Sohag University Sunday 18/03/2018



Faculty of Science  **1 h Term Exam**

Physics Department Time: **1** hour

**Mathematical Physical Methods (3 Year Physics Branch)**

**Answer the following equations:** (20 marks)

1. Find the Fourier coefficients corresponding to the function: (8 marks)

**** *for period = 10*

1. Write the corresponding Fourier series. (3 marks)
2. How should *f(x)* be defined at *x = -5*, *x =* 0 and *x =* 5 in order that the Fourier series will converge to *f(x)* ****? (3 marks)
3. Expand and draw *f(x) = x, 0 < x < 2,* in a half range for **sine series** only. (6 marks)

*Best Wishes Dr. Khaled Saber El-Sharif*