Menon-type identities again:
A note on a paper by Li, Kim and Qiao

By PENTTI HAUKKANEN (Tampere) and LÁSZLÓ TÓTH (Pécs)

Abstract. We give common generalizations of the Menon-type identities by Sivara-makrishnan (1969) and Li, Kim, Qiao (2019). Our general identities involve arithmetic functions of several variables, and also contain, as special cases, identities for gcd-sum type functions. We point out a new Menon-type identity concerning the lcm function. We present a simple character-free approach for the proof.

PENTTI HAUKKANEN
FACULTY OF INFORMATION TECHNOLOGY
AND COMMUNICATION SCIENCES (ITC)
TAMPERE UNIVERSITY
FI-33014
FINLAND

LÁSZLÓ TÓTH
DEPARTMENT OF MATHEMATICS
UNIVERSITY OF PÉCS
IFJÚSÁG ÚTJA 6
7624 PÉCS
HUNGARY