ROHINI COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)
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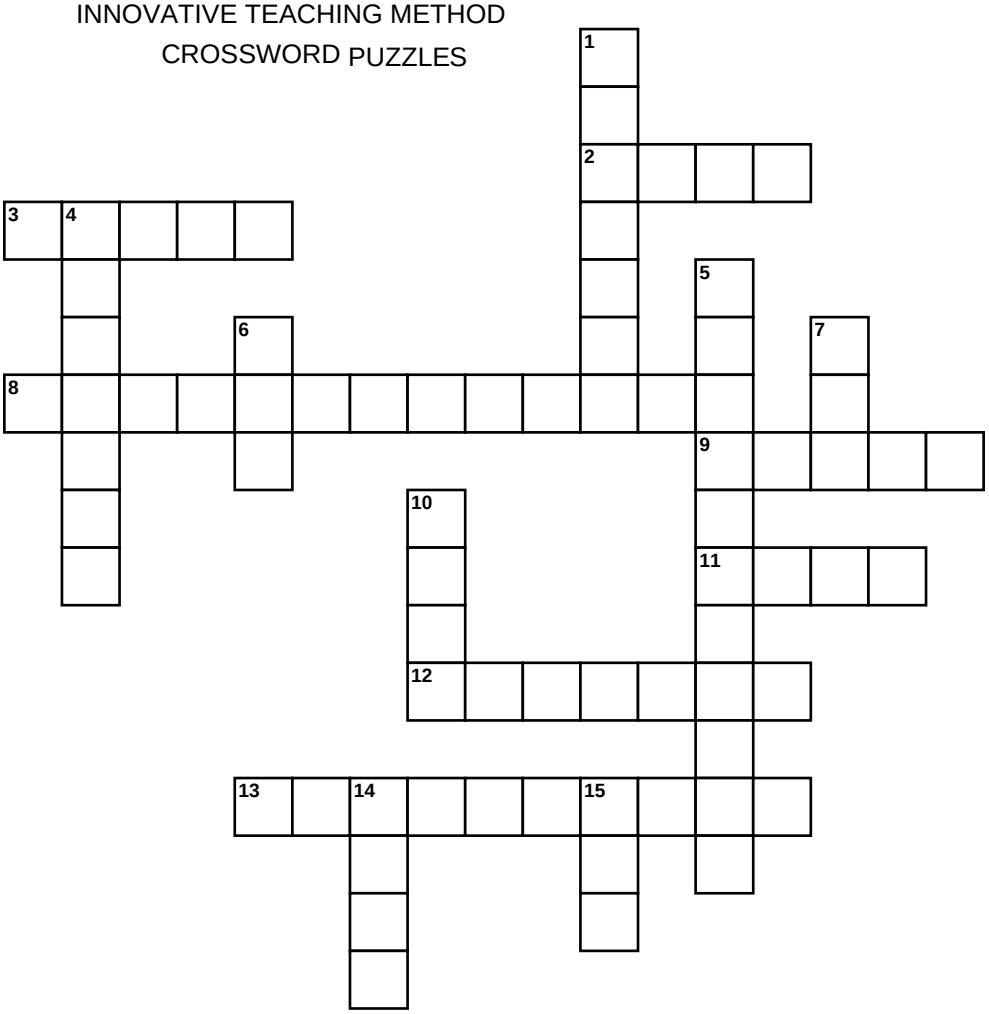
KANYAKUMARI, TAMIL NADU

24EC302 DIGITAL LOGIC CIRCUITS AND DESIGN

I YEAR II SEM ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

INNOVATIVE TEACHING METHOD

CROSSWORD PUZZLES



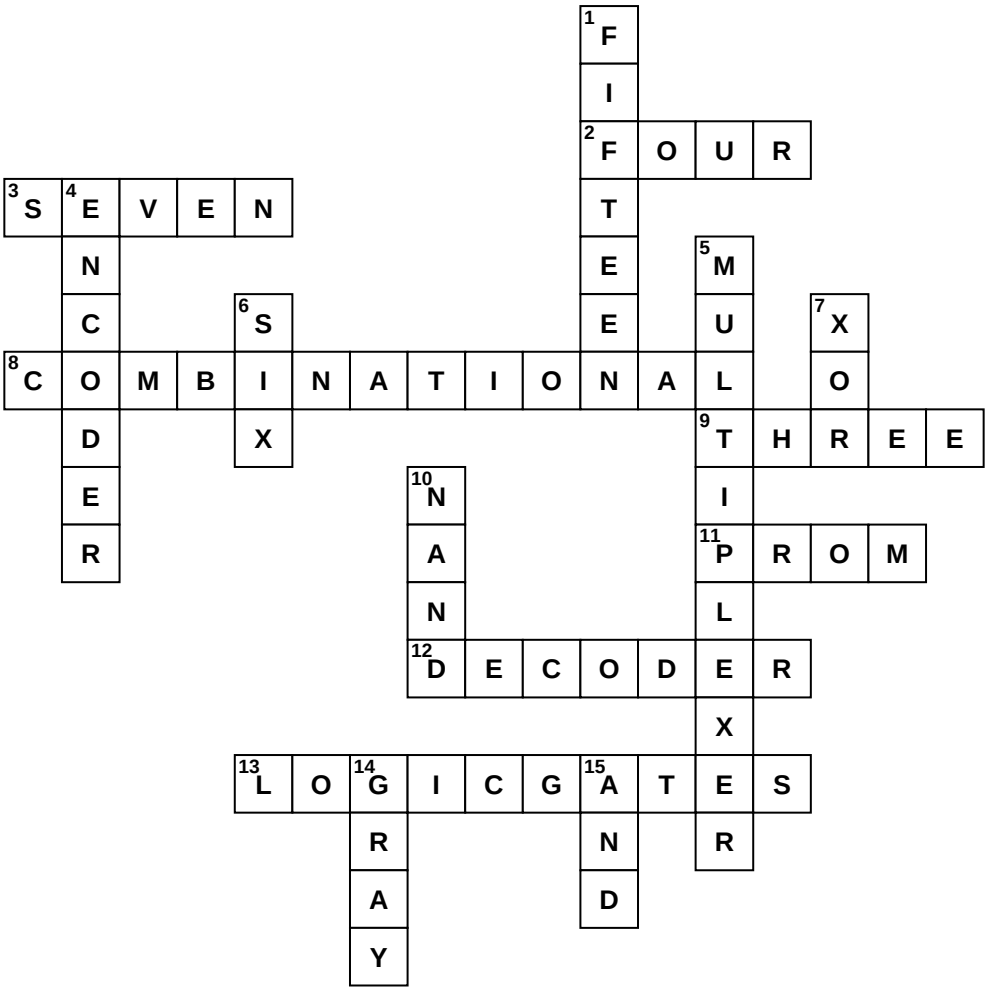
Across

[2] How many 3*8 decoders are required to construct a 5*32 decoder.
[3] How many types of logic families exists?
[8] A multiplexer is a _____ Circuit.
[9] How many OR gates are required for an octal-to-binary encoder?
[11] It has fixed AND Gates and programmable OR Gates.
[12] It can be used to interface a BCD input to an LED display. Only one of its outputs can be active at one time.
[13] The main building blocks of combinational circuits are _____.

Down

[1] Construct a 16*1 MUX using 2*1 MUX. How many 2*1 MUX will be required.
[4] It has more inputs than outputs. It is used to convert key actuations to a binary code.
[5] It can be used to route an input signal to one of several possible outputs.
[6] The output Y of a 2-bit comparator is logic 1 whenever the 2-bit input A is greater than the 2-bit input B. The number of combinations for which the output is logic 1, is _____.
[7] A bulb in the staircase has two switches, one switch being on the ground floor and the other one on the first floor. The bulb can be turned ON and also can be turned OFF by any one of the switches, irrespective of the state of the other switch. The logic of switching on the bulb resembles _____.
[10] By using only _____ gates, we can realise all logic functions.
[14] The code where all successive numbers differ from their preceding number by single bit .
[15] Which gate is used to implement a BCD to seven segment Decoder.

Solution


1 F
I
2 F O U R
3 S 4 E V E N
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5 M
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6 S
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U
7 X
8 C O M B I N A T I O N A L
O
D
X
9 T H R E E
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10 N
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R
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11 P R O M
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12 D E C O D E R
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13 L O 14 G I C G 15 A T E S
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