Okay, let's analyze this multiple-choice question with a critical eye, as a graduate statistics student would. We're focusing on the generalizability of survey results, which hinges on how well the sample represents the population of interest (all dormitory students).

Here's a breakdown of each option:

\* \*\*(A) Five thousand students live in dormitories on campus. A random sample of only 500 were sent the survey.\*\* The sample size of 500 is likely sufficient to provide a reasonable estimate of the population proportion of interest. The total population size of 5000 is also not relevant. Random sampling is the gold standard for ensuring the sample is representative of the population. So, while there could be issues with how the sample was selected, having a sample size of 500 out of 5000 is not inherently a problem.

\* \*\*(B) The survey was sent to only first-year students.\*\* This is a significant source of \*selection bias\*. First-year students' preferences might be different from those of upperclassmen (e.g., due to different social dynamics, experience with dorm life, or financial situations). This is a threat to the ability to generalize the results to \*all\* dormitory students, because the sample is not representative of all the students.

\* \*\*(C) Of the 500 students who were sent the survey, only 160 responded.\*\* This results in a low response rate. Low response rates can introduce \*non-response bias\*. Those who responded might have systematically different preferences than those who didn't respond. This limits the generalizability of the results.

\* \*\*(D) Of the 500 students who were sent the survey, only 160 responded.\*\* This is the same as choice (C). Low response rates can introduce \*non-response bias\*. Those who responded might have systematically different preferences than those who didn't respond. This limits the generalizability of the results.

\*\*Therefore, the answer is (A)\*\* because the sample size is large enough and the sampling method is appropriate. The other options introduce biases that would make it difficult to generalize to the entire population of interest.