PET ENGINEERING COLLEGE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Academic Year: 2023 - 2024(Even Semester)
Degree, Semester & Branch: B.E, II & CSE
Course Code & Title: CS3451 & Introduction to Operating systems
Name of the Faculty member : J.Umadevi, AP/CSE

Innovative Practice Description

Unit / Topic: Unit I/ Overview of Operating Systems
Course Outcome: CO1
Activity Chosen: Crossword puzzle
Date of the Activity: 09-04-2024

Justification:

To identify the understanding level of a student about functions, a game-based activity was chosen to do the revision of topic instead of carrying out regular quiz tests.

- **Time Allotted for the Activity: 15 Minutes**

Details of the Implementation:

A crossword is an interesting word puzzle activity that helps the students recollect the concepts and find the answers individually. It is one type of game, so this is an enjoyable activity rather than a regular multiple-choice questions test. The activity was conducted in a classroom for a duration of 15 minutes. The students were given with a crossword puzzle of 15 questions on paper. They have to think and write the answers to the given puzzle. The activity was given to the students. After the completion the answers were discussed with the students at the end of the class to make them to know the answer of all the questions.

- **CO – PO / PSO mapping:**

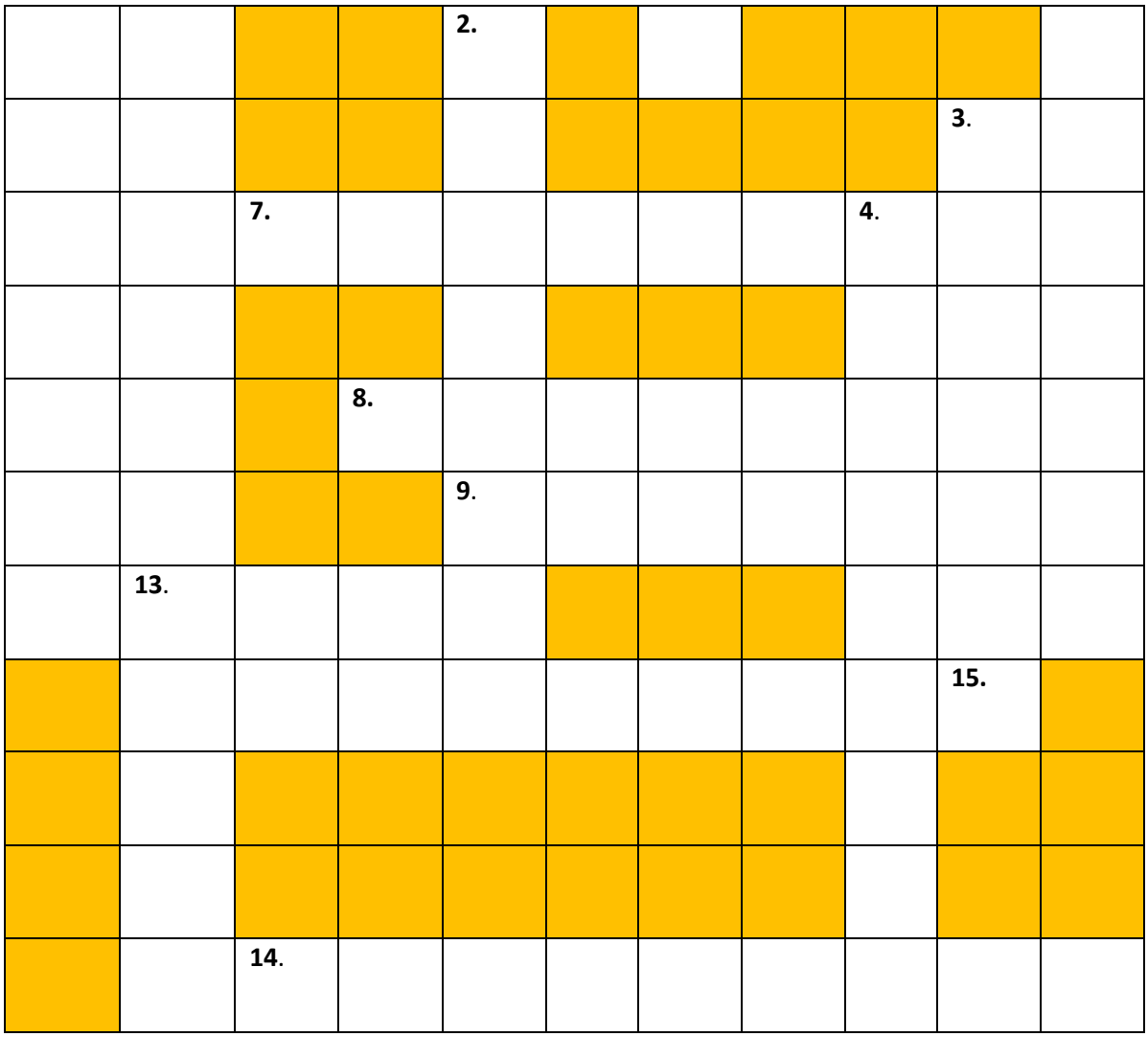
CO	PO1	PO2	PO3	PO4	PO9	PO10	PO11	PO12	PSO1	PSO2
1	3	3	2	2	3	2	3	1	2	1

- **Images / Screenshot of the practice:**

Fig 1: Cross word puzzle with question

Date :09-04-2024

1.	**11**.									
10.						**6**.				**12**.
	5.									



DOWN

1. Part of the Operating System which is responsible for file management.
2. A_____ is a running program that serves as the foundation for all computation.
3. Within a program, a_____is a separate execution path.
4. How many instructions can a processor do per second?
5. _____is Software that allows the operating system to communicate with hardware devices.
6. Which connector interface designed to connect computer to peripheral devices, such as printers, mouse, keyboards

ACROSS

7. The executable file which gets executed.

8. _____is the core component of an operating system that manages hardware resources and provides essential services.
9. _____is the user interface that allows interaction with the operating system through commands.
10. _is a signal from hardware or software that interrupts the normalexecution of a program.
11. Name the initial program that loads the operating system into memory during system startup.
12. A series of the most widely used desktop operating systems, made by _____
13. _____type of computer memory, which temporarily stores computer information such as operating system, application programs and data so they can be immediately accessed by the CPU.
14. _is main storage device of a computer; commonlyreferred as an internal device and used to permanently store data.
15. Memory is known as_____when all the data is lost if the power is switched off.

Fig 2: Sample answer

1.F	11. B	O	O	T	L	O	A	D	E	R
10. I	N	T	E	R	R	6. U	P	T		12. M
L	5. D					S				I
E	E			2. P		B				C
S	V			R					3. T	R
Y	I	7. P	R	O	G	R	A	4. M	H	O
S	C			C				I	R	S
T	E		8. K	E	R	N	E	L	E	O

E	D			9 S	H	E	L	L	A	F
M	13. R	A	M	S				I	D	T
	I	E	L	I	T	A	L	O	15. V	
	V							N		
	E									
	R	14. H	A	R	D	D	R	I	V	E

Reflective Critique:

- **Feedback of practice from students :**
  - The crossword puzzle activity was very interesting and able to identify the appropriate name of the event handler.
  - The puzzle activity received enthusiastic responses from every student.
- **Benefit of the practice:**
  - Student's understanding on concepts of function is improved.
  - This activity helps to test the level of understanding of the students
- **Challenges faced in implementation:**
  - Few students found it difficult to complete the puzzle

References:

- Abraham Silberschatz, Peter Baer Galvin and Greg Gagne, "Operating System Concepts"‖, 10th Edition, John Wiley and Sons Inc., 2018.
- Andrew S Tanenbaum, "Modern Operating Systems", Pearson, 5th Edition, 2022 New Delhi.
- https://www.wikipedia.org/wiki/Operating_system
- https://www.geeksforgeeks.org/introduction-of-operating-system-set-1/

Signature of Faculty Member **HOD**