1154-11-1407 **Shashika Nuwan Chamara Petta Mestrige*** (pchama1@lsu.edu), 4728, Y.A. Tittle Ave, APT 32, Baton Rouge, LA 70820. *Ramanujan congruences for a class of eta-quotients.* Preliminary report.

The partition function $p_{[1^c\ell^d]}(n)$ can be defined using the generating function,

$$\sum_{n=0}^{\infty} p_{[1^c\ell^d]}(n)q^n = \prod_{n=1}^{\infty} \frac{1}{(1-q^n)^c(1-q^{\ell n})^d}.$$

In this talk, we prove infinite families of congruences for the partition function $p_{[1^c\ell^d]}(n)$ modulo powers of ℓ where $\ell = 5, 7$ for any integers c and d. We use Hecke operators, explicit basis of the vector space of modular functions of the congruence subgroup $\Gamma_0(\ell)$ and work of Atkin and Gordon on proving congruences for the partition function $p_{-k}(n)$. (Received September 15, 2019)