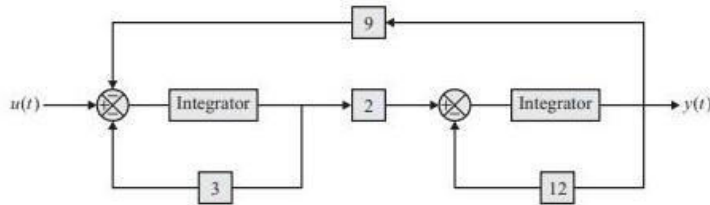


LECTURERS IN GOVERNMENT POLYTECHNIC COLLEGES (ENGINEERING AND NON-ENGINEERING) IN A.P TECHNICAL EDUCATION SERVICE. - NOTIFICATION NO.23/2018

ELECTRICAL AND ELECTRONICS ENGINEERING- 14TH MAR 2020 – S2 – REVISED KEY

Question Number : 16 Question Id : 2310981666

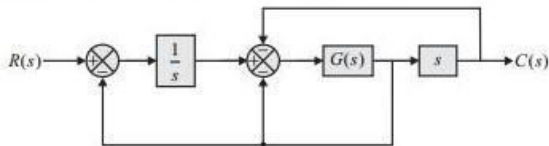
Find the transfer function $G(s) = Y(s)/U(s)$ of the system below.



Answer: Deleted

Question Number : 18 Question Id : 2310981668

If the transfer function is $C(s)/R(s) = S / S^2 + S + 2$, then $G(s) = ?$



Answer:

1

Question Number : 44 Question Id : 2310981694

A (0-600V) voltmeter has an error of $\pm 2\%$ of full-scale deflection. When the true value is 60 V, the span of the reading would be:

Answer: Deleted

Question Number : 53 Question Id : 2310981703

When compared, the N-channel MOSFET is better than the P-channel MOSFET because:

Answer:

it has faster operation

it consumes less power

it is TTL-compatible

Question Number : 62 Question Id : 2310981712

The cut-in voltage & Forward voltage in silicon diode respectively are

Answer:

0.7 V, 1 V

0.7 V, 0.7 V

Question Number : 74 Question Id : 2310981724

An alternating current varying sinusoidally having an average value of 20 A flowing for one second through a resistance produces a heat of 400 joules. What would be the heat produced if a DC current of 20 A flows through the same resistance for the same time?

Answer: Deleted

Question Number : 75 Question Id : 2310981725

An AC current flowing through a capacitor of 10 μF is given by $i = 10\sin 100t$. Then, the rms value of voltage across the capacitor in volts is:

Answer: Deleted

Question Number : 106 Question Id : 2310981756

The magnetic flux linked with a single turn coil is given by the equation $\phi = 6t^2 + 4t + 6$. The emf induced in the coil in the fourth second will be:

Answer:

52 V

Question Number : 126 Question Id : 2310981776

A periodic function $f(t)$ having a time period of T repeats itself after half time period $T/2$. Fourier series of $f(t)$ would contain:

Answer:

odd harmonic terms only

Question Number : 132 Question Id : 2310981782

$x(t) = e^{at}u(t)$ and $h(t)=u(t)$. The convolution integral $g(t)=x(t)*h(t)$ is:

Answer: Deleted