

Take Test: Test 1 (2018-19)

Test Information

Description

Instructions

Timed Test This test has a time limit of 1 hour. This test will save and be submitted automatically when the time expires.


Warnings appear when **half the time, 5 minutes, 1 minute, and 30 seconds** remain.

Multiple Attempts This Test allows 3 attempts. This is attempt number 1.

Force Completion This Test can be saved and resumed at any point until time has expired. The timer will continue to run if you leave the test.

This test does not allow backtracking. Changes to the answer after submission are prohibited.

Close Window

 Moving to the next question prevents changes to this answer.

Question 3 of 10 >

Question 3

10 points

Save Answer

A matched filter is used to detect the signal $s(t)$


$$\text{where } s(t) = 3 \operatorname{rect} \left\{ \frac{t - 10 \times 10^{-3}}{20 \times 10^{-3}} \right\}$$


which is corrupted by additive white Gaussian noise of double-sided power spectral density 10^{-3} W/Hz. The maximum Signal-to-Noise ratio at the filter output is

- (a) 9000;
- (b) 1800;
- (c) 180;
- (d) 90;
- (e) none of the above.

☐ a☐ b☐ c☐ d

 e

 Moving to the next question prevents changes to this answer.

Question **3** of **10** 

Close Window