

## CHARACTERISTICS OF BESOV-NIKOL'SKIĬ CLASS OF FUNCTIONS \*

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**Abstract.** In this paper we consider functions from a Besov-Nikol'skiĭ class. We give constructive characteristics of this class. We establish criteria for a function to be in this Besov-Nikol'skiĭ class by means of conditions on its Fourier coefficients. We also discuss embedding theorems between some classes of functions.

**Key words.** Moduli of smoothness, Besov-Nikol'skiĭ class, Best approximation, Fourier coefficients, Embedding theorems.

**AMS subject classifications.** 42A10, 42A16, 41A50, 42A32, 42A50.

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