



Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College of Engineering , Satara.
Department of Computer Sciences & Engineering
Academic Year 2020-21 SEM II

Class: TY-CSE
Course: Internet of Things (BTCOE604)
Course Coordinator: Prof. Tarannum Sayyad

INNOVATIVE
PEDAGOGY ACTIVITIES
REPORT

Pedagogy refers to a student centred **teaching** and learning (SCL) approach where educators are reflective in their theory, practice and policy implementation in **teaching/learning**, resulting to positive impacts in the learners.

Having a well-thought-out **pedagogy** can improve the quality of your **teaching** and the way students learn, helping them gain a deeper grasp of fundamental material. Being mindful of the way we **teach** can help us better understand how to help students achieve deeper **learning**.

Keeping in mind the importance of pedagogical approach a Unitwise Pedagogy activity was posted on Google Classroom of the students and sufficient time was given to the students to solve the activity.

Following are the Unit wise details of pedagogy activities conducted during the Semester II :

UNIT-I : IoT Introduction

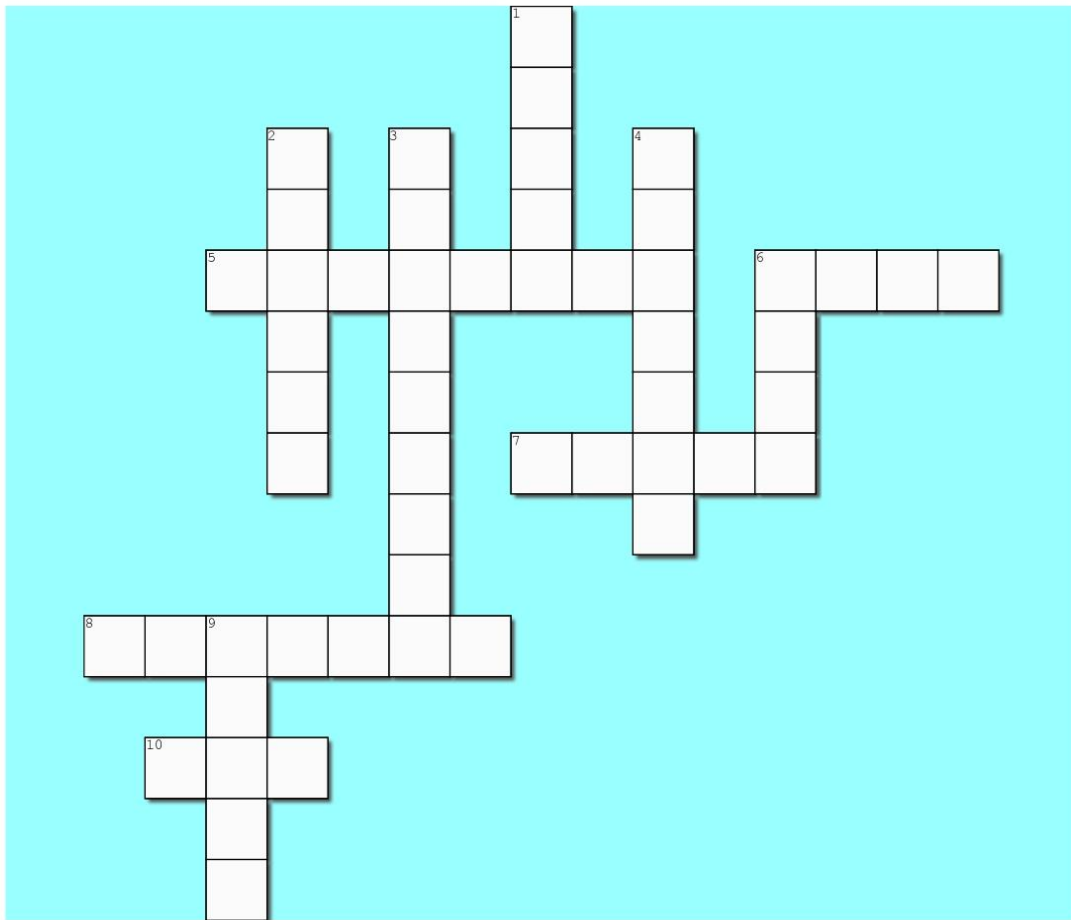
Name of the Activity: CROSSWORD PUZZLE

Activity Description: Students have to fill the white squares with letters, forming words or phrases, by solving clues, which lead to the answers.

Skills Enhanced: Improved Vocabulary , Reasoning, Problem solving, Stress relief.

Name: _____

INTERNET OF THINGS : PUZZLE I



Created using the Crossword Maker on TheTeachersCorner.net

Across

5. CONNECTION OF NETWORKS
6. TOPOLOGY IN WHICH EVERY DEVICE IS CONNECTED TO EVERY OTHER DEVICE
7. TAG GIVEN TO THE DEVICES IN IOT
8. M in M2M
10. ALSO REFERED SOMETIMES AS EDGE

Down

1. CREATOR OF PHRASE ' INTERNET OF THINGS '
2. THING IN IoT
3. ANOTHER NAME GIVEN TO SMART FARMING
4. MICROCONTROLLER IN IoT IS ALSO CALLED AS
6. PROTOCOL USED IN IOT
9. WHERE THE DATA CENTER OF IOT APPLICATION IS LOCATED

Sample Solution by student :

**INTERNET OF THINGS :
PUZZLE I**

RESET **PRINT** **SHARE LINK**

6 TAG GIVEN TO THE DEVICES IN IOT

ACROSS

- 2 M-in-M2M
- 5 CREATOR OF PHRASE "INTERNET OF THINGS"
- 7 PROTOCOL USED IN IOT

DOWN

- 1 CONNECTION OF NETWORKS
- 2 TOPOLOGY IN WHICH EVERY DEVICE IS CONNECTED TO EVERY OTHER DEVICE

UNIT-II : Smart Objects

Name of the Activity: **SEARCHWORD**

Activity Description: Students have to find the hidden words. A **word search**, is a word game that consists of the letters of words placed in a grid, which usually has a rectangular or square shape. The objective of this puzzle is

to find and mark all the words hidden inside the box. The words may be placed horizontally, vertically, or diagonally. Often a list of the hidden words is provided.

Skills Enhanced: Improved Vocabulary , Reasoning, Problem solving, attitude of Persistence, Effective stress relief.

Name: _____

SENSOR , ACTUATOR AND IOT ACCESS

N	S	P	C	E	L	L	U	L	A	R	L	C	C	H	O	B	F
S	P	N	E	U	M	A	T	I	C	V	R	O	K	F	B	P	T
P	H	C	H	I	R	S	E	N	S	O	R	N	P	G	L	R	V
R	E	Y	R	Y	L	O	W	P	A	N	T	S	O	Y	U	E	L
O	W	P	A	N	D	M	J	L	S	I	H	T	S	R	E	S	O
X	T	E	M	P	E	R	A	T	U	R	E	R	I	O	T	S	S
I	Z	I	G	B	E	E	A	T	A	E	I	A	T	S	O	U	S
M	W	M	M	G	V	V	X	U	C	E	O	I	I	C	O	R	Y
I	I	K	Q	W	P	D	U	V	L	N	H	N	O	O	T	E	H
T	F	L	F	T	E	T	A	C	T	I	L	E	N	P	H	I	V
Y	I	W	A	C	T	U	A	T	O	R	C	D	R	E	N	U	S
T	A	C	C	E	L	E	R	O	M	E	T	E	R	C	H	D	Y

Find the following words in the puzzle.
Words are hidden → ↓ and ↘ .

ACCELEROMETER
ACTUATOR
BLUETOOTH
CELLULAR
CONSTRAINED
GYROSCOPE
HYDRAULIC

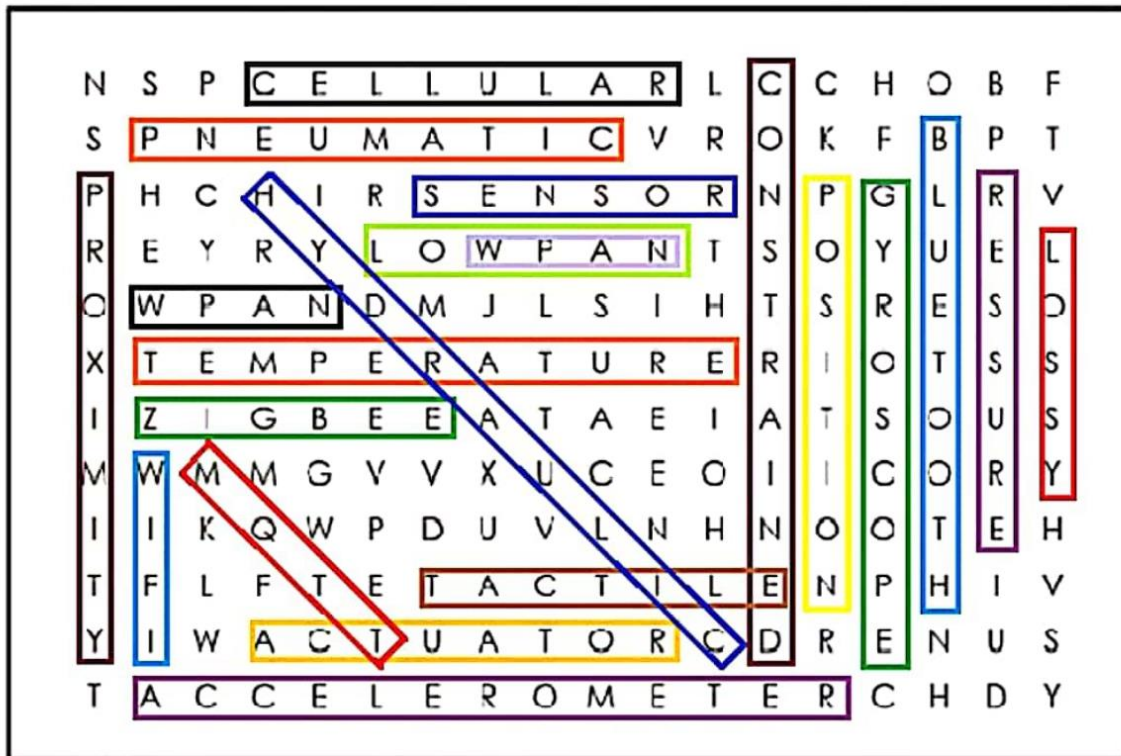
LOSSY
LOWPAN
MQTT
PNEUMATIC
POSITION
PRESSURE
PROXIMITY

SENSOR
TACTILE
TEMPERATURE
WIFI
WPAN
ZIGBEE

Sample solution by Student:

Name: vishwajeet kadam

SENSOR , ACTUATOR AND IOT ACCESS



Find the following words in the puzzle.
Words are hidden → ↓ and ↘ .

ACCELEROMETER
ACTUATOR
BLUETOOTH
CELLULAR
CONSTRAINED
GYROSCOPE
HYDRAULIC

LOSSY
LOWPAN
MQTT
PNEUMATIC
POSITION
PRESSURE
PROXIMITY

SENSOR
TACTILE
TEMPERATURE
WIFI
WPAN
ZIGBEE

Sample solution by Student:

IoT Activity III

Double Buzz

NTTHGGFERANAE
F R A G M E N T A T I O N

HMEESROV
M E S H O V E R

ENHSURMED
M E S H U N D E R

COFA
C O A P

MTQT
M O T T

FANOLW
L O W P A N

PTD
T O P

RREKOS
B R O K E R

HULEEIPSR
P U B L I S H E R

BESRURCBST
S U B S C R I B E R

VIP
I P V 6

DAASC
S C A D A

SBOMUD
M O D B U S

NDP
D N P 3

THSCI
T I S C H

IPHRSORCAEEDOHENS
H E A D E R C O M P R E S S I O N

POIS
I P O S

ISWUN
W I S U N

ATATOAPNDI
A D A P T A T I O N

TPINTZOANOZI
O P T I M I Z A T I O N

N E E D O F I P
O P T I M I Z A T I O N

Prepared By: Tarannum sayyad

Solved By: Shifa Bagwan

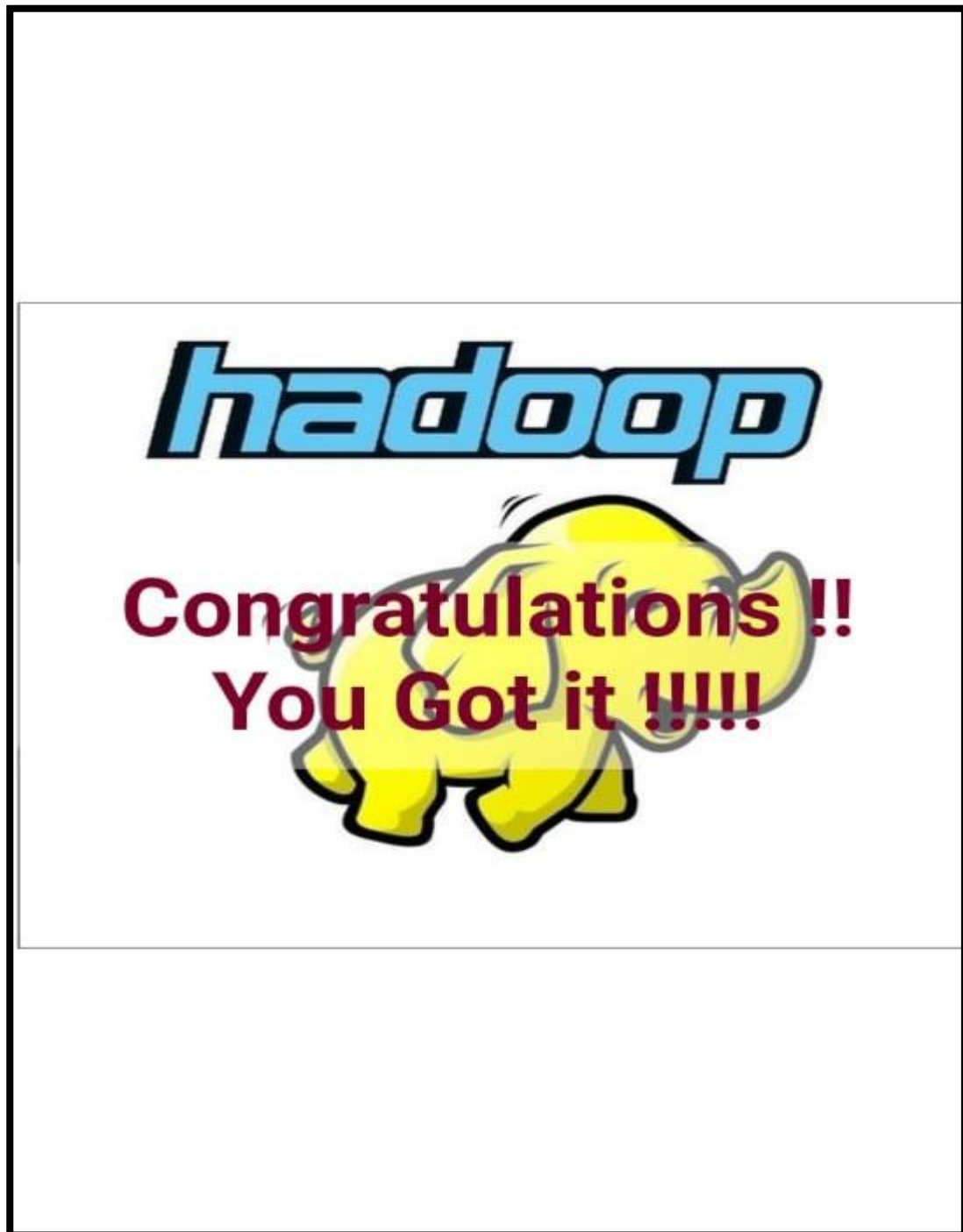
UNIT-IV : IoT & Data Analytics

Name of the Activity: **Find the Picture**

Activity Description: Students have to solve a jig saw puzzle and form a picture out of it.

Skills Enhanced: Reasoning, Problem solving, attitude of Persistence, Effective stress relief.

Sample solution by student:



UNIT-V : IoT End Devices




Name of the Activity: **SEARCH THE WORD**

Activity Description: Students have to find the hidden words. A **word search**, is a word game that consists of the letters of words placed in a grid, which usually has a rectangular or square shape. The objective of this puzzle is to find and mark all the words hidden inside the box. The words may be placed horizontally, vertically, or diagonally. Often a list of the hidden words is provided.

Skills Enhanced: Improved Vocabulary , Reasoning, Problem solving, attitude of Persistence, Effective stress relief.

Sample solution by student:

SEARCH THE WORDS

 **RESET**  **PRINT**  **SHARE LINK**

Q	D	B	S	Q	A	C	A	C	B	U	R
C	S	A	S	E	R	L	R	A	V	K	O
E	D	C	T	D	C	O	T	P	H	B	A
C	M	I	R	A	B	U	V	T	O	A	D
I	T	F	A	T	C	D	R	C	Z	S	P
V	E	F	T	E	L	E	S	I	I	A	R
R	E	A	E	G	G	I	N	S	T	H	I
E	R	R	G	L	C	D	Y	T	C	Y	C
S	T	T	Y	J	E	L	E	T	E	J	I
L	S	M	L	T	A	H	I	F	F	R	N
O	S	Y	F	N	I	W	X	R	D	R	G
F	I	U	A	C	S	C	T	R	A	M	S

HINTS

STREET CITY DATACENTER SERVICE
CLOUD SMART CISCO TRAFFIC
ROADPRICING ANALYSIS SECURITY