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EFFICACY OF READING COMPREHENSION MODELS IN SCHEMA DEVELOPMENT PROCESS - AN EMPIRICAL INVESTIGATION

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ABSTRACT

This experimental study aimed at evaluating the reading comprehension strategies and vocabulary learning techniques through the lens of schema development in learners. The focus of this research work is on learning new lexis by comparing the efficacy of top-down and bottom-up models of reading comprehension. The study further discloses the details of how learners develop the understanding by using previous experiences and background knowledge. In order to justify the main aim of the research a mixed method research framework was adopted for data collection process. Data has been collected from 20 students of 8th grade. The current research is having both qualitative and quantitative bent. Due to the experimental structure of the research, data collection process relied on pre-test and post-test of vocabulary and reading comprehension. SPSS software has been used for quantitative data analysis. Qualitative data has been analyzed on the basis of research questions which this research is based on. This research may help ESL instructors to guide students with a wholesome analysis of reading strategies, which assist them in comprehension process in order to read according to the context. By equating both models of reading comprehension on the basis overall data the results show that top-down reading comprehension approach is more operative in schema activation process as oppose to the bottom-up approach. The article is significant in developing new methods and techniques for English language pedagogy. Comparison of two distinct models of reading comprehension highlights their pros and cons, which may be used further for an improvised practice of teaching English vocabulary.

INTRODUCTION

Reading is one of the fundamental English skills while reading the reader extracts meanings from the text and tries to comprehend the whole idea of the text either by concentrating on the main details of the text or by focusing on the slight grammatical descriptions to comprehend the text appropriately. While reading a reader basically aims at understand the semantic basis of the text while focusing on his previous experiences in the mind, the literal information given in the reading passage and the information that the text is having on contextual grounds. A reader triggers his cognitive competencies and links his/her mental representation of the lexis with the words in the text and grasps the whole idea. Vocabulary inference tasks in the classroom help learners to become more aware of the new vocabulary so that they can read the text appropriately and their reading competencies may develop in this regard.

The Role of Schema in Reading

The term "Schema" was formerly introduced by a philosopher Immanuel Kant in 1804, the original meaning of schema is "the piece of transcendental fantasy" (Wang & Chen, 2002). Schema is a highly psychological concept. Schema is chain of thoughts, events and perceptions in mind which interpret patterns of previous information and its linkage while perceiving new context. According to Bartlett a psychologist "schematic knowledge is an activation of past experiences and old exposures" (1932). Schemata actually is a store house of information and knowledge in human mind which is utilized time to time to grab insights well. Schema can also be proposed as a list of scenes in the mind which are extracted when it is needed. The role of schema theory is a very vital aspect n reading comprehension and development. Schema performs a very striking role in grasping the text. Schema is described as having a systematic information and perceptions regarding people, places, things, and events. The connection between the reader's cognitive competence and list of former experiences and the text leads towards comprehension process which is termed as schematic knowledge.

In the past theories of top-down and bottom-up were considered as metaphors not as proper models or approaches but later in 1970's they build the course for research in reading comprehension abilities while highlighting the schema development process. Both top-down and bottom-up models are perceived as the process of conceptualization and abstraction than to be taken as rational and testable hypothesis. This type of classification of both terms found in past studies but this categorization providing beneficial techniques to compare different but correspondent approaches of classifying reading comprehension abilities and their organization.

In bottom-up model reading began from very discrete and minor linguistic rules in the text. Readers read the text by focusing on the specific and in-depth information in the text. Primarily learners focus on word by word details occurring in the text then move towards comprehending large sentences, phrases, clauses and meanings in the text. L1 reading experts compose that phonemic and morphemic details in the text direct readers towards the inclusion of universal semantic approach of the text and they become fluent and successful L2 readers. As Daszak, Cunningham, and Hyatt (2000) put forth "if learners are taught in a way that how to spell a cat then instinctively they will be able to write rat, bat, pat and many more with same rhyming scheme"(p. 184). In bottom-up model phonemic representations in the text make readers able to trigger their mental lexicon for a certain word or letter. In this way the process of word recognition becomes feasible as readers relate the words in the text with the words in the mind and cognitively try to understand the whole text. This technique of deriving meaning from mental lexicon and making the text more understandable is called "psychologically divine".

The purpose of this study is to analyze the efficacy of two models of reading comprehension and schematic development in learners in a particular tenor. The study further put forth the process of development regarding the understanding of text and lexical items by using former insights in the mind. This study works on checking the role of teacher as to what extent pedagogical instructions and activities guide L2 learners towards reading as a more comprehensible procedure by activating schematic knowledge.

In Pakistan research was conducted on 10th class ESL students for the development of reading comprehension ability by using interactive model of reading comprehension. Another research was designed on reading comprehension of boys and girls at school level by taking the reading tests for both genders as data collection tools. There was a research work in Pakistan on the exploration of reading skills of early grade leaners.

STATEMENT OF THE PROBLEM

As discussed above, multiple researches based on gender, based on public/private sectors, and based on different classes were carried out. The research was aimed at checking the effectiveness of interactive reading comprehension model and GTM teaching method to teach reading. Which indicated that learners learnt quite well when they were taught by using interactive model as compare to the traditional methods of teaching. Reading comprehension processes at secondary level were also described in the second research study which is mentioned above. The last research which is interpreted above had the basic purpose to check the reading comprehension process faced by public and private sectors in Pakistan, laid the foundation of current research. Despite a lot of research on teaching reading comprehension at distinct criterion this area of research which is focusing on investigating the efficacy of reading comprehension models in schema development process is yet to be explored in Pakistan.

Significance of the Study

The significance of this article lies primarily in developing new methods and techniques for English language teaching. This study leads teachers towards appropriate use of reading activities which assist learners in the process of vocabulary mastery, translate the texts by using schemata and enhancing their reading competencies. This research on schema development process paves the way for language teachers when learners are not familiar what schema exactly is and how to use it in text comprehension then top-down is more effective method as oppose to the bottom-up according to the findings.

Aims and Objectives

In order to achieve the purpose this research focuses on achieving the following objectives:

1. Evaluate the enactment of reading and vocabulary learning techniques

1. Explore the role of prior knowledge existence

2. Compare the efficacy of reading comprehension models in learning new lexis

Research Questions

This research answers the following major and minor questions

1. How far do top-down and bottom-up methods of teaching reading impact L2 learners' reading competencies?

2. What are the instructional tools the teacher use to foster the activation of background knowledge while reading the text?

3. How far do schema activation techniques via vocabulary inferencing tests impact the process of learning new lexis?

4. What are the strengths and weaknesses of top-down and bottom-up methods in schema development of learners?

LITERATURE REVIEW

This section deals with the body of literature relevant to the schema development by using reading comprehension models and reading comprehension techniques.

In Oman there is dearth of strategies that how teachers of English in classrooms instruct learners in activating their schemas. Al-Issa (2006) believed that first issue faced by Omani EFL students is the lack of schemata while reading. This study explores the three main aspects of schema related to reading comprehension process, the role of teachers in classroom while activating the background knowledge of learners and the role of strategies they use in the process of schema activation. Another research by Ajideh (2003) also described that dearth of schema activation in learning process is one of the three fundamental problems in leaning process in Oman. Despite a lot of research works in the field of schema there is still a dearth in the use of teaching activities which should be used while learning (Johnson, 1981; Carrell & Eisterhold, 1983). The participants of the study are sixth and seventh Grades Basic Education experts in Batinah North Region. Data was collected during the academic term 0f 2009-2010. Total population of the research was 217 members 129 were women and 88 were men. Questionnaire, observation and interviews were selected as data collection tool in this article. The findings showed few guidelines for teachers of English and some insights for pedagogical developments also.

Moreover, a research seems to consentrate that role of content schemata is important in enhancing reading comprehension in an EFL classroom (Al-Jahwari & Al-Humaidi, 2015; Alhaisoni, 2012). This research work has offered

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remarkable stance on the role of readers' former knowledge in their failure or success in understanding the Witten passages. This research gives the idea that multiple researches have been conducted to evaluate Saudi English learners' preferred reading strategies (see for example Al-Issa, 2006; Nezami, 2012) role of pleasure reading in enhancing their reading fluency and comprehension (Al-Asmari & Javid, 2018) and reading-related problems of Arab English learners to make differences between native language and second language (Block, 1992). This research relies on a survey for data collection. 61 participants were chosen who all are EFL teachers at Center (ELC), Taif University. Quantitative research paradigm is used in this study. A survey contained 24 items and Likert scale has been used. A questionnaire used by Al-Jahwari, & Al-Humaidi (2015) has been taken in this research which consisted of four parts with 32 items. The findings have also indicated that EFL teachers consider low English language ability and poor reading comprehension abilities of Saudi English learners and also the lack of proper teaching techniques and classroom teaching instructions in their institute. There are few suggestions which have significant educational application in gestation of much sought-after object of appropriate ELT in the KSA by certifying better reading competencies among Saudi English learners. An article evaluates the connection schemata and reading comprehension in L2 among postgraduate students in UPM. 20 students were chosen as participants of this study who are having the same capability in English as L2. Reading is a fundamental English language skill. It is basically decode the chain of oral production of lexis. This concept is not as simple as it looks, it is about comprehending the deeper meanings of a text. The more capable we are in grasping the meaning of the written passages the more our reading comprehension skill will enhance. Shen (2008) states that schema has a vigorous effect on comprehending reading texts such sort of knowledge makes students presuppose what is coming next but the point is that learners have correct schemata in their mind regarding a particular text otherwise it will have harmful impact on the understanding of text. Carrell (2008) describes that the effect of schema on reading comprehension is not very striking on the other hand prior knowledge is very remarkable while reading. Quantitative research framework is used in this study for collecting data. Questionnaire is used as a data collection instrument which is consisted of 8 questions and two are openended questions. This paradigm is used because the data on schema and reading comprehension shows that how the results are affected by assessment (Dochy, 1992; Dochy, Seger, & Sluijsmans, 1999). The results show low schematic and reading comprehension. The performance of students in a reading comprehension with high schemata is better than comprehending in lower schematic knowledge.

Translation and comprehension are connected since Cat ford's introduction of theory of meaning (Bialystok, 1991, p. 145). This research tries to explore that how content schemata can affect students' performance in translation. The objective of this article that connection and distinction among content schema, reading ability of learners, and vocabulary mastery as free volatiles and students' performance in translation as the dependent volatile. Few researches have been designed to evaluate the effect of previous knowledge on translation and some researches focus on the role of schema in reading comprehension procedure. A lot of researches analyze the role of cultural schema, which is termed as "culturally specific content schemata" in reading comprehension procedure (Snow, 2002; Robinson, 2000; Johnson, 1981; Steffensen, Joag-Dev, & Anderson, 1979). These researches consentrate on the vital role of schema in comprehension process. The reason of inappropriate translation is the lack of previous knowledge (Kim, Heidari, & McCarthy, 2020). The other reason is not having appropriate mastery in vocabulary inference while reading (Yazdi & Kafipour, 2014). Grammar rules are also very significant in reading comprehension not merely vocabulary is having a vital role (Khojasteh & Reinders, 2013). 172 English leraners at Islamic Azad University of Shiraz, Hafez non-profit university, as well as Booshehr, Safashahr, and Lar Payamenour universities were randomly chosen as participants. Their ages range from 21 to 29 years. They were 32 men and 140 women. Two tools were used in this study for data collection the first is open-ended questionnaire contained 6 items and the other is vocabulary test designed by Stewart (2014). The findings show that vocabulary and translation are interconnected.

Schema theory is a philosophical concept firstly proposed by the philosopher Kant in 1781. In 1970s, psychologists Rumelhart (1980) and others designed several researches and developed the concept of schema into a full-fledged theory. According to this theory, the schema is made of past experience or former knowledge. The purpose of this article is to evaluate the implementation of schema theory in English reading instructions. When the reader relates the schema in the mind with the information given by the language material, he can grasp the data he is reading. Halliday and Hasan (2014) proposed that most of the work of learning English is learning to give right predictions. The predictions in the pre-reading direct students to gain proper background knowledge and trigger the mandatory schemas. This sort of "warm-up" activity is known as "Lead-in". It aimed at mitigating the difficulty in reading, prepare learners for reading, and making them familiar with reading tasks.

Rumelhart (1980) stated that the schema describes the system of the memory content, that is, the schema gives learners with the rubric of the interrelated content concept in the memory.

Reading comprehension is one of the basic aims of ESL teaching/learning. In short, there are two fundamental insights in reading. The first, product-oriented reading approach, explains that the meaning lies in the text itself and is based on the aspect of the text to decide the meaning. In this view, pre-reading tasks actually depends on disclosing the meaning of difficult words. As for the second process-oriented reading approach, meaning is based on the successful relation between the reader and the text, and brain features play a vigorous role in comprehension. Widdowson (1979) described that recent reading research states reading as a reasoning task in which readers can generate meaning based on textual clues. With the processing of this part of the information, as the reading develops, the first decision is confirmed, rejected or accepted (Goodman, 1970, p. 260). Alderson and Urquhart (1984) claim that it is easy to consider reading both as product and as process. In this study, as an ESL reading instructors I worked with a class of intermediate –level learners for one education term and particularly focus on schema-theory –based pre-reading

processes. Competencies in reading based on the proper link between knowledge in English language and knowledge of the universe.

Imran Ahmad (2020) described that English reading comprehension skills is important for pedagogical wellbeing. Though a lot of Pakistani teachers selected the old GTM method for teaching, which is not capable enough to help pupils to grasp the course, syllabus and innovative perspectives that teachers teach them in English. The main aim of this research is to compare the effectiveness of interactive model to teach reading and GTM approach of reading comprehension. Learners are passive learners and there are less basic reading comprehension skills when they are taught with traditional approaches. Reading comprehension competence have a vigorous significance in the procedure of learning new perspectives and sudents' success at school level. Quasiexperiment research framework has been chosen in this research. Population in the present study is 10th class learners of two schools in Korangi, Karachi. The results of the research exhibited that learners become skillful and better readers when they are taught by using interactive method of reading comprehension as compare to the GTM approach.

Shamaila Amir (2018) proposed a research in Karachi to check the process of reading comprehension of learners of secondary grade in both private and government sectors. English is a lingua franca and is used by a large variety of masses around the world for multiple purposes such as for economical progress, for political purposes and for the purposes of trade. Researchers put forth the process of learning to read the language forms is one of the striking ways to enhance proficiency and competency of a particular language. Reading tests were conducted as data collection tools for 100 boys and 100 girls at secondary grade and their scores were contrasted to find out distinctions and relation between the findings and results. Two questionnaires were used as data collection tool as well in order to estimate the success rate, practices and complexities of reading comprehension procedure. Data was explored and findings revealed that there is a remarkable distinction between the scores of students and practices of teachers while teaching reading skill.

RESEARCH METHODOLOGY

Research Design/Frame Work

The frame work of the present research is experimental research design. In order to accomplish its set objectives and to explore which method of reading comprehension is more effective. It is based on pre-test and post-test method; implying that it is having both quantitative and qualitative bent. The findings of the research are interpreted with the scores achieved by learners in the tests. As the post-tests consist of subjective portion as well to check schematic knowledge of students while attempting the test based on expansion of reading competencies, abilities and learners' command on vocabulary. However, it is safe to call the process triangulated, with a bent towards quantitative side. The triangulation has been taken place on the interpretation level, as it reveals to what extent the schemata and past experiences are helpful in comprehending a text. **Scheme of inquiry.** After experimentation of 20 students in pre-test, 10 students have been taught by using top-down method in which their schemas built differently from the bottom-up model. Learners in both top-down and bottom-up models were taught for 9 days and at the 10th day post-test was conducted to evaluate their command on utilizing schema after teaching them in a controlled situation and by using particular activities according to both models. Learners were taught 45 vocabulary items as well, along with learning to read by triggering schemata. The portion of checking their vocabulary mastery was also included in the post-test.

Population and Sampling

The research is related to investigating that which reading comprehension model worked well in comparison with the other while teaching them new vocabulary from the texts they were unfamiliar with and made the learners competent readers, by developing schematic knowledge which they used in text reading. The sample therefore mainly contains 20 ESL 8th grade learners from a private school in Faisalabad. The sample was intentionally delimited to 20 students due to feasible accessibility.

Sample type. As per the quantitative and qualitative nature of the research, the most suitable sampling type would be stratified random sampling.

Sample size. Twenty 8th grade students were selected as sample from Bloom Star School System, Jhumra; Dist. Faisalabad. These 20 students were divided into two groups who were taught by using the text which was formerly unknown to them which they could read easily but the comprehension of that text was little beyond to their cognition. They were made to read the text by activating their schema which helped them in comprehending the new terms in the text and they became capable enough to grasp that what the overall text was about. **Sample criteria.** Students in both top-down and bottom-up groups were divided into three categories. They were as high achievers, mediocrites and low achievers. One teacher for both groups was selected in order to minimize the problems of extraneous variable such as teaching competency.

Data Collection Tools

Pre-test and post-test were used as data collection tools to evaluate the schema development of students and teach novel vocabulary items. Welly Ardiansyah (2018) utilized these tools in order to test students' reading comprehension in top-down and bottom-up models. In this article same tools of pre-test and post-test were used after modification. Another technique of making reading test taken from a book (Paul Nation, 2009) to check vocabulary learning skills of students (See Appendix B, Q, 6-10). As the designed research is experimental in nature so it will rely heavily on testing system. Pre-test is contained 36 items and post-test consisted 48 items. The text which has been taken is of political science. This sort of text use intentionally because learners never studied it before. In this way their schemas were not built formerly that is why they has been developed by using political science in a totally innovative manner.

Tools for Data Analysis

The proposed research is based on both quantitative and qualitative paradigms. Quantitative part has been analyzed by using SPSS software and t-test has also been used for the comparison of both top-down and bottom-up reading comprehension models. The small qualitative portion is based on subjectivity of learners regarding usage of schema while reading, which has been discussed according to four research questions by giving references from pre-test and posttest in appendices.

FINDINGS AND DISCUSSION

The pre-test and post-test has been undertaken by 20 students. 10 students have been selected for pre-test and post-test by using the top-down model and the other 10 students have been selected to test under the bottom-up model of reading comprehension. Experimentation has been conducted under controlled conditions.

		Top dow	'n		Bottom-	up	
		Count	Total	%	Count	Total	%
Pre	S_TD_01	18	13	54.2%	18	11	45.8%
	S_TD_02	18	7	31.8%	18	15	68.2%
	S_TD_03	18	12	50.0%	18	12	50.0%
	S_TD_04	18	13	56.5%	18	10	43.5%
	S_TD_05	18	12	57.1%	18	9	42.9%
	S_TD_06	18	10	52.6%	18	9	47.4%
	S_TD_07	18	9	39.1%	18	14	60.9%
	S_TD_08	18	14	58.3%	18	10	41.7%
	S_TD_09	18	9	45.0%	18	11	55.0%
	S_TD_10	18	14	63.6%	18	8	36.4%

Table 1: Results of top-down and bottom-up methods in both pre-test and post-test

Post	S_TD_01	24	24	66.7%	24	12	33.3%
	S_TD_02	24	13	44.8%	24	16	55.2%
	S_TD_03	24	22	59.5%	24	15	40.5%
	S_TD_04	24	21	51.2%	24	20	48.8%
	S_TD_05	24	21	50.0%	24	21	50.0%
	S_TD_06	24	24	52.2%	24	22	47.8%
	S_TD_07	24	24	55.8%	24	19	44.2%
	S_TD_08	24	22	62.9%	24	13	37.1%
	S_TD_09	24	23	63.9%	24	13	36.1%
	S_TD_10	24	24	66.7%	24	12	33.3%

The table 4.1 above is exhibiting the overall results of students in both topdown and bottom-up groups, that how much schema is developed by using topdown and bottom-up models and reading techniques. The table is divided two parts upper part consists of results of pre-tests in top-down and bottom-up models with their aggregate percentage on the basis of frequency of correctness in vocabulary items which were given in pre-tests in both reading comprehension approaches. Same pre-test that was used for both groups in topdown and bottom-up reading comprehension models, frequency of vocabulary items was same in both pre-tests as well. If we compare results of both reading models on the basis of pre-test then it is clear from the above table that students in top-down reading comprehension model were more familiar with the term schema and they use their background knowledge to some extent while answering the questions in the test.

The other half of the table is indicating a further breakdown in the overall scores of test takers and frequencies of total vocabulary items and correct vocabulary items with accumulative percentage of each student in terms of post-test. Posttest in both groups was conducted after teaching them properly by using reading comprehension activities and reading techniques in the classroom. In top-down model students were taught that how to comprehend the overall meaning of the text by activating schema, which assist them to understand the meaning within the text by using past experiences. Hence it is quite clear from the table above that the top-down model remained successful in schema development process and make students remarkably competent in reading. On the other hand, bottom-up approach is not able to touch the bar set by top-down reading comprehension model.

	Test	Test		
	Top-down	Bottom-up		
Ν	42	42		
Mean	7.88	6.48		
Std. Deviation	2.661	2.830		
Std. Error Mean	0.411	0.437		
t-value	2.343*			
Prob.	0.022			

Table 2: Comparison of top- down and bottom-up test regarding overall data

NS = Non-significant (P>0.05); * = Significant (P<0.05); ** = highly significant (P<0.01)

SD = Standard deviation

 $SE = Standard \ error$

In this study two pre-tests and two post-tests were taken by using the top-down and bottom-up models of reading comprehension. The results presented in the figure above clearly explain the findings of this research work pertaining to the efficacy of both models of reading comprehension. The figure above is revealing that which model of reading was more effective in classroom and which model was less beneficial while teaching. Total number of items in pre and post-tests in top-down model were 42 and the items that were selected for pre and post-tests in bottom-up model were also 42 in total. The overall mean of items in top-down model is (7.88) and (6.48) is the mean of items when the bottom-up model was applied in teaching.

When students were taught by using both reading models the high standard deviation (2.661) in bottom-up model of reading comprehension indicated that it is less reliable as compare to the top-down model which is having standard deviation as (2.830). (0.437) standard error is disclosing that the reliability of bottom-up model is far from the sample average and top-down model is closer to the sample average because the standard error of mean is less scattered as it is (0.411). The difference between the effectiveness of both models is remarkable as it is (2.343**) which indicates that top-down model of reading comprehension worked well in classrooms but bottom-up model worked not as good as the top-down was. Students use their background knowledge in top-down model more effectively either in pre-test or post-test. On the contrary students' schema activation is not as better in bottom-up model as it is in top-down model of reading comprehension.

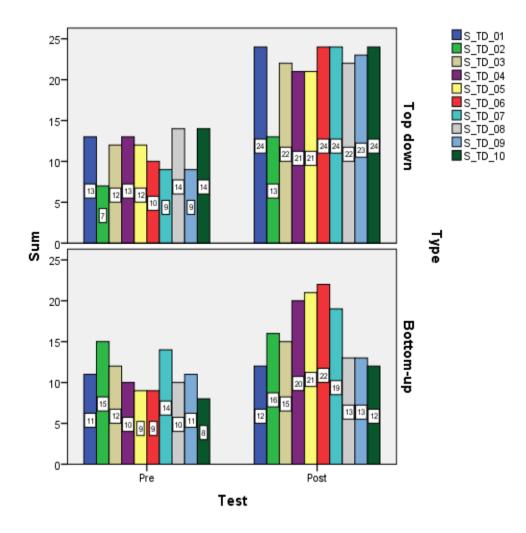


Figure 1: Results of top-down and bottom-up methods in pre-test and post-test

The figure above is categorized into two parts one half is showing both pre-test and post-test results, was taken by using top-down model and the second half of the figure is disclosing the results of bottom-up approach in both pre and posttests. This graph is not only highlighting the distinctions between results of pre and post-tests under both models but also indicate which reading comprehension is better in schema development process on the basis of both tests by using both models. The difference is marked with the range of sum outside the bar which is from 0-25, the position of tests and both models according to the sum is deciding which approach is better in developing schematic knowledge. In the upper part of the figure the bars at the right side are indicating that at the time of pre-test of top-down group the schema of students was not fully developed. The bars are showing the range of numbers of vocabulary items which were answered correct at the time of pre-test because students was quite unaware of the term schema as they did not know how to activate their back ground knowledge while reading.

The bars in the graph at the left side are exhibiting that due to proper vocabulary learning techniques and use of reading comprehension strategies in the classroom students became familiar with the term schema and they became capable to use it while reading the text. They became able to use mental representation of certain words while reading. As the sum outside the graph is ranging from 0-25 and it is clear from the outlook of the graph that in pre-test schema development of students hardly touch the range between 10-15. On the contrary in post-test this range is between 20-25 in graph. In this way it is obvious that with proper reading guides, schema development activities direct learners that in which way to activate their background knowledge and use it while reading.

The lower part of the graph is opposite to the upper side this part is indicating that in bottom-up approach while taking pre-test schema was not as developed as at the time of post-test was. After pre-test learners were made to read the text and enhance their reading competencies by focusing on the in-depth grammatical details of text. Students required to move from specific details to general details to comprehend the text properly by using their previous knowledge. In the upper part of the graph left side is showing the findings of pre-test and the opposite side is showing the results of post-test. Primarily it is the mere distinction between test results within an approach. The average range of pre-test results is ranging between 10-15 and the average of post-test falls between in 20-25. However, it is obvious that learners can develop their schemas and reading competencies with proper reading instructions in L2 learning classrooms. The end the whole graph is strikingly showing that students learn better in top-down model as the position of top-down model is higher than the bottom-up model.

Research Question No. 01: How far do top-down and bottom-up methods of teaching reading impact L2 learners' reading competencies?

First question deals with the reading abilities of L2 learners and to what extent they enhance over time by using top-down and bottom-up reading models in language classroom. The reading competencies of L2 learners can be extended when a teacher uses different techniques in classroom such as reading aloud the text, read the whole text and extract five unknown words to learn its meaning and then comprehend the whole text with the help of these five lexemes, read the text by following the meaning of each single word to grasp the text better. While reading a text the instructor asked learners use your prior knowledge to understand the text relate your past exposures and common shared knowledge to comprehend the given text appropriately.

Students were asked to become a skillful reader, read a passage carefully and differentiate the statements which are given in the text, which are true according to the paragraph in text and which are totally wrong or even not present in the passage (See Appendix B, Q, 26). They were given a text and were asked to fill the empty slots by reading the passage carefully (see Appendix B, Q, 21-25, and P.25).

Research Question No. 02: What are the instructional tools the teacher use to foster the activation of background knowledge while reading the text?

Learners reading comprehension level and schema development process is based on the cognition and mind. Second question deals with which strategies and methods that were used by the teacher to activate the schema of the readers in second language reading comprehension process. In this context there are two remarkable reading comprehension models, top-down model and bottom-up model of reading comprehension. In another task teacher asked the learners to read the passage by discussing it with your friends and give a title to a given paragraph. They activate their schema while reading a particular text and tried to make it understandable for themselves. They used to read it with their peers as well and discussed the whole meaning of the text. They were assigned to give title to a certain passage by using schematic knowledge (see Appendix B, Q, 21-25 and P.22).

Research Question No. 03: How far do schema activation techniques via vocabulary inference tests impact the process of learning new lexis?

The third question is about how schema activation and vocabulary learning techniques help learners in learning new lexis which are helpful for them while reading certain texts. Before reading a text learners must be familiar with approximately half of the vocabulary items of the text then they will be capable to read it appropriately otherwise it will be difficult for them to understand the text and trigger their schema which is relevant to the words in the text. In this research work vocabulary along with its many aspects is directly proportioned to the process of comprehension learners not only haphazardly read the text but tried to activate their common shared knowledge under two reading comprehension models while reading.

This study is not merely based on extracting meaning from the text but learn certain vocabulary items which was helpful for learners in reading process. As in this study learners were given a lot of tasks to make their reading better. In the same way in vocabulary tasks learners were supposed to learn five vocabulary items per day and at the end of the specific term they were asked in the test to write the synonyms of certain vocabulary words (see Appendix B, Q 6-10).

Research Question No. 04: What are the strengths and weaknesses of topdown and bottom-up method in schema development of learners?

The last question deals with which model of reading comprehension worked well in schema development process and which model lagged behind in schema activation process. The difference between both reading models is not dichotomous both approaches focus on schema development on different levels. In top-down approach readers read the text by concentrating on general details and then moved towards specific such as firstly they tried to understand the whole meaning of the text, read paragraphs, sentences, clauses and then focused on in-depth grammatical details to grab the overall idea of the text by using schematic knowledge. Using background knowledge while reading the text foster readers to understand the authors' literal meaning. On the contrary in bottom-up approach learners moved from specific to general details. They formerly focused on phonemes, morphemes, syntax and semantics level and then try to read the longer paragraphs to understand the text in a proper way. In general both models are helpful in schema development process but in this

research work top-down approach has been worked well in classroom as compare to the bottom-up model of reading comprehension. So top-down approach is having bit more strengthening tenets in schema development process as compare to the bottom-up approach.

CONCLUSION

This study successfully concludes the effectiveness and role of reading comprehension models in schema development process. Two different models (top-down and bottom-up) of reading comprehension have been used in this research. Two control groups of ESL students have been selected to teach by using the methods and activities according to the reading comprehension models.

All the research questions are answered by exploring the results of pre-test and post-test under both reading models. In the pre-test learners were given the questions such as true/false, fill in the blanks and MCQS' which they had to answer after reading the text by using their prior knowledge but they were not capable to use schema properly. After that they were taught in the class room by using reading activities in schema development process. Teacher used brain-storming activities, asked students to read the paragraph and give it a title, read a text and predict the next paragraph and read the text in the form of peers and translate it. These classroom activities helped learners use their background information to comprehend the text. Learners were also taught 45 vocabulary items which were included in the test.

The analysis of the collected data by using t-test in SPSS software reveals the comparison of pre-test and post-test under both models and the overall comparison of top-down and bottom-up models. The comparison clearly shows that in pre-test schema was not fully developed but in the post-test learners answered the questions in form of statements by using their schema. Different learners developed their schemas differently and chose different tendencies according to their existed information in the mind to understand the text well. While looking at the overall comparison of both models regarding their pre-test and post-test results then it is clear top-down model has surpassed the bottom-up model in schema development process.

This research work aspire L2 instructors to propose new pedagogical insinuation in classrooms. The current research proclaim the classroom heterogeneity along with the development in learners' reading competencies. In pedagogical settings this study may accommodate future researchers to check the schema development process of college students by using top-down and bottom-up models of reading comprehension. In future anticipated research works may be conducted on the improvement in text translation in language classrooms by using top-down and bottom-up models. As how learners trigger their schemata (top-down processing) and how do they focus on profound grammatical details and affixation patterns (bottom-up processing) while translating the texts. Top-down, bottom-up and interactive models may pave the way to conduct research studies in near future to teach writing by activating schema in L2 settings. More prospective future research works may be

composed in different provinces or cities and on various age groups and grades by using top-down and bottom-up reading models.

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APPENDIX A

Reading Comprehension Pre-Test

Direct	ions
1.	Write your full name, gender, class, school name, day, and date.
1.	The time isminutes
2.	You are not allowed to ask your classmate if you have a problem ask your teacher.
Full Na	ame: Gender: Class:
	:
School	·

Day and Date: _____

Academic Year: _____

Questions 1-5 Refer to The Following Paragraph

In an office, two clerks may quarrel over a chair and their dispute may be decided by another clerk who has influence over them. Workers in a factory demand higher wages from their employer, who refuses to do so. They may accept his decision because he has authority over them. But if they threaten to go on strike in support of their demands, the employer may be constrained to accept them due to the influence of their strike threat. Or take another example. Two persons may quarrel over a piece of land. They go to a court, where the judge decides' their dispute according to the law and they submit to his decision. Although these disputes and struggles may be, popularly or journalistically, called as "hostel politics", "campus politics", "office politics" or the like, but really they are not political. Reason is that they are and can be settled by an appeal to social customs, norms or laws. But they can become political if and when one of the two actors in the dispute refuses to accept the authority of the social norms or laws. Then the government, or more accurately, one or the other organ or department of the government will be involved in it. Thus, for example, the dispute, between students in a college or university campus can become political when one or more political parties or personalities become involved in it. Similarly, a workers' strike for higher wages etc., is only an industrial dispute. But it becomes political when one or more political parties or personalities, whether they are of the ruling party or not, become involved in the workers and employers dispute. The reason why political parties or personalities become involved in the non-political disputes of the people is that by doing so they either aim at controlling the government or at maintaining their control over it. Hence politics is a struggle or confrontation between two or more parties or persons with a view to control the government so that one of them may impose its or his decision or policy on the other by means of governmental power and authority.

In a factory workers can fight for high

- a) Vehicles
- b) Machinery
- c) Wages
- d) None of these

What is another term used for office politics.

- a) Grouping
- b) Badmouthing
- c) Campus Politics
- d) Apolitical Attitude

The word "Law" is closest in meaning to word

- a) Rule
- b) Norm
- c) Value
- d) Power

An industrial dispute become political dispute when

- a) The decision is taken by the court
- b) Two parties are on strike

- c) Political parties involved in it
- d) Workers don't obey the law

The whole paragraph is about

- a) The role of politics
- b) The issues between workers and employers
- c) What is the role of court?
- d) The nature of non-political disputes

Questions 6-10 Refer to The Following Paragraph

Psychological experiences are extremely complex. The questions psychologists pose are as difficult as those posed by other scientists, if not more so (Wilson, 1998). A major goal of psychology is to predict behavior by understanding its causes. Making predictions is difficult because people vary and respond differently in different situations. Individual differences are the variations among people on physical or psychological dimensions. For example, most people experience negative events at some time in their lives. Some individuals handle the challenges, while other people develop symptoms of a major depression. Other important individual differences that we will discuss in the chapters to come include differences in intelligence, self-esteem, anxiety, and aggression. Because of individual differences, we cannot always predict who will become aggressive or who will perform best on the job. The predictions made by psychologists (and most other scientists) are only probabilities. We can say, for instance, that people who score higher on an intelligence test will, on average, do better at school. However, we cannot make very accurate predictions about exactly how any one person will perform.

What is the synonym of complex?

- a) Easy
- b) Different
- c) Affected
- d) Difficult

Psychology predicts about

- a) Mind
- b) Body
- c) Behavior
- d) None of these

Changes among people on physical and psychological basis are called

- a) Individual differences
- b) Individual challenges
- c) Individual experiences
- d) Group relations

Individual differences can make difficult

- a) The process of prediction
- b) Scientific studies
- c) Knowledge of psychological dimensions
- d) The way of comprehension

The title of the paragraph can be

- a) Importance of individual differences
- b) Challenges of studying psychology

- c) Prediction about human behavior
- d) Complex psychological experiences

Question 11, fill in the blanks with appropriate words

Defense, State, Power, Politics, Science

The two kinds of definitions of Political Science really two interrelated aspects of ______, viz. power and ______ and government. Power is the central organizing factor in politics, while government or state is its basic operational structure. In conclusion, we may define Political ______ as a systematic study of the state or government, which is a ______ structure making authoritative decisions and allocating resources and values for internal security, and development and external ______. Question 12, do the following statements agree with the information given in the reading

Question 12, do the following statements agree with the information given in the reading passage?

TRUE	If the statement is true
FALSE	If the statement is false
NOT GIVENIf the inf	Formation is not given in the passage

There is an additional reason that predictions are difficult. Human behavior is influenced by more than one variable at a time, and these factors occur at different levels of explanation. For instance, depression is caused by genetic factors, personal factors, and cultural factors. You should always be skeptical about people who attempt to explain important human behaviors, such as violence or depression, in terms of a single cause.

- Human behavior is influenced by more than one variable at a time.
- The predictions made by psychologists are only probabilities.
- Depression is caused by genetic factors.

APPENDIX B

Reading Comprehension Post-Test

Direc	ctions
4.	Write your full name, class, school name, day and date, and Academic year
5.	The time is45minutes
6.	Total Marks 50
7.	You are not allowed to ask your classmate if you have a problem ask your teacher.
Full 1	Name: Class:
Scho	ol:

Day and Date: _____ Academic Year: _____

Question 1-5 Refer To The Following Paragraph /10

Man is by nature a political animal. Owing to his many needs, such as for food, shelter, warmth, sex, defense and the like, he has to live with others. While trying to satisfy these needs, men and women have to work and cooperate, compete and may even come into conflict with each other. All this creates

problems of various kinds. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote cooperation and prevent conflicts among people, to settle disputes as and when they arise, so that human life and society may be better, happier and more productive. The problem is, indeed, very important. If it is not tackled properly, human life and society will suffer many kinds of troubles, such as endless disputes, anarchy, misery, poverty and even the end of all social life. But if it is solved properly, peace, plenty and progress will be the result. Accordingly, every society needs to have such institutions, laws and men and women of authority or power as to regulate all activities, value relations, and interests of all persons and groups living in it. Now such a society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process, or of men and women in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

Answer the following Questions after reading the paragraph

- 1. What is Political Science?
- 2. What is the main problem while satisfying the basic needs of a man?
- 3. What is politically organized society?
- 4. What are the basic needs of a man?
- 5. What are the results after solving the problem of satisfying the needs of a man?

Question 6-10 Refer to The Following Statements /10

Choose the correct option of the underlined words from the columns A, B, C and

Sr. #	Statements	А	В	С	D
6	Endless dispute, <u>anarchy</u> , misery poverty and even the end of social life.	politely	disorder	conflict	disturbed
7	Workers in factory demands higher wages.	salary	harmony	dispute	None of these
8	In a book it is <u>customary</u> to begin with the definition.	authentic	vitality	stability	tradition
9	States or nations over <u>territories</u> or for purpose of domination.	boundaries	endeavors	anticipation	regions
10	Behavioral political scientists asserts that political conflicts establishes an equilibrium.	balance	integratio n	phenomenon	exploitatio n

Question 11-15 refer to the following paragraph /05

The two kinds of definitions of Political Science describes really two interrelated aspects of politics, viz. power and state and government. Power is the central organizing factor in politics, while government or state is its basic operational structure. In conclusion, we may define Political Science as a systematic study of the state or government, which is a power structure making authoritative decisions and allocating resources and values for internal security, and development and external defense. The term "politics" is derived from the word "polis" of the ancient Greek language. The word "polis" means a citystate. It was the form of the state which the ancient Greeks had in their country. All the activities and affairs of the city-state were called by them as "politics". The ancient Greeks also undertook a close study of these affairs and activities of their city-state, which also they called "politics". Aristotle (384-322 B.C.), one of the famous Greek philosophers; was the first thinker to make a systematic study of the life and activities in the city states of his country in his well-known book, entitled "Politics". Thus he became the founder of the science of politics. Although politics always remained an important subject-matter of study by countless thinkers, writers and philosophers for centuries after the ancient Greeks, the term "political science" came into usage at the end of the nineteenth century, for reasons which we shall explain later on.

Fill in the blanks with appropriate words

11. The ancient Greeks also undertook a close study of these affairs and activities of their ------ which also they called "politics".

12. The ancient Greeks also undertook a close study of these ------ and ------ of their city-state, which also they called "politics".

13. Power is the central organizing ------ in politics while government or state is its basic operational structure.

14. Although politics always ----- an important subject-matter of study by countless thinkers.

15. Power structure making ------ decisions and allocating resources and values for internal security.

Question 16-20 refer to the following paragraph /10

A French political scientist, Maurice Duverger, in his book: The Idea of Politics. Suggests that the study of politics should be undertaken at two levels: micro political and macro political. At the micro political level, political study should deal with the relations of an individual with other individuals in such political activities as elections, voting, party meetings, committee work, etc. At the macro political level, it is a study of group relations where, as Maurice Duvergerwrites, "direct contact does not exist or is replaced, by indirect contact between intermediaries, by administrative relationships, or by artificial, theatrical contacts (e.g., the minister's handshake, the television appearance of the head of state).1 However, we should not draw a very hard and fast line of demarcation between micro politics and macro politics. They always affect each other. Indeed, what is micro political today may become macro political tomorrow and vice versa. History of revolts and revolutions tell us that they often began as micro political activities of a small group of rebels or revolutionaries. What is more, political psychology tells us that the personality of the future rebel or revolutionary is often formed by the micro politics of his parental family life. Similarly, macro politics is also deeply affected by the nature and quality of micro politics. It is a well-known principle of Political Science that the strength and stability of a state very much depends upon the vitality of its local government bodies. Maurice Duvergersays, "Research must be pursued simultaneously on both levels, but the passage from one to the other, the change in scale, raises an important problem."

Choose one option from the each statement

16. Macro politics is also deeply affected by the ----- of micro politics.

a) Rebels and revolutionaries

- b) Parental family life
- c) Nature and quality
- d) Direct contact

17. Maurice Diverge in his book "The Idea of Politics" suggests that the study of politics should be undertaken at

- a) Two levels
- b) Three levels
- c) Four levels
- d) None of these
- 18. Group relations are come under the study of
- a) Macro political
- b) Political science
- c) Politics as an arena
- d) Domination and exploitation

19. Political study should deal with the relations of an individual with other individuals

- a) At administrative level
- b) At micro political level
- c) At macro political level
- d) At democratic level
- 20. Macro and micro political always
- a) Dominate each other
- b) Affect each other
- c) Confront each other
- d) Depend on each other

Question 21-25 Refer To The Following Paragraph /10

One should not think that politics is all conflict and nothing else: it is also an integrative force. As a matter of fact, the goal of political struggle is to bring about a new social order in the state. But then what next? Should a new social order, once achieved, become a permanent order, in which there would be no more political conflict? Some political thinkers, especially in the past ages, believe it to be so. They think that it is a moral order, which should not be disturbed. Even some behavioral political scientists' assert that political conflict establishes an equilibrium, which should be disturbed as little as possible. But

great political thinkers declare that conflict and integration are only stages in the everlasting political process, producing ever higher levels of social order, because every social order is a partial integration of the society. It gives rise to a new political conflict with a better program for greater integration of the society. Therefore politics is a continuous conflictive-integrative process to integrate the society more and more. Maurice Divergewrites, "Every attack on the existing social order implies the image and anticipation of a superior, more authentic order. Every conflict implies a dream of integration and represents an effort to bring it into being." Thus will come into being a higher social order and thus will arise a world of harmony!

Choose on option from each statement

- 21. Great political thinkers declare that conflict and integration are only----
- ----- in the everlasting political process
- a) Norms
- b) Forces
- c) Aspects
- d) Stages
- 22. The whole paragraph is about
- a) Nature of political science
- b) Politics as an integrative force
- c) Levels of politics
- d) Politics as an art of the possible
- 23. Every conflict implies a dream of
- a) Authenticity
- b) Integration
- c) Anticipation
- d) Society
- 24. Social order which is brought by political struggle is
- a) Harmony in the country
- b) Moral order
- c) Political order
- d) None of these
- 25. Every social order gives rise to a new political-----with a better program for greater integration of the society
- a) Conflict
- b) Endeavors
- c) Ideology
- d) Clan

Question 26: Do the Following Statements Agree with The Information Given in The Reading Passage? /05

TRUE	RUE If the statement is true	
FALSE	If the statement is false	
NOT GIVEN If the information is not given in the passage		

The dispute between students in a college or university campus can become political when one or more political parties or personalities become involved in it. Similarly, a workers' strike for higher wages etc., is only an industrial dispute. But it becomes political when one or more political parties or personalities, whether they are of the ruling party or not, become involved in the workers and employers dispute. The reason why political parties or personalities become involved in the non-political disputes of the people is that by doing so they either aim at controlling the government or at maintaining their control over it. Hence politics is a struggle or confrontation between two or more parties or persons with a view to control the government so that one of them may impose its or his decision or policy on the other by means of governmental power and authority.

• A workers' strike for higher wages etc. is not an industrial dispute.

• Then the government, or more accurately, one or the other organ or department of the government will be involved in it.

• Hence politics is a struggle or confrontation between two or more parties or persons with a view to control the government.

APPENDIX C

Question No 01: What is political Science?

S_TD_01. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_02. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_03. Political science describes two interrelated element e: g power, state and government. Political science is the systematic study of the state or government.

S_TD_04. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_05. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_06. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process, or of men and women in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_07. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process, or of men and women in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_08. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_09. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_10. Man is by nature a political animal. Owing to his many needs such as food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_11. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process, or of men and women in the process of governing themselves.

S_TD_12. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process, or of men and women in the process of governing themselves.

S_TD_13. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_14. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process.

S_TD_15. Political Science is a science or study of such a politically organized society, political system or state. It is a study of political process.

S_TD_16. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_17. Political Science is a science or study of such a politically organized society, political system or state. It is the study of political process or of man and woman in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_18. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_19. Political Science is a science or study of such a politically organized society, political system or state.

S_TD_20. Political Science is a science or study of such a politically organized society, political system or state.

APPENDIX D

Question No 02: What Is the Main Problem While Satisfying the Basic Needs of a Man?

S_TD_01. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people. The problem is that food, shelter, warmth, sex etc.

S_TD_02. While trying to satisfy these needs men and women have to work and cooperate, compete and may even come into conflict with each other.

 S_TD_03 . The other problem is to trying to satisfy these needs men and women have to work and cooperate, and may even come into conflict with each other.

S_TD_04. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people to settle disputes as when they arise.

S_TD_05. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people. The problem is that food, shelter, warmth, sex etc.

S_TD_06. While trying to satisfy these needs, men and women have to work and cooperate, compete and may even come into conflict with each other. All this creates problems of various kinds. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people, to settle disputes as and when they arise, so that human life and society may be better, happier and more productive.

S_TD_07. While trying to satisfy these needs, men and women have to work and cooperate, compete and may even come into conflict with each other. All this creates problems of various kinds. One of the most important problems is

to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people, to settle disputes as and when they arise, so that human life and society may be better, happier and more productive.

S_TD_08. While trying to satisfy these needs, men and women have to work and cooperate, compete and may even come into conflict with each other. One of the most important problems is to organize human activities and relations to satisfy the basic needs.

S_TD_09. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote cooperation and prevent conflict among people.

S_TD_10. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote cooperation and prevent conflict among people

S_TD_11. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people. The problem is that food, shelter, warmth, sex etc.

S_TD_12. The problem is indeed very important, if it is not tackled properly, human life and society will suffer many kinds of troubles, such as endless dispute, anarchy, misery, poverty and even the end of all social life.

S_TD_13. While trying to satisfy the basic needs men and women have to work and cooperate, compete and may even come into conflict with each other.

S_TD_14. Man is by nature a political animal owing is may need such as for food, shelter warmth, sex, defense and the like he has to live with other.

S_TD_15. One of the most important problems is to organize human activities and relations to satisfy the basic needs.

S_TD_16. One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people. To settle dispute as and when they arise so that human life and society may be better and more productive.

S_TD_17. Politically organized society i.e., political system or state.

S_TD_18. Accordingly, every society need to have a such institution, law and men and women of authority or power as to regulate all activities, value relation and interest of all group living in it.

S_TD_19. Accordingly, every society need to have a such institution, law and men and women of authority or power as to regulate all activities, value relation and interest of all group living in it.

S_TD_20. The problem is indeed very important if it is not tackled properly human life, and society will suffer many kinds of trouble such as endless, dispute, anarchy, misery, poverty, even the end of all social life.

APPENDIX E

Question No 03: What Is Politically Organized Society?

S_TD_01. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_02. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_03. A politically organized society, a political system or state.

S_TD_04. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

 S_TD_05 . A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_06. A politically organized society, is such a society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

 S_TD_07 . A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_08. A society which is regulated by laws and by men and women of authority or power is a politically organized society.

S_TD_09. Owing to his many needs such as food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_11. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_12. Now such a society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_13. Politically organized society, i.e., a political system or state.

S_TD_14. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_15. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_16. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_17. Politically organized society i.e., political system or state.

 S_TD_18 . A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_19. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

S_TD_20. A society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a political system or state.

APPENDIX F

Question No 04: What Are the Basic Needs of A Man?

S_TD_01. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_02. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_03. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_04. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_05. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_06. The basic needs of humans are food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_07. Man is by nature a political animal. Owing to his many needs such as food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_08. Basic needs is to promote cooperation and prevent conflict among people to settle dispute as and when they arise.

S_TD_09. Now such a society which is regulated by laws and by men and women of authority or power is a politically organized society, i.e., a society, system or state.

 S_TD_{10} . Owing to his many needs such as food, shelter, warmth, sex, defense. S_TD_{11} . One of the most important problems is to organize human activities and relations to satisfy the basic needs and to promote co-operation and prevent conflicts among people to settle disputes and when they arise, so that human life

and society may be better, happier and more productive. S_TD_{12} . The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_13. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_14. Man is by nature a political animal owing is may need such as for food, shelter warmth, sex, defense and the like he has to live with other.

S_TD_15. Man is by nature a political animal owing is may need such as for food, shelter warmth, sex, defense and the like he has to live with other.

S_TD_16. The basic need and to promote cooperated and prevent conflict among people to settlement dispute as when they arise.

S_TD_17. The basic needs of man is food, shelter, warmth, sex, defense and the like, he has to live with others.

S_TD_18. It is the study of political process or of man and woman in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_19. It is the study of political process or of man and woman in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_20. One of the most important problem human activities and relations to satisfy the basic needs and to promote cooperation and to prevent conflicts among people to settle disputes and when they arise so that human life and society may be better happier and more productive.

APPENDIX G

Question No 05: What Are the Results After Solving the Problem of Satisfying the Needs of a Man?

S_TD_01. The result after solving the problem is peace, plenty and progress.

S_TD_02. If it is solved properly, peace, plenty and progress will be the result. S_TD_03.\\\\\\\\

S_TD_04. If it is solved properly, peace, plenty and progress will be the result. S_TD_05. The result after solving the problem is peace, plenty and progress.

S_TD_06. The result after solving the problem of satisfying the basic needs of human, the human life and society may be better happier and more productive as well as peace, plenty and progress will be the result.

S_TD_07. The result after solving the problem of satisfying the basic needs of human, the human life and society may be better happier and more productive as well as peace, plenty and progress will be the result.

 S_TD_08 . If it is solved properly, peace, plenty and progress will be the result. S_TD_09 . When the problem is solved properly, peace, plenty and progress will be the result.

S_TD_10. The problem is include very important if it is not tackled properly human life and society will suffer many kinds of problem such as endless dispute, anarchy, misery and even all social life. But if it is not solved properly peace, plenty and progress will be the result.

S_TD_11. The result will give after solving the problem while trying to satisfy these needs men and women have to work and cooperate, compete and may even come into conflict with each other.

S_TD_12. So that human life and society may be better, happier and more productive.

S_TD_13. While trying to satisfy the basic needs men and women have to work and cooperate.

S_TD_14. If it is solved properly, peace, plenty and progress will be the result. S_TD_15. If it is solved properly, peace, plenty and progress will be the result.

S_TD_16. If it is solved properly, peace, plenty and progress will be the result. S_TD_16. If it is not tackled properly human life, and society will suffer many kinds of trouble such as endless, dispute, anarchy, misery, poverty, even the end of all social life. If it is solved properly, peace, plenty and progress will be the result.

S_TD_17. So that human life and society may be better, happier and more productive.

S_TD_18. It is the study of political process or of man and woman in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_19. It is the society of political process or of man and woman in the process of governing themselves. It is the application of scientific method to the study of political affairs and events.

S_TD_20. The result will give after solving the problem while trying to satisfy these needs men and women have to work and cooperate, compete and may even commit conflict with each other.