### SYNERGY INSTITUTE OF ENGINEERING AND TECHNOLOGY, DHENKANAL



# Near NH-55, Banamaliprasad – 759001

# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING NBA ACCREDITED

#### **Assignment-III**

Full Marks-40 Duration- Within 1 Week from Notification Name- Registration No-

**Subject with Code:** Computer Organization and Architecture (CSPC2005)

Year & Semester: 2nd & IV

Course & Branch: B. Tech. & CSE
Academic Session: 2024, 2025

**Academic Session:** 2024-2025

Course Outcome	Total Marks	Marks Secured	Signature of Evaluator
CO3	40		
Level	<b>Total Marks</b>	Marks Secured	
L1-L3			
L4-L6			

### Section-A Answer All Questions

1. What are the classification of data hazards?	[2 marks] [CO3] [L2]
2. How data hazard can be prevented in pipelining?	[2 marks] [CO3] [L2]
3. State different types of hazards that can occur in pipeline.	[2 marks] [CO3] [L2]
4. What are Hazards?	[2 marks] [CO3] [L2]

## Section-B Answer All Questions

1. Differentiate between vector and array processor	[6 marks] [CO3] [L2]
2. Explain operand forwarding with an example.	[6 marks] [CO3] [L2]

### Section-C Answer All Questions

1. Differentiate between RISC and CISC	[10 marks] [CO3] [L2]
2. Explain Flynn's classification in detail	[10 marks] [CO3] [L2]

#### **Additional Questions**

- 1. Explain pipelining with example.
- 2. Differentiate between tightly coupled and loosely couple MIMD.
- 3. Explain cache coherence.