1) The turn is to be played before the c♯, so that that note receives its full 16th value.
1) The practice in recent editions of making this group analogous to the figure of the second quarter-rest in m. 38, giving (a) is unacceptable, since Beethoven's tone sense would not have permitted the single occurrence of such a high note (h#) in the course of a movement even if the note had been available to him.