

NATIONAL UNIVERSITY OF TECHNOLOGY, ISLAMABAD QUIZ VIII (CALCULUS II), SPRING 2019 DATED: JUNE 28, 2019

Q.1 Evaluate the line integral $\int_C (xy + z^3) ds$ from (1, 0, 0) to $(-1, 0, \pi)$ along the helix C (see Figure 1) that is represented by the parametric equations

 $x(t) = \cos t, \quad y(t) = \sin t, \quad z = t, \qquad (0 \le t \le \pi).$

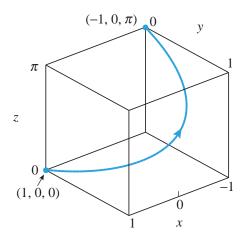


Figure 1: Helix C.

"Your problem is nt the problem, its your attitude about the problem." — Ann Brashares.