Analysis of Computer Science Papers Conducted by Board of Intermediate and Secondary Education at Secondary Level

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Abstract : The purpose of this study was to analyze the papers of computer science conducted by Board of Intermediate and Secondary Education with reference to Bloom's taxonomy. The present study has two parts. First, the analysis is done on the papers conducted by Board of Intermediate of Secondary Education on the basis of basic rules of item construction especially Bloom's (1956). And the item analysis is done to improve the psychometric properties of a test. The sample included the question papers of computer science of higher secondary classes (XI-XII) for the years 2011 and 2012. For item analysis, the data was collected from 60 students through convenient sampling. Findings of the study revealed that in the papers by Board of intermediate and secondary education the maximum focus was on knowledge and understanding level and very less focus was on the application, analysis, and synthesis. Furthermore, the item analysis on the question paper reveals that item difficulty of most of the questions did not show a balanced paper, the items were either very difficult while most of the items were too easy (measuring knowledge and understanding abilities). Likewise, most of the items were not truly discriminating the high and low achievers; four items were even negatively discriminating. The researchers also analyzed the items of the paper through software Conquest. These results show that the papers conducted by Board of Intermediate and Secondary Education were not well constructed. It was recommended that paper setters should be trained in developing the question papers that can measure various cognitive abilities of students so that a good paper in computer science should assess all cognitive abilities of students.