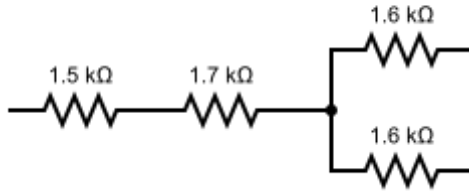


1. The total resistance of system is ( $\Omega$  is an Ohm sign.):



- a) 6.4 k $\Omega$   
b) 4.8 k $\Omega$   
c) 4.0 k $\Omega$   
d) 5.6 k $\Omega$
2. Choose the right word to the place of three dots (...):  
... are both conductors and resistors under certain conditions.
- a) Conductors  
b) Semiconductors  
c) Insulators
3. an XOR gate produces true:
- a) when all inputs are only 0.  
b) when all inputs are only 1.  
c) when all inputs are 0 and 1.  
d) only when odd number of inputs are 1.
4. Choose the right statements coming from Ohm's Law:
- (1) a Current varies directly with a voltage;  
(2) a Current varies inversely with a voltage;  
(3) a Current varies directly with a resistance;  
(4) a Current varies inversely with a resistance;

- (5) a Resistance varies directly with a voltage;
  - (6) a Resistance varies inversely with a current.
    - (a) 1, 4, 5, 6;
    - (b) 2, 3;
    - (c) 1, 4.
5. Choose the right word to the place of three dots (...):
- ... is the only register connected to the **data bus**, and all **data** should go through this register.
- a) Memory Address Register (MAR).
  - b) Memory Buffer Register (MBR).
  - c) Instruction Register (IR).
  - d) Program Counter (PC).
6. Choose the right words to the place of three dots (...):
- the address of next instruction in the program counter (PC) is placed there initially by ... and updated automatically by ... :
- a) the operation system, the CPU.
  - b) the CPU, the operation system.
  - c) memory address registers, memory buffer registers.
7. Choose the right word to the place of three dots (...):
- ... is the only register connected to the **address bus**, and all addresses should go through this register.
- a) Memory Address Register (MAR);
  - b) Memory Buffer Register (MBR);
  - c) Instruction Register (IR);
  - d) Program Counter (PC).

8. Choose the right words to the place of three dots (...):

**Add Immediate (AI)** command differs from **Add (A)** with that an operand ... :

- a) is a content of memory pointed to be added to an accumulator;
- b) is what is added to an accumulator;
- c) is a content of memory pointed to be added to a storage;
- d) is what is added to a storage.

9. Choose the right order of stages in instruction cycle:

- a) Fetch – Decode – Execute;
- b) Decode – Fetch – Execute;
- c) Execute – Fetch – Decode;
- d) Execute – Decode – Fetch.

10. Choose the right words to the place of three dots (...):

The number of ... assigned to the opcode will determine the ... number of ... that processor is allowed to have.

- a) operands, maximum, operators.
- b) bits, minimum, instructions.
- c) bits, maximum, instructions.
- d) operators, average, storage.

Answers:

1. c
2. b
3. d
4. c
5. b
6. a
7. a
8. b
9. a
10. c