Choose the correct answer: (5 × 1 = 5)

1. How an Embedded System communicate with the outside world

(a) memory (b) output

(c) peripherals (d) input

2. _____ translates high level programming language to a lower level language

(a) BIOS (b) compiler

(c) Assembler (d) Linker

3. Who coined the term JoT

(a) IBM (b) Kevin Ashton

(c) Ross Ihaka (d) Guido van Rossum

4. Identify among the following which is not an loT platform

(a) Salesforce

(b) AWS

(c) Microsoft Azure

(d) Flipkart

5. IaaS stands for _____

(a) Internet as a Service

(b) Infrastructure as a Service

(c) Internet as a Software

(d) Infrastructure as a Software

(B). Fill in the blanks: (5 × 1 = 5)

6. What is the approximate data access time of SRAM _____

7. An example for embedded development software tool _____

8. loT gateway must provide _____

9. _____ component of an loT system that executes a program

10. QoS stands for _____

II. Answer ALL the questions. (5 × 2 = 10)

11. Embedded Systems.

12. Define Pointers.

13. Define Internet.

14. What is Smart in loT?

15. What is Cloud Computing?

SECTION B — (5 × 5 = 25)

Answer ALL questions choosing either (a) or (b).

16. (a) List the major Application areas of embedded systems.

Or

(b) Explain the characteristics of embedded system.

17. (a) Discuss how the functions are useful in embedded programming.

Or

(b) Describe the various Data types in embedded C.

18. (a) Explain the characteristics of IoT

Or

(b) Discuss how internets useful in IoT.