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| Name: |

CSSE304 Winter 202220 Final Exam Paper Part

For all of these problems say what value the expression evaluates to. If they infinite loop, say infinite loop.

A. [5 points]

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| --- |
| (let ((lst '()))  (set! lst (cons 'foo lst))  (call/cc (lambda (q)  (set! lst (cons 'bar lst))  (q lst)  (set! lst (cons 'baz lst))))  (set! lst (cons 'foobar lst))  lst) |

'(foobar bar foo)

B. [5 points]

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| (define b  (lambda (c)  (+ 5 (c 7))))  (define a  (lambda ()  (+ 3 (call/cc b))))  (+ 4 (a)) |

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C. [5 points]

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| (let ((val 10))  (call/cc (lambda (fun1)  (let ((fun2 (call/cc (lambda (x) x))))  (set! val (sub1 val))  (fun2 fun1)  (set! val (+ 100 val)))))  val) |

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D. [5 points]

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| --- |
| (call/cc (call/cc (lambda (x)  (lambda (y)  (y (+ 6 (+ 10 (x (lambda (z) 17))))))))) |

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