

Registration Number:

Date & Session



**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU -27**  
**BCA (DATA ANALYTICS)-VI SEMESTER**  
**SEMESTER EXAMINATION: APRIL 2023**  
(Examination conducted in May / June 2024)  
**BCADADE 6423 – AI AND IOT**  
**(For current batch students only)**

**Time: 2 Hours**

**Max Marks: 60**

This paper contains ONE printed page and THREE parts

**PART - A**

**Answer ALL the questions**

**5 x 2 = 10**

1. Define Rationality in AI.
2. Write about PEAS.
3. Point out the challenges faced by Internet of Things.
4. Distinguish IEEE 802.15.4g and IEEE 802.15.4e.
5. Name the IoT system building blocks

**PART – B**

**Answer any FIVE questions**

**5 x 4 = 20**

6. Write agent types and their PEAS descriptions with example.
7. Discuss about Iterative Depth First Search with example.
8. Write about hill climbing algorithm with example.
9. Discuss about sensors and actuators.
10. Compare and contrast the physical and MAC layers of IoT Access technologies with suitable illustrations.
11. Summarize in detail about embedded computing.
12. Generalize the various enabling technologies of IoT.

**PART – C**

**Answer any THREE questions**

**3 x 10 = 30**

13. Summarize the properties of task environments.
14. Explain various local search algorithm in detail.
15. Compare and contrast the physical and MAC layers of IoT Access technologies with suitable illustrations.
16. Describe the seven layers of IoT Reference model designed by IoTWF.

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