



## Levels of Thinking – Bloom’s Taxonomy – Exam Preparation

Benjamin Bloom created this taxonomy for categorizing questions that commonly occur in educational settings based on the level of abstraction, or thinking, involved. There are six levels in Bloom’s taxonomy which are outlined below. Since professors will often ask questions within particular levels, if you can determine the levels of questions that will appear on your exams, you will be able to study using appropriate strategies.

Level of Thinking	Question Cues	Skills Demonstrated	Suggested Study Strategies
<b>Knowledge:</b> Recall information such as a term and its definition	list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where	<ul style="list-style-type: none"> <li>• Observation and recall of info</li> <li>• Knowledge of dates, events, places</li> <li>• Knowledge of major ideas</li> <li>• Mastery of subject matter</li> </ul>	<ul style="list-style-type: none"> <li>• Flash cards</li> <li>• Mnemonic devices (rhymes, acronyms)</li> <li>• Recite/rehearse facts</li> <li>• Visual imagery</li> </ul>
<b>Comprehension:</b> Characteristics of concepts, putting an idea into your own words	summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend	<ul style="list-style-type: none"> <li>• Understanding information</li> <li>• Grasp meaning</li> <li>• Translate knowledge into new concept</li> <li>• Interpret facts, compare, contrast</li> <li>• Order/group/infer causes</li> <li>• Predict consequences</li> </ul>	<ul style="list-style-type: none"> <li>• Associate material with prior knowledge</li> <li>• Cluster details into categories and label with key words</li> <li>• Memorize characteristics</li> </ul>
<b>Application:</b> Using ideas, principles and theories in concrete situations	apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover	<ul style="list-style-type: none"> <li>• Use information</li> <li>• Use methods, concepts, theories in new situations</li> <li>• Solve problems using required skills or knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Outline procedures</li> <li>• Diagram processes</li> <li>• Generate original examples</li> <li>• Solve and analyze new problems</li> </ul>
<b>Analysis:</b> Breaking down information into component parts to examine/develop divergent conclusions, or make organization or the order of ideas clear	analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer	<ul style="list-style-type: none"> <li>• Seeing patterns</li> <li>• Organization of parts</li> <li>• Recognition of hidden meanings</li> <li>• Identification of components</li> </ul>	<ul style="list-style-type: none"> <li>• Generate comparison and contrast lists</li> <li>• Identify themes/trends from text or case studies</li> <li>• Make tables that show relationships between elements</li> </ul>
<b>Evaluation:</b> Judging the value of ideas, procedures, methods, etc., using appropriate criteria (end product may not be a distinct right/wrong)	assess, design, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize	<ul style="list-style-type: none"> <li>• Compare and discriminate between ideas</li> <li>• Assess value of theories/presentations</li> <li>• Make choices based on reasoned arguments</li> <li>• Verify value of evidence</li> <li>• Recognize subjectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Make global maps to summarize each block of information</li> <li>• Generate a thesis to support certain evidence</li> <li>• Locate evidence to support a thesis</li> </ul>
<b>Create:</b> Putting various elements together to create new ideas or thought process; synthesizing prior learning to formulate new hypothesis	assemble, combine, compose, construct, correspond, develop, design, generate, integrate, investigate, produce	<ul style="list-style-type: none"> <li>• Developing a hypothesis</li> <li>• Devising a procedure</li> <li>• Generating new ways of thinking or viewing things</li> <li>• Use old ideas to create new ones</li> </ul>	<ul style="list-style-type: none"> <li>• All of the above!</li> </ul>

Try using the following study strategies to prepare for questions based on the different levels of thinking.

