



## ASSESSMENT OF CRITICAL THINKING AMONG THE GRADUATE STUDENTS THROUGH PAST EXAM PAPERS

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### ABSTRACT

Teaching and assessment are integral to each other. The main objective of teaching is considered to be the inculcating of critical and creative thinking among the students. The development of critical and creative thinking makes the individuals active and vibrant members of society and successful contributors in the progress of the world. Assessment on the other hand is a tool which measures as to what extent and to what degree the cognitive skills have successfully developed among the students. The purpose of exams has always been to determine as how successfully the teaching objectives have been achieved. Thus, question papers or questions in the exam papers are used as an instrument to assess the cognitive abilities of the students. A good question paper consists of all types of questions which may determine different levels of thinking skills. This research paper, therefore, aims to explore different domains, set in question papers, in the form of questions to assess the cognitive skill of students. For the purpose, five years previous papers of B.A English were collected from the University of Peshawar and analyzed with the application of Bloom's Taxonomy of Educational Objectives. The results showed the insufficiency of exam papers and inefficiency of paper setters in the assessment of all the cognitive levels of thinking as ordained by Bloom(1956) and highlighted some issues which gave certain directions to the improvement of assessment strategies.

**Key Words:** Teaching and Assessment, Exam Papers, Critical Thinking

### INTRODUCTION

Critical thinking comprises of important sub-skills like problem solving, decision making, analyzing an argument, making inferences, judging and evaluating. It also involves cognitive disposition. Disposition involves attitudes, habits, openness and fairness of mind, and willingness to accept and entertain some diverse opinions and point of views. Education and teaching is the process which helps to develop all such skills bringing about ultimate change in

habits and behavior of the students. On the other hand assessment is a tool which helps to determine as to what extent teaching and instructional input has been successfully proceeded on. So this paper aims to explore the assessment of critical and creative thinking skills among the students of graduation and the role of examination in assessment and evaluation of the development of cognitive levels.

Modern age is the age of science and technology. The world has turned into a global village revolutionized by computers and computerized machines. The minds and trends have changed since the very beginning of 21<sup>st</sup> century. There is a race of knowledge and innovation among the advanced nations. Fighting with sword and spears in the battlefield was a medieval occupation of the nations. Now science has totally changed the peoples bent of mind and life style. Progress in the field of science and technology, inventions and innovations, and the latest research has made it a tough and challenging job for developing and backward countries and nations to survive among and compete with the advanced nations. Strength of nations depends on the strong economy and high standard of education. The nations with low economy and poor standard of education are considered to be weak, backward and under-developed. Multi-tasked people, equipped with knowledge and skills, having creative thinking, seeing-eye, receptive memory, capacity to expound and judgment to select are the demands of the rapidly changing modern world. Problem solving, critical and creative thinking, and goal settings are the specific skills required from every citizen of a state and every individual of a society.

Pondering upon the current scenario, we need a strong education system which may produce individuals having high professional skills and talent. Education is a process of transmitting knowledge, skills and values to the next generation. In order to run and win the race with the world we need potential youth, we need highly skilled and talented political leaders, scientists, professionals, businessmen, industrialists, policy-makers and decision makers who may lead our nation to the heights of progress above all other nations of the world. According to Munazza (2004), problem solving, goal setting and creative thinking are considered to be the specific skills required for the 21<sup>st</sup> century workforce. In this regard, Education is the only means of building up the nations, societies and cultures. According to Behlol (2011), education is the only source of power to rule and conquer the world and it is a process of preservation and promotion of intellectual capital.

Another current issue is the use of English language. English language has become the language of the global world. All type of communication in the world is conducted in English language. Thus, proficiency in English language is the first and foremost requirement of the progress in the world. In Pakistan, English is learnt, taught and spoken as 2<sup>nd</sup> language. Even it is regarded as official language, for all official documentation is conducted in English language in Pakistan. Another important fact to mention here is that English is taught as a compulsory subject from grade one to graduation level in all schools and colleges in Pakistan. This paper, however, aims to explore as to what extent critical and creative thinking, knowledge, perception and power of expression is developed among the students at graduation level and how these skills are assessed in exams through English Paper A & B in B.A class, what is the paper-setters

strategy and criteria in setting the questions in the exams paper, how different levels of complexity are determined in the setting of questions, and to what extent English Paper A & B is a successful tool for the assessment and evaluation of the development of critical and creative thinking skill among the student of B.A class.

This study will be highly significant for teachers, educationists, syllabus designers, paper setters, policy makers, students and university scholars and professionals in a way that it deals with a highly crucial issue. Besides the individuals related to education department, this study also encompasses the political bureau into its circle. Further, this study will be a great contribution to the existing body of knowledge on cognitive level as assessing the examination questions. This may consequently benefit to the whole nation in offering graduates a higher level of thinking skills.

There are many other studies that deal with teaching, instructional materials, syllabus designs, testing and evaluation. But this study is different from others in that it deals with the teaching and evaluation strategies at graduation level. Secondly, this study specifically deals with the strategies of the assessment of the development of creative and critical thinking, perception and communication skills of the students in B.A. And lastly, this study focuses on the role of English Paper A & B in B.A Examination in assessment and evaluation of these creative and critical skills. So far as sample and population is concerned, this study encircles the English Papers of the University of Peshawar in KPK province of Pakistan.

## LITERATURE REVIEW

Curriculum, teaching and assessment are the three major components and basic pillars of a strong, powerful and potential education system. Curriculum sets the goals, teaching and instructions are means of achieving those goals and assessment is a tool to judge the output and outcomes to the curriculum and instructional input. All the three components are interlinked with each other. Teaching of high order thinking skills makes the teaching even more effective (Lewis & Smith, 1993). According to Renzulli, (1997) "training in creativity can help students to be self-sufficient and independent. In order to contribute into knowledge-based economy, the students especially at graduation level must develop an ability to think at higher level (Jones *et al*, 2009). Chaffee (2003) says, "Critical thinking is making sense of the world by carefully examining the thinking process." Thus we can say that teaching is a process of bringing some desirable change in a society and state. This change may be in the form of knowledge, skills or attitude. The right direction of this change is judged by the assessment process. Afzaal (2005) states that examination should be a certification that examinee have reached a certain level of achievement. He further states that examination should be quite in accordance with the learners' ability and academic categorization of the examinees as strong and weak in studies. The first step in teaching and assessment is to determine the learning outcome. Content standards and curriculum guidelines established by state or district provide a useful starting point for specifying the instructional goals (Khan, 2010). A question paper in the examination determines as to what extent the teaching and learning objectives have been achieved and a good question paper contains certain difficulty levels as to accommodate the students of different levels of

capabilities. Thus, assessment of students' cognitive development of intellectual abilities and skills like critical thinking, problem solving, communication, decision making are all generally measured by means of examinations.

*Critical thinking* basically belongs to philosophy and psychology (Lewis & Smith, 1993). But some researchers also found the growth of its roots in the field of education (Sternberg, 1986). Philosophical approach to critical thinking focuses on hypothetical role of critical thinker—counting the qualities and characteristics of the person rather than behavior and action (Lewis & Smith, 1993; Thayer-Bacon, 2000). Richard Paul (1992) takes critical thinking in the context of “perfection of thought”. American Philosophical Association portrays critical thinker as a person having inquisitive nature, open & fair mindedness, flexibility and desire to be well-informed, understanding diverse viewpoints and willing to suspend judgment and consider other perspectives (Facione, 1990). According to Facione(1990) critical thinking is a “purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based.”

*Cognitive psychologists* immersed in behaviorist tradition and experiential research paradigms intend to focus on how people actually think versus how they could or should think in certain ideal conditions (Sternberg, 1986). Cognitive psychology defines critical thinking by types of actions or behaviours a critical thinker can do. This approach also includes a list of skills or procedures performed by critical thinkers (Lewis & Smith, 1993). Cognitive psychologists define critical thinking as “the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts” (Sternberg, 1986, p. 3)

Some *educational researchers* working in the field of education have also participated in the discussion of critical thinking. Benjamin Bloom (1956) and his associates have presented certain taxonomies for information processing skills which is rich source for educational practitioners in teaching and assessing higher order thinking skills. **Bloom's taxonomy of educational objectives** has a hierarchy of “evaluation” at the top and “comprehension” at the bottom where three highest levels—analysis, synthesis, and evaluation are said to be representing critical thinking (Kennedy et al., 1991). In Blooms taxonomy there are six levels and each level requires the previous as a base. These levels start at knowledge, followed by comprehension, application, analysis, synthesis and evaluation. Educational approach is beneficial in a way that it is based on years of classroom experience and observations of student learning, quite unlike philosophical and psychological traditions (Sternberg, 1986).

*Dimensions of Learning model* was presented by Marzano and a team of researchers in the United States at McREL, the Mid Continent Region Educational Laboratory. It was developed from an earlier project, *Dimensions of Thinking* (Marzano et al., 1988). This program is then documented, with a teacher's manual (Marzano et al., 1992), an assessment manual (Marzano et al., 1993) and training manual (Marzano et al., 1992b). The Dimensions of Learning Program suggests that for effective learning, the teacher and the learner must attend to thinking and learning in five dimensions—Positive Attitude & Perception, Acquire and Integrate Knowledge,

Extend and Refine Knowledge, Use Knowledge Meaningfully, Productive Habits of Mind  
Marzano R. J., (1992).

Norman Webb presented *Depth of Knowledge* model to systematically analyze the alignment between standardized assessments. Depth of Knowledge was employed “to analyze the cognitive expectation demanded standards, curricular activities and assessment tasks (Webb, 1997). This model is based upon the assumption that curricular elements can be categorized on the basis of cognitive demands which are required to produce an acceptable response. Webb divided the whole process into four levels:

- Level—1 Recall and Reproduction (the students are expected to recall the information)
- Level—2 Skills and Concepts (understanding the concepts and making decision to approach the problem)
- Level—3 Short-term Strategic Thinking (it requires reasoning and planning, drawing conclusions, citing evidence and developing logical arguments and explaining the phenomena)
- Level—4 Extended Thinking ( it demands designing and conducting experiments, making connection, combining and synthesizing ideas into new concepts and giving a critique to experimental designs)

Professor John Biggs and Kevin Collis introduced *SOLO Taxonomy* (Structure of Observed Learning Outcomes) in 1970 in Australia. It also provides a good framework for developing a standard examination. It describes gradual development and understanding of students in five stages. The five stages of this Taxonomy are: Pre-Structural, Uni-Structural, Multi-Structural, Relational, Extended Abstract stage (Biggs & Collis, 1982).

Then Jerome Bruner presented the theory of learning in *three stages of representation*. Each stage is a "way in which information or knowledge are stored and encoded in memory" (McLeod, 2008). Bruner was a psychologist and he focused on the cognitive development of children and its relation to learning and education. According to him learning occurs in three stages: 1- Enactive (action-based), 2- Iconic (image based), Symbolic (language-based). (Bruner, 1996)

Cognitive taxonomies are considered to be organized scheme for classifying instructional learning targets into various levels of complexities and objective to use these taxonomies is to examine as how the students use their knowledge and skills in practical life and some novel situations (Brookhart, 2010). However, this study employs Bloom’s Taxonomy for the analysis of the University of Peshawar past exam papers of English.

## **METHODOLOGY**

The study involved textual and content analysis of the university exam papers and the results were presented in the form of tables and figures. Therefore, it employed quantitative as well as qualitative research paradigm which in technical terms can be defined as explanatory

mixed method design. The major purpose of the analysis was to find out certain words, concepts, patterns, meanings and make certain inferences about the messages within the text. For this purpose, five years old exam papers, English Paper A & B, of the University of Peshawar, ranging from 2009 to 2013, were collected and used as data source. There were total ten question papers. Five papers were collected for English Paper-A and five for English Paper-B. English Paper-A consisted of total five questions. Question No.1 dealt with explanation of some extract from English Poetry with reference to the context and there were four extracts in this question and students were required to explain any of the three. Other four questions were theoretical with fifty percent of choice i.e. there were two questions asked in each number of question and students were required to answer any of the two questions. Thus, in each paper there were eight theoretical questions from short stories, essays and novel. Besides, some questions were divided into parts. Each part was to be treated as a separate question but all the parts collectively formed one question e.g. **“Write the character sketch of Pokham, what moral lesson do you learn from the story, how much land does a man require?”**

The above mentioned question is one single question but it has three parts. Each one of these three parts is a separate question but all parts collectively make one question. During the analysis all such parts were treated as separate questions. In all the five papers, there were six such partly questions which were analyzed as separate questions.

In this way, in five papers there were five (5) questions dealing with explanation with reference to the context and forty six (46) theoretical questions (forty theoretical and six partly questions). Thus, there were total  $(5 + 46 = 51)$  fifty one questions in Paper- A which we were to analyze.

So far as Paper-B is concerned, each paper consisted of seven (7) questions which comprised of 1-essay writing, 2-grammatical correction, 3-using the idiomatic expressions into sentences, 4-correct use of preposition, 5-pair of words, 6- letter writing or Translation from Urdu to English, and 7-précis and comprehension. Q.6 had two parts—letter writing and translation. Students were required to attempt any of the two but for analysis both were treated separately. The translation question appeared only two times in all the five years papers. Thus in Paper-B, there were total  $(35 + 2 = 37)$  thirty seven questions for analysis.

Blooms Taxonomy was employed as an ‘assessment tool’ for the analysis of the University papers. This taxonomy consisted of six domains namely: Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation. This tool was modified in a template as it was used by Gerkewe (2010) in his research to examine the cognitive level of the questions asked in the examination papers of Bachelors of Nursing Program at the University of NATAL. This template used certain verbs, sample questions, and potential activities and products for all the six cognitive levels in the taxonomy. This taxonomy was applied in such a way that the verbs used in the questions were analyzed and reviewed categorically relating them to any of the six domains given in the taxonomy.

The reason behind using Blooms Taxonomy is the fact that it more compact and comprehensible for educators, examiners, paper-setters and researchers than other taxonomies.

They are more familiar with it than with the other ones and they feel quite at ease while dealing with it. Secondly, it is Blooms Taxonomy which is used by almost all the examiners and paper-setters in Pakistan. According to Zahid(2010) for few years Solo Taxonomy was used in Pakistan but the examiners and paper-setters were confused in using it, therefore it was abandoned. He further says that our teachers are more familiar with six levels of learning as described by Bloom. Therefore, they feel more confident in setting and marking the papers with the help of Blooms Taxonomy. It is for all these reasons that we also preferred Blooms Taxonomy of Educational Objectives.

## RESULTS

Before we analyze and compile the results, let us first discuss how we can apply our tool i.e. Blooms Taxonomy, on question papers for analysis.

Blooms Taxonomy categorized the cognitive thinking levels into six stages of complexity. Each level is individually analyzed. The first level is 'Knowledge'. It is concerned with assessing previously learnt information and knowledge. In this domain, the learners are required to retrieve and recall the information from the long-term memory. The knowledge represents lowest level of learning. This domain can be analysed by using multiple choice or asking the students to recount facts or statistics, to define or quote rules and procedures (Truschel, 1993). Define, classify, describe, locate, outline, give examples, list, name, identify, tell, relate, write, find, state, recall or recognize etc are the verbs which identify the 'knowledge' domain in the questions.

The second domain is 'Comprehension'. Interpretation, extrapolation, and self-regulation are the major components of this domain. Paraphrase, differentiate and distinguish, demonstrate, visualize, restate, rewrite, give examples, summarize, explain, interpret, describe or estimate, compare, convert, distinguish, restate, translate are the verbs which indicate the comprehension domain in the questions.

The third level is 'Application'. It can be checked by asking the students to apply things such as rules, methods, concepts, principles, laws or theories. Apply, classify, modify, put into practice, demonstrate, show, compute, operate, solve, illustrate, calculate, interpret, manipulate, predict, use, illustrate, construct, complete, examine, classify and solve are the words which can identify this domain in the question papers.

'Analysis' is the fourth domain in this taxonomy. It is used to examine the problems, categorize different components, distinguish facts, draw conclusions etc. Compare and contrast, categorize, analyze, organize, deduce, choose, diagram, discriminate, examine, investigate, identify, explain, separate and advertise etc are the words refer to 'Analysis' domain.

The fifth domain is that of 'Synthesis' referring to making judgments, statements, and reports etc. Sometimes, this domain is assessed by asking for personal opinions. Discuss, plan, compare, construct, rearrange, compose, organize, design, hypothesize, support, write, report,

combine or comply, invent, compost, predict, imagine, propose, devise and formulate are the key words which the nature of ‘Synthesis’ in the question papers.

The sixth and last component of Blooms taxonomy is ‘Evaluation’. This component is considered to be the uppermost in cognitive hierarchy because it involves elements of other categories along with conscious judgments on the basis of clearly defined criteria. It comprises of writing on well-organized theme, speech, solving problems or making some classification. Verbs like, criticize, justify, debate, support or reject with reason, conclude, assess, rate, evaluate or apprise, judge or justify, defend, verify, argue, recommend, assess, discuss rate, determine or prioritize etc identify the ‘Evaluation’ domain.

The above mentioned criteria of Blooms Taxonomy were applied on question papers. The results of the analysis are given below in the table.

Results Cognitive Levels in Paper - A												
	year 2009		year 2010		year 2011		year 2012		year 2013		Total	
	Question Frequency	%age	Question Frequency	%age	Question Frequency	%age	Question Frequency	%age	Question Frequency	%age	Question Frequency	%age
Knowledge	3	30	2	22.22	3	25	1	11.11	3	27.27	12	23.52
Comprehension	3	30	3	33.33	5	41.66	3	33.33	4	36.36	18	35.39
Application	1	10	1	11.11	0	0	1	11.11	2	18.18	5	9.80
Analysis	1	10	3	33.33	3	25	3	33.33	2	18.18	12	23.52
Synthesis	0	0	0	0	0	0	0	0	0	0	0	0
Evaluation	2	20	0	0	1	8.33	1	11.11	0	0	04	7.84
<b>Total Frequency</b>	<b>10</b>		<b>9</b>		<b>12</b>		<b>9</b>		<b>11</b>		<b>51</b>	

(Table 1.01 showing the results of English Paper-A for all the five years)  
(See source data of results in Appendix-I)

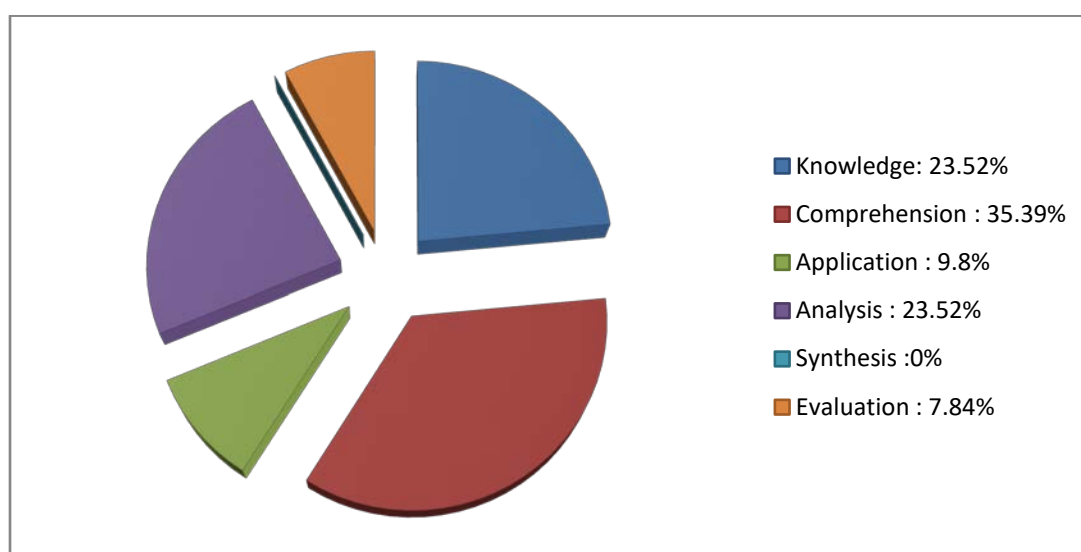
All the five papers were individually analyzed and individual results of each yearly paper were presented in the table and then accumulatively collective results were also prepared and presented in the table. The results show that there were total 10 questions presented in the annual paper of B.A English **year 2009**, 30% of the questions belonged to knowledge domain 30% to comprehension, 10% to Application and Analysis and 20% to the Evaluation domain, while Synthesis was totally missing. In the **year 2010**, there were total nine questions. 22.22% were allocated to knowledge domain, 33.33% to Comprehension, 11.11% to Application, 33.33% to Analysis. At this time only synthesis and evaluation domains were totally ignored. Here we need to keep in mind that variation in the total number of questions is because of the fact that some time one single question was divided into two or three parts therefore during the analysis these parts were also treated as questions because they belonged to different cognitive domains as it was mentioned in methodology section too. In the **year 2011** twelve questions were noticed and Knowledge was found 25%, Comprehension 41.66%, Analysis 25% and Evaluation 8.33%. On the other hand Synthesis and Application were totally missing. The paper of **year 2012** showed knowledge domain with the ratio of 11.11%, Comprehension as 33.33%, Application as 11.11, and Analysis as 33.33% and Evaluation as 11.11% out of nine questions. Synthesis domain was totally ignored this time too. Finally in the paper of **year 2013**, out of eleven questions, 27.27%



was ordained for ‘Knowledge’, 36.36% for ‘Comprehension’, 18.18% for Application, 18.18% for ‘Analysis’ whereas Application and Evaluation domains were totally missing this time.

The results of all the five years were analyzed and compiled collectively. These final results showed that Comprehension domain was most frequent with the percentage of 35.39%, and Knowledge 2<sup>nd</sup> in interest of the examiners and paper setters with the ratio of 23.52%, Analysis was the 3<sup>rd</sup> with the ration of 23.52% while Application remained on 4<sup>th</sup> with the ratio of 9.80%. ‘Evaluation’ domain was the one which was least focused with the ratio of 7.84% whereas Synthesis was totally ignored in all the five years papers.

The figure below evaluates the final results of all the five years papers:



(Figure 1.02) Cognitive Levels in English Paper-A

Then English Paper-B was analyzed. The results of the analysis are given below in the table:

Results of Cognitive Levels in English Paper – B												
	year 2009		year 2010		year 2011		year 2012		year 2013		Total	
	Frequency	%age	Frequency	%age	Frequency	%age	Frequency	%age	Frequency	%age	Frequency	%age
Knowledge	0	0	0		0		0		0		0	0
Comprehension	2	28.57	2	28.57	2	28.57	2	28.57	2	28.57	10	27.02
Application	3	42.85	3	42.85	3	42.85	3	42.85	3	42.85	15	38.46
Analysis	0	0	0	0	0	0	0	0	0	0	0	0
Synthesis	2	28.57	2	28.57	3	42.85	3	42.85	2	28.57	12	32.43
Evaluation	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Frequency</b>	<b>7</b>		<b>7</b>		<b>8</b>		<b>8</b>		<b>7</b>		<b>37</b>	

(Table 2.01 showing the results of English Paper-B for all the five years)

The results in the table show that in Paper-B three of the domains were totally missing. Only three domains namely: Comprehension, Application, and Synthesis were followed. The

most focused one in this hierarchy is Application domain with the ratio of 38.46% whereas Synthesis was 2<sup>nd</sup> in interest with the ratio of 32.43% and the 3<sup>rd</sup> one was Comprehension domain with the ratio of 27.02%. The paper was equally divided into seven questions with equal distribution of marks. The only exception was the sixth question where sometimes translation into English was added as optional with letter writing. Thus in this case instead of seven, eight questions were calculated in the analysis. Secondly, each year the paper pattern and the question format was the same, only the content of the questions was changed. It was for this reason that the missing domains were permanently missing during all the five years.

The figure below represents the final results of Cognitive levels in English Paper-B for all the five years.

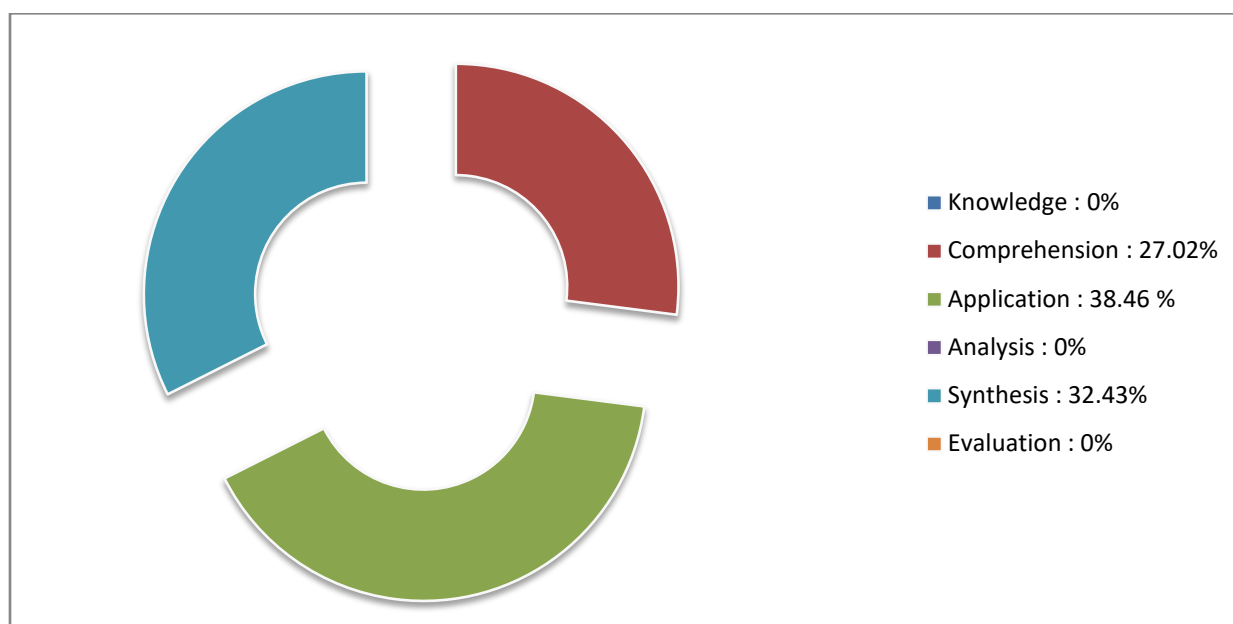


Figure 2.02 Cognitive Levels in English Paper-B

### Analysis

The results presented in the table 1.01 and figure 1.02 show that in English Paper –A much of the attention is given to Comprehension, Knowledge and Analysis whereas Application and Evaluation are the matter of least interest. The noticeable thing is the complete ignorance of Synthesis level in Paper-A. Apparently, it seems as the paper-setter has tried to duly divide all the levels in setting the questions but results in the table-1.01 show that only first four levels are focused with keen interest but the last two especially, the Evaluation level is least focused, even some times totally ignored as we see in the paper of year 2010 and 2013. According to researchers like (Kennedy et al., 1991), Analysis, Synthesis and Evaluation are said to be representing critical thinking. Evaluation is said to be the highest whereas Comprehension is considered to be the lowest level in the order of levels of critical thinking. According to Darwazeh (2004), examination paper should be a combination of high as well as low levels of thinking skills so that all students—students having high thinking ability and low thinking ability, might handle it. And there should be due ratio and proportion to the distribution of questions at all the six levels. In this regard, in the present study, we see that the lowest level has the highest rate—Comprehension: 35%, whereas the highest level has been placed in the lowest position—Evaluation: 7.84%. Same is the case with Application and Synthesis domain where Application type questions are found with 9.80% and Synthesis with 0% of proportion in the paper setting of English

Paper-A. Only Knowledge and Analysis have been found with equal distribution of questions with the ratio of 23.5 %.

When compare all the domains with each other in Paper-A with reference to the distribution of questions, we feel as if the paper setters are unaware of these cognitive domains or perhaps they are not so much expert in paper setting with equal distribution of questions in all the domains. At a moment, a level is given high priority but the next moment the same level is treated as the lowest one and even totally ignored as we see in Paper-A that in year 2009, 2011 and 2013 the frequency in knowledge is three (3) but in the year 2012 it is decreased to only one single question. Similarly, in the paper of year 2009 we have two questions for Evaluation domain in year 2010 and 2013 Evaluation domain is totally missing. All this shows inefficiency of the paper setters in dealing with the distribution of questions in accordance with the cognitive domains.

When we observe the final results of all the five years papers, for a moment we feel that the paper setting of Paper-A has been tactfully handled between Knowledge, Comprehension and Analysis with prior importance and with the light touch of highest cognitive domain i.e. Evaluation. But this sense of satisfaction is totally blurred and turns into a kind of disappointment with the fact that most of the questions are repeated time and again in the papers year by year. For example the question about the character of Grandpa and Tony is repeated in four papers out of five (see Q3 2013, Q.3 2012, Q.3 2011, and Q.5 2015). Similarly questions about the character of Pokham (see Q.2 2012, Q.2 2011, Q.3 2010) and characters of Dick and Maybold (see Q.5 2012, Q.5, 2011, Q.4 2010) are repeated three times. Other questions like:

Express your views about the character of little old man. (Q.3 2011, Q.4 2009)

What connection does Green establish between childhood and book? (Q.4 2012, Q.3 2010)

Man is usually called the “highest animal” on the basis of intelligence what are the specific traits that make him the lowest animal according to Mark Twain. (Q.4 2011, Q.3 2009)

What is the most interesting incident in the novel “Under the Greenwood Tree”? (Q.4 2010, Q.5 2009)

are also repeated time and again, which establish the sense of selected study to pass the exams. This repetition of questions has facilitated the students to prepare the selected question from the selected chapters to pass the exams. This continuous practice of repetitive questions has totally spoiled the spirit of assessment and evaluation.

Another damage which the repetition of questions has caused that is the development of cramming habits among the students. Students simply cram the answers to the questions appearing in the previous papers and achieve highest marks. Such students apparently achieve highest marks in exams but ultimately, they fail in problem solving, critical and creative thinking, and goal setting in their practical life.

As regards Paper—B, we see that only three of the domains namely, Comprehension, Application, and Synthesis are focused and the others three, Knowledge, Analysis and Evaluation are totally ignored. Here, Application is at the top with 38.46 % of questions, Synthesis is second with 32.43% and Comprehension with 27.02% of questions. In the individual yearly results in the table 2.01, we see that each year, the domain wise distribution of questions frequency and percentage is same. The only difference is in the case of Synthesis in year 2011 and 2012. This difference is the result of insertion

of Translation question as optional question with Letter writing. However, the rest of the consistency of results was due to the constant paper pattern. The paper pattern involves Essay writing, Correction of sentences, Use of idioms into sentences, Use of Pair of words in sentences, Letter writing, sometimes with the option of translation from Urdu to English and finally Précis and comprehension.

Apparently, the whole paper seems to be well planned but mismanagement peeps through the whole of paper in all the five years, without any least intention of improvement. The first example is the very first question of essay writing. Essay writing is a highly creative activity where we construct our knowledge and experiences and our personal opinions about a topic in a complete whole. It highlights the writing skills and expressive power on one hand and critical and creative thinking on the other. However the mismanagement is seen in two ways in this question. Firstly, we see that the number of topics for essay writing varies from year to year. Sometimes the number of topics in this question is three (Annual 2013 G-II, 2010 G-II), sometimes four (Annual-2009 G-I) and even sometimes five (Annual 2012 G-II, 2011 GII). There is no consistent pattern criterion in the number of topics. Secondly, the topics are also old and worn out which appear again and again. Such topics like “Science in the Service of Mankind”, “Earth Quack” “Education for Women”, “Terrorism”, “Unemployment”, and “My aim in Life” are seen in the papers of Matriculation and Intermediate level. The questions and Topics for essay writing should be intellectually challenging and demanding.

Another example of mismanagement in paper setting is the question of Translation from Urdu to English. Translation is the means of assessment of language skills of the students. This question should be the compulsory part of the paper but unfortunately it is set as optional with letter writing. Letter writing and Translation represent two different skills but they are absorbed into one single question as options. But the worst of the extent is that there is no consistency even in this optionality. As we see that the question of translation appeared only two times (in year 2011 and 2012) in all the five years papers. All such examples show mismanagement and inefficiency of the paper setters and examiners.

Another important aspect of Paper-B is précis writing and Comprehension. Through it we can judge comprehension and analytical skills of the students. Twenty marks are allocated to this one single question which shows the value of this question. But the problem is that most of the paragraphs for précis writing and comprehension in the exams are taken from the helping books which the students had gone through during their course work. Spirit of précis writing and comprehension can be maintained if some new material is introduced.

Sentence correction, correct use of preposition, use of idioms and pair of words are a good way to judge how students apply their knowledge of language. It is good that such language components are included in Paper-B to assess the language knowledge and skills of the students. The whole framework of Paper-B is good. But problems lie in the content which is used for assessment.

Finally, we see that Paper-B covers the cognitive levels—Application and Synthesis, which are missing in Paper-A. If we take Paper-A and Paper-B as whole for the assessment of cognitive levels, we see Comprehension, Knowledge and Analysis are dominant in Paper-A, whereas Application and Synthesis are covered by Paper-B. The greatest flaw is seen in the complete ignorance and missing of Evaluation domain in both the papers with little exception in Paper-A.

## **Conclusion**

Examination is an integral part of Education. Education is incomplete without assessment and examination. Examination is a tool to assess the potential of teaching inputs and outcomes of learning. If we consume all our energy and money on teaching strategies and planning curriculum and we use our best sources and resources to train and educate our young generation but all our efforts are futile and useless if we have wrong assessment tools or if we use this tool wrongly and inefficiently. The findings of this study show that in B.A examination of English Paper-A & B administered by University of Peshawar, paper pattern allows to distribute all the cognitive levels of critical and creative thinking skills at equal level. All the cognitive domains— Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation, ordained by Bloom in his taxonomy are found in examination papers. Much of the emphasis is given to the lower levels whereas the highest levels, like Evaluation, meet extreme scarcity, even sometimes non-entity. Much of the importance is given to Knowledge and Comprehension. Though Analysis, Application and Synthesis are also observed but existence of these critical and creative levels is marred and blurred by other internal and external factors like inefficiency of paper setters, repetition of questions, selected chapters, availability of helping books, guides and guess papers etc. These factors facilitate the students to achieve highest marks with little crammed material in the exam but they are also a big hurdle in the development and progress of our country. They are a big hurdle in the development of critical and creative thinking among the students of graduation. As a result, our youngsters fail in their practical life in society as well as in their representation of their country in the world. Thus, in order to achieve success in the world, to produce good citizens, successful businessman, administrators, scientists, social workers and political leaders, we need to improve our self, our administration, and teaching and assessment strategies. We need expert teachers, paper setter and expert examiners. We need to define certain rules and regulations and strictly follow those rules in teaching and assessment process. All short-cuts, cramming helping material and books should be banned. Only those books and material should be allowed which is approved by Higher Education Commission. Repetition of questions from selected chapters should be avoided. If we define such rules and strictly follow them, only then we will be able to produce such individuals who may face all the challenges of life in this world.

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## APPENDIX—1

### SOURCE DATA PAPER-A

#### Questions Distribution of English Paper-A in all the Six Cognitive Domains

##### 1-Knowledge

1. Write the character sketch of Metilda Loisel. (Q.2 Annual-2013 Group-II)
2. What idea do you get of the condition of poor people in Russia from “Beggars boy at Christ’s Christmas tree? (Q.2 Annual-2013 Group-II)
3. Write a note on the chapter “Fancy in the rain”. (Q.5 Annual-2013 Group-II)
4. Write a character sketch of Pokham in detail. (Q.2 Annual-2012 Group-II)
5. How did little Tuk help the washer woman? (Q.2 Annual-2011 Group-II)
6. Write the character sketch of Pokham. (Q.2 Annual-2011 Group-II)
7. How much land does a man require? (Q.2 Annual-2011 Group-II)
8. What is the role of Carter in the story? (Q.2 Annual-2010 Group-I)
9. What is the most interesting incident in the novel, “Under the Green wood Tree” (Q.4 Annual-2010 Group-I)
10. What part does the Gold Bug play in the discovery of treasure? Write in detail(Q.2 Annual-2009 Group-I)
11. Write down the character sketch of the old man. (Q.4 Annual-2009 Group-I)
12. Describe the most interesting incident in “Under the Green wood Tree”. (Q.5 Annual-2009 Group-I)

##### 2-Comprehension

1. Explain with reference to the context any three of the following : (Q.1 Annual-2013 Group-II)
2. Express your opinion about the characters of Grandpa and Tony? (Q.3 Annual-2013 Group-II)
3. Explain some of the ways in which ideas have come to creative thinkers and what was the source of these ideas? (Q.4 Annual-2013 Group-II)
4. What are the main themes of the novel “Under the Green wood Tree” (Q.5 Annual-2013 Group-II)
5. Explain with reference to the context any three of the following : (Q.1 Annual-2012 Group-II)
6. What connection does Green establish between childhood and books? (Q.4 Annual-2012 Group-II)
7. What are the main themes of the novel “Under the Green wood Tree”? (Q.5 Annual-2012 Group-II)
8. Explain with reference to the context any three of the following : (Q.1 Annual-2011 Group-II)
9. What moral lesson do you get from the story? (Q.2 Annual-2011 Group-II)
10. What moral lesson do you learn from the story? (Q.2 Annual-2011 Group-II)
11. Express your views about the character of little old man (Q.3 Annual-2011 Group-II)
12. Discuss the structure and plot of “ Under the Green wood Tree” (Q.5 Annual-2011 Group-II)
13. Explain with reference to the context any three of the following : (Q.1 Annual-2010 Group-I)
14. What opinion do you form of the character of Pokham? (Q.2 Annual-2010 Group-I)
15. What connection does Green establish between childhood and books? (Q.3 Annual-2010 Group-I)
16. Explain with reference to the context any three of the following : (Q.1 Annual-2009 Group-I)
17. Summarize the lesson “The Necklace” written by De Maupasant. (Q.2 Annual-2009 Group-I)
18. Express your opinion about the little old man.(Q.4 Annual-2009 Group-I)

##### 3-Application

1. Discuss how far the title of the play, “Paddy Pool” is suitable? (Q.3 Annual-2013 Group-II)
2. How does the chapter “Fancy in the rain” illustrate the character of Lady Elizabeth Enderfield? (Q.5 Annual-2013 Group-II)
3. Discuss how far the title of the play is suitable? (Q.3 Annual-2012 Group-II)
4. What is the role place of Carter’s incident in the story? **Does it disturb the Garden Party? (Q.2 Annual 2010 Group-I)**
5. Show how far the title of the play “Paddy Pools” is suitable. (Q.4 Annual-2009 Group-I)

#### 4-Analysis

1. Write the character sketch of Matilda Loisel. **How does she represent womanly vanity?** (Q.2 Annual-2013 Group- II)
2. How does the French Hospital where Orwell stayed, can be compared with the hospital in England discuss in detail? (Q.4 Annual-2013 Group-II)
3. How is Laura different from the other of her family? Discuss. (Q.2 Annual 2012 Group-II)
4. Contrast the views of Grandpa and Tony. (Q.3 Annual 2012 Group-II)
5. Compare and contrast the characters of Dick and May bold as they appear in the novel “Under the Green wood Tree”. (Q.5 Annual 2012 Group-II)
6. Contrast the views of Grandpa and Tony. (Q.3 Annual 2011 Group-II)
7. Man is usually called the “highest animal” on the basis of intelligence what are the specific traits that make him the lowest animal according to Mark Twain. (Q.4 Annual 2011 Group-II)
8. Compare and contrast the character of Dick and May bold as they appear in the novel “Under the Green wood Tree” (Q.5 Annual 2011 Group-II)
9. What is the dominant theme which underlies the story “The Secret Life of Water Mitty”? (Q.3 Annual-2010 Group-I)
10. Compare and contrast the character of Dick and May bold. (Q.4 Annual-2010 Group-I)
11. Contrast the views of Grandpa and Tony. (Q.5 Annual-2010 Group-I)
12. Man is usually called the “highest animal” on the basis of intelligence what are the specific traits that make him the lowest animal according to Mark Twain. (Q.3 Annual 2009 Group-I)

#### 5-Synthesis

**No instance found**

#### 6-Evaluation

1. Do you agree with Win that excess TV viewing is problem of the same magnitude as an addiction? (Q.4 Annual 2012 Group-II)
2. Leacock uses exaggeration in the lesson “How to Live to be 200”. How far do you agree with his title, give examples? (Q.4 Annual-2011 Group-II)
3. Critically summarize the lesson “Where do the Bright ideas come from” by Lancelot Whyte. (Q.3 Annual 2009 Group- I)
4. The characters of Hardy in “Under the Green wood Tree” are true to life as well as drawn from life. Discuss in detail. (Q.5 Annual-2009 Group-I)

### SOURCE DATA PAPER-B

#### Knowledge

**No instance found**

#### Comprehension

- 1- Correct any five of the following sentences.
- 2- Read the following passage carefully and answer the questions given at the end.

#### Application

- 1- Use any of the following idioms in your sentences.
- 2- Fill in any of the following blanks with correct preposition.
- 3- Use any of the following pair of words into your sentences



### **Analysis**

**No instance found**

### **Synthesis**

- 1- Write an essay of 350—400words on any of the topic
- 2- Write a letter to the editor about the disadvantages of entry tests for professional colleges.
- 3- Translate the following sentences from Urdu to English.(Q.6 Annual-2012, 2011 G-II)

### **Evaluation**

**No instance found**

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