1 What is a system? 61

combination of components acting together to perform a specific objective
7%

they are sets of connected objects or things
0%

behaviors of these systems are shaped by their environments
0%

1 and 3
11%

All of the above
82%

2 Select the correct statement 87

dynamic systems can only be found in mechanical field
0%

we can use physical laws to understand the performance of dynamic systems
68%

the output of a system is only dependent on the input
0%

All of the above
15%

None of the above
17%

3 Select the correct statement 77

force applied to a damper is inversely proportional to the velocity of the piston
0%

dynamic systems can be modelled in mathematical terms
8%

model can be obtained by testing a prototype of a corresponding device
0%

1 and 2
21%

2 and 3 ✓
71%

4 Select the correct statement 77

depending on the time constat, system reach to its steady state at different times ✓
18%

natural frequency, which describes the speed of the input
3%

when system is overdamped, it shows both oscillatory and exponential behaviour
3%

2 and 3
68%

None of the above
9%

5 Select the correct statement

94

peak time is the time required for the response to reach steady state value for the first time

7%

settling time is the time required for the response to reach its steady state value

27%

rise time is the time taken to maximum overshoot

9%

All of the above

45%

None of the above

13%