

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BCA DEGREE EXAMINATION DECEMBER 2025
(First Semester)

Branch – COMPUTER APPLICATIONS

COMPUTER ORGANISATION AND ARCHITECTURE

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks

$$(10 \times 1 = 10)$$

Continued

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain two classes of storage with example. (OR)	K2	CO1
	11.b.	What is the problem with floating-point? Give example.		
2	12.a.	Analyze one address instruction format $(A+B)*(C+D)$. (OR)	K3	CO2
	12.b.	Examine Stack Organization with example.		
3	13.a.	How interrupt are used in I/O transfer? (OR)	K3	CO3
	13.b.	Compare Single bus and multiple bus organization.		
4	14.a.	Analyze how cache memory is measured. (OR)	K4	CO4
	14.b.	What is a memory management concept and memory management requirement?		
5	15.a.	List and explain the advantage of parallel processing. (OR)	K4	CO5
	15.b.	Discuss about multicore system.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Explain about connection between the processor and the memory with neat sketch.	K4	CO1
2	17	Analyze different types of addressing modes with example.	K4	CO2
3	18	Elaborate the steps for DMA data transfer.	K4	CO3
4	19	Illustrate virtual memory with neat sketch.	K4	CO4
5	20	Discuss GPU architecture fundamentals.	K4	CO5

Z-Z-Z

END