
Aptitude

1) A farmer used 1034 acres of land for growing rice, wheat and corn in the ratio of 5:2:4 respectively. How many acres were used for growing corn?

- A) 188 acres B) 258 acres C) 376 acres D) 470 acres

2) How many times should the keys of a keyboard be pressed in order to type the first 300 counting numbers? (i.e. to type 1, 2, 3 ... 300)

- A) 362 B) 1448 C) 1504 D) 792

3) The more she learnt _____ the American Civil War, the more fascinated she became.

- A) About B) From C) Off D) With
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Instrumentation Engineering

4) The effect of atmospheric noise is most significant in which of the following ranges?

- A) Below 30MHz B) From 30MHz to 300MHz
C) From 300MHz to 3000 MHz D) Above 3000 MHz

5) Unity feedback closed loop second order system has a transfer function $81/(s^2+0.6s+9)$ and is excited by a step input of 10 units. What is the steady state error of the output?

- A) 10 B) 0 C) 1 D) 0.1

6) Consider the analog signal $x_a(t)=3\cos 50\pi t+10\sin 300\pi t-\cos 100\pi t$. What is the value of F_n ?

- A) $F_n=300\text{Hz}$ B) $F_n=400\text{Hz}$ C) $F_n=100\text{Hz}$ D) $F_n=200\text{Hz}$