



DEPARTMENT OF COMPUTER SCIENCE

2025 CORE ASSESSMENT TEST



Estd. 1853

Government College(A) Rajahmundry

Department of Computer Science

Core Assessment Test (CAT)

Report

Time: 02:00 PM To 04:00 PM

Date:10-10-2025

Introduction

The Core Assessment Test was conducted for newly admitted students to evaluate their entry-level skills in fundamental areas required for successful academic learning. The assessment helps identify student strengths and areas that need focused support during the initial phase of the course. The Department of Computer science organized a Bridge Course as a part of Deeksharambham focusing on the Basic Knowledge about Computer fundamentals and enhancing the skill required to the students are well prepared for the Current academic year.

Objectives of the Core Assessment

- To evaluate foundational competencies in Computer Science.
- To identify student strengths and weaknesses at the time of joining.
- To provide data-driven insights for designing bridge courses and remedial training.
- To support and guide students toward improving essential academic skills.
- To help the institution plan orientation programs, mentoring, and skill-building workshops based on batch requirements.

Expected Outcomes of the Assessment

For Students:

- Gain a clear understanding of their current skill levels.
- Receive targeted feedback for improvement.
- Get guidance on areas that need focused learning.

For Faculty / Institution:

- Ability to classify students based on skill levels.
- Identify gaps requiring Bridge Courses or Foundation Skill Training.
- Establish academic support and mentoring plans.
- Improve teaching strategies for the new batch.

Course Syllabus:

Module I: Milestone of computer evolution-First Generation, Second Generation, Third Generation,Fourth Generation, Fifth Generation.

Module II: Input Devices –keyboard, Mouse, Scanner, Joystick, Light Pen, Micro Phone etc.Output Devices-Soft Copy Devices, Hard Copy Devices.

Module III: Computer Memory:Main Memory –Random Access Memory, Read Only Memory. Secondary Memory-Fixed Storage, Removable Storage.

Module IV: Number system-Binary, Octal, decimal, and Hexadecimal. Number System Conversions:Decimal to Binary, octal, Hexadecimal, Octal to decimal, Binary, Hexadecimal, Binary to Decimal, Octal, and Hexadecimal Conversions.

Bridge Course – Concept Building Sessions

Session 1:

Date: 6-10-2025

Time:2:00 pm – 4:00 pm

Venue: Techno Sphere

Topic: Generations of Computers **Lecturer:** Dr.D.Suneel Kumar

Demonstrate the Generations of computers From First to Fifth.



Figure 1: Generations demonstration



Figure 2: Generations demonstration

Session 2:

Date: 7-10-2025

Time:2:00 pm – 4:00 pm

Venue: Room No:89

Topic: Number Systems

Lecturer: U.Sandhya Rani

Demonstrate the Number Systems Conversions From one Radix to Another.



Figure 3 : Number Systems demonstration

Session 3:

Date: 8-10-2025

Time:3:00 pm – 4:00 pm

Venue: Digi Hub

Topic: Memory Concepts

Lecturer: P.Narasinga Rao

Demonstrate the Memory Concepts- Primary Memory, Secondary Memory.



Figure 4: Memory Concepts demonstration

Session 4:

Date:9-10-2025

Time:2:00 pm – 3:00 pm

Venue: Room No:89

Topic: Input Devices

Lecturer: Ch. Sujatha

Demonstrate and Visualize the Input Devices.



Figure 5: Input Devices demonstration

Session 5:

Date:10-10-2025

Time:10:00 am – 11:00 am

Venue: Room No:89

Topic: Output Devices

Lecturer: V. Bala Parameswari

Demonstrate and Visualize the Output Devices.



Figure 6: Output Devices demonstration

CAT EXAM:

1. The computers of the First Generation used which technology?

- a) Transistors
- b) Vacuum tubes
- c) Microprocessors
- d) Integrated Circuits

Answer: b

2. The major electronic component of Second Generation computers was:

- a) Vacuum tubes
- b) Microprocessors
- c) Transistors
- d) ROM chips

Answer: c

3. Integrated Circuits (ICs) were used in which generation of computers?

- a) First
- b) Third
- c) Fifth
- d) Second

Answer: b

4. The introduction of microprocessors began which generation?

- a) Fourth
- b) Third
- c) Second
- d) Fifth

Answer: a

5. Fifth Generation computers are associated with:

- a) Vacuum tube technology
- b) Artificial Intelligence
- c) Electromechanical relays
- d) Magnetic tapes

Answer: b

6. Which of the following is an input device?

- a) Printer
- b) Monitor
- c) Joystick
- d) Speaker

Answer: c

7. A light pen is used as:

- a) Storage device
- b) Pointing device
- c) Output device
- d) Hard copy device

Answer: b

8. Which of the following is a soft copy output device?

- a) Printer
- b) Monitor
- c) Plotter
- d) Laser printer

Answer: b

9. Dot matrix is a type of:

- a) Scanner
- b) Hard disk
- c) Printer
- d) Microphone

Answer: c

10. Which device is NOT an input device?

- a) Keyboard
- b) Scanner
- c) Monitor
- d) Microphone

Answer: c

11. RAM is an example of:

- a) Secondary memory
- b) Main memory
- c) Input device
- d) Output device

Answer: b

12. ROM stores:

- a) Temporary data
- b) Permanently written instructions
- c) User applications
- d) Only multimedia data

Answer: b

13. EEPROM can be:

- a) Erased using ultraviolet light
- b) Electrically erased and reprogrammed
- c) Used as input device
- d) A soft copy device

Answer: b

14. Hard Disk Drive (HDD) is a type of:

- a) Main memory
- b) Fixed secondary storage
- c) Temporary memory
- d) Removable memory

Answer: b

15. Pen drive belongs to:

- a) Fixed storage
- b) Main memory
- c) Removable storage
- d) ROM

Answer: c

16. Binary number system base is:

- a) 2
- b) 8
- c) 10
- d) 16

Answer: a

17. Hexadecimal number system uses digits:

- a) 0–7
- b) 0–9 only
- c) 0–9 and A–F
- d) A–Z

Answer: c

18. Convert Decimal 8 into Binary:

- a) 1000
- b) 111
- c) 1010
- d) 0101

Answer: a

19. Convert Binary 1010 into Decimal:

- a) 5
- b) 7
- c) 10
- d) 12

Answer: c

20. Convert Octal 10 into Decimal:

- a) 8
- b) 2
- c) 10
- d) 6

Answer: a

After completion of bridge course Department conducted an Online **Core Assessment Test (CAT)** to the students to understand their learning abilities.

Based on the performance in the CAT exam and categorize them into Advanced, Moderate, and Slow Learners to provide targeted support.

Learner Category	Marks Range	Description
Advanced Learners	17–20	Students with excellent understanding and strong performance in CAT.
Moderate Learners	10–16	Students with average performance, requiring some guidance to improve.
Slow Learners	<10	Students who need focused support and remedial measures to enhance learning.

Student Participation Summary

Total Students: 122

Students Appeared: 92

Observations After CAT Exam:

Category	Marks Range	No. of Students	Description
Advanced Learners	17–20	37	Demonstrated excellent understanding and presentation skills (Grade A)
Moderate Learners	10–16	28	Displayed moderate performance, requiring some improvement (Grade B/C)
Slow Learners	<10	27	Needed significant support and mentoring to improve skills (Grade D)

Key Findings

Skill Gaps Identified:

- Low numerical ability
- Limited computer knowledge
- Poor analytical reasoning

Following pedagogical tools are recommended for the students based on their learning abilities.

Learners	Pedagogical tools
Advanced Learners	Moocs, Jigsaw
Moderate Learners	Graded-Assignment, Peer learning
Slow Learners	Remedial classes, Bridge course

Government College (Autonomous) , Rajahmundry

Department of Computer Science

I B.Sc-Computer Science & AI Honours

CAT Exam Report

Sl. No	Student Name	Marks
1	A. SURYA	19
2	AnuSree	18
3	banalasanth	20
4	Busala Purnima	17
5	Danieljulius Chituka	20
6	Dinesh	18
7	Divya Rajasri	19
8	FrancesBlessing Brent	17
9	GVaralakshmi Devi	20
10	Harshitharamya	18
11	Hepsi	19
12	J.Amaravathi	17
13	J.Sirisha	20
14	kadiyapusananteja	18
15	kirankumar	19
16	MogantiDeepthi Ramani	20
17	O.PAVAN	17
18	P.yamini	19
19	PaipuriSatya Sri Pavan	18
20	patnalaveera mounika	20
21	prasannasri	17
22	Ramakrishnaangara	18
23	RaparathiMaheswari	19
24	S.KUMARASWAMY	20
25	sanju	17

26	ShaikYakuba	18
27	sharon	19
28	sk.sadhik	20
29	SKSUFUYANA	17
30	Smuthyala ramalakshmi	18
31	T.Manasa	19
32	T.Samuel Raju	20
33	V.Anusha	17
34	A.shalini	18
35	D.Tarak Sai	19
36	Dineshvegireddi	20
37	k.rani	18
38	Kolusuvijay gowtham tharun	16
39	KrishnaKrishna	14
40	mnagavaishnavi	12
41	pmother teresa	15
42	A.Bharathi	16
43	DIGUMARTHIBLESSY	14
44	gundarapulavanya	13
45	JayasriSai Prasanna	12
46	K.SriVyshnavi	15
47	konetinani yogendra venkatesh	14
48	Sk.yasmeen	13
49	B.jesika	16
50	B.Lakshmi	15
51	bommidikeerthi latha	12
52	Devaki	14
53	Durga	13
54	mollinagavaishnavi	10
55	sanju.ch	16
56	VENKAT	15
57	p.Meghana	12

58	P.PavaniDurga Lakshmi	9
59	Jpavani sree	8
60	kiran	7
61	bhuvananaga deveswari	6
62	pmeghana	5
63	Sai	4
64	satish	3
65	Umajagadishwari	2
66	S.Sanjana	1
67	B.mohannagendra	2
68	G.swathi	3
69	KVENKATRAO	4
70	Sarojini	5
71	BEHETHsai.G	6
72	a.purnasandhya sri	7
73	A.sowmyasri	8
74	DineshKarthik	16
75	N.Bhavani	15
76	P.Sai Teja	14
77	VaralakshmiDevi Girajala	12
78	Chinni.Nandini lakshmi	10
79	J.pavanisri	9
80	LikhithaPolimeru	8
81	Y.Satya durga devi	7
82	B.kiran	6
83	Deepika.s	5
84	DigumarthiBlessy	4
85	Gayathri	3
86	Hemasri	2
87	KumarSambani	1
88	Sivasurya	3
89	SnigdhaEvanjilin	4

90	SReshma	5
91	SURYATEJA	6
92	VeldurtiAnusha	7