TOPIC
Computers – Section IV – Question 4

QUESTION
Given the following algorithm
    ABC = 5
    If ABC = 5 then DEF = "Peter"
    If ABC > 5 then DEF = "Paul"
    If ABC $\leq$ 5 then DEF = "Mary"
    Print DEF
The output of the last statement is
   (A) Peter
   (B) Paul
   (C) Mary
   (D) There would be no output.

HINT
The third conditional statement also satisfies the inequality.

SOLUTION
Since ABC = 5, then the first conditional statement with ABC=5 is true, that is,
      If ABC = 5 then DEF = "Peter"
Since ABC=5, then the second conditional statement with ABC>5 is false.
However, the third conditional statement ABC $\leq$ 5 is true, that is,
      If ABC $\leq$ 5 then DEF = "Mary"
Hence the value will be DEF = "Mary".
The correct answer is "Mary".

ANSWER
(C)

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