We consider a finite-buffer, single-server queue wherein inter-batch arrival times are generally distributed and arrivals occur in batches of random size. The service process is correlated and its structure is presented through continuous-time Markovian service process (C-MSP). In the case of finite-buffer batch arrival queue, there are different customers rejection/acceptance strategies such as partial batch rejection-, total batch rejection- and total batch acceptance-policy. This paper analyzes partial batch acceptance-policy. We obtain steady-state distribution at pre-arrival-, arbitrary- and post-departure-epochs along with some important performance measures, like probability of blocking for the first-, an arbitrary- and the last-customer of a batch, average number of customers in the system, and mean waiting times in the system. The corresponding queueing model without batch arrivals (i.e., arrivals occurring singly) under continuous-time batch Markovian service process (C-BMSP) has also been investigated. The proposed analysis is based on the RG-factorization of the transition probability matrix of the embedded Markov chain at an embedded pre-arrival epoch of a batch/customer. We also establish relationship among the queue-length distributions at pre-arrival-, arbitrary- and post-departure-epochs using the classical argument based on Markov renewal theory and semi-Markov processes. Some numerical results have been presented in the form of tables by considering phase-type inter-batch/inter-arrival distribution.