Q.1 Discuss elementary education in Pakistan and compare it with elementary education in India.

There has been much talk and debate regarding quality education in Pakistan. Ironically, they all revolve around mostly the types, sources and content of education instead of stages, particularly the most crucial and decisive stage i.e., elementary education. There has been little progress in recent years in developing new and existing programmers for adolescent learners in government schools at elementary level. Exploratory programmers, counseling programmers and health and physical education programmers are being cut back in government schools. The education has been narrowed down to teaching of rote-skills and transmission of knowledge. This mere imitation and content-centered elementary education has shortchanged the area of personnel development of the learners. This fact of failure of government elementary education has been put in the back burner in the face of doing what is easier and less costly, but the negation of various ongoing sustained social changes experienced by the emerging learners has become the practice of the day. These social changes are:

1. The family pattern of a mother at home and a father working is increasingly changing.
2. The suicide rate in teenagers are increasing due to different pressures.
3. It is estimated that pre and early adolescents spend one third of their waking hours in watching television, surfing social websites on internet and playing online games.
4. 75 per cent of all advertising is aimed at promoting mobile brands, mobile networks and mobile packages.
5. Lack of a stable home is a big contributor to delinquency.

The elementary level is comprised of the students with most impressionable age group where various social changes make indelible prints on their minds. These years represent the last chance for the students to master basic skills, lasting attitude towards learning and assertion of self and individualistic differences. Success at elementary school, or the future life, can be determined and predicted for this age group. The associations such as The National Middle School Association, Pakistan Montessori Council, and Pakistan Elementary Teachers Association are striving for a balanced elementary curriculum by organizing frequent conferences and workshops for the educators who are engaged in imparting basic education. However, the government should patronize the associations and educational organizations by allocating a large part of budget. Moreover, the government educationist and administrative authorities should make sure that the content is cognitive learning oriented. It must be diversified and exploratory based on real life situations and indigenous experiences. Consequently, it could enhance the development of problem solving skills and reflective thinking process among the students. This would also help the students to acknowledge and appraise their own interests and talents. The huge delta region formed at the confluence of the Ganges and Brahmaputra River systems - now referred to as Bangladesh - was a loosely incorporated outpost of various empires centered on the Gang etic plain for much of the first millennium A.D. Muslim conversions and settlement in the region began in the 10th century, primarily from Arab and Persian traders and preachers. Europeans established trading posts in the area in the 16th century. Eventually the area known as Bengal, primarily Hindu in the western section and mostly

Muslim in the eastern half, became part of British India. Partition in 1947 resulted in an eastern wing of Pakistan in the Muslim-majority area, which became East Pakistan. Calls for greater autonomy and animosity between the eastern and western wings of Pakistan led to a Bengali independence movement. That movement, led by the Awaji League (AL) and supported by India, won the independence war for Bangladesh in 1971. The post-independence AL government faced daunting challenges and in 1975 was overthrown by the military, triggering a series of military coups that resulted in a military-backed government and subsequent creation of the Bangladesh. The Indus Valley civilization, one of the world's oldest, flourished during the 3rd and 2nd millennia B.C. and extended into northwestern India. Aryan tribes from the northwest infiltrated the Indian subcontinent about 1500 B.C.; their merger with the earlier Dravidian inhabitants created the classical Indian culture. The Maura Empire of the 4th and 3rd centuries B.C. - which reached its zenith under ASHOKA - united much of South Asia. The Golden Age ushered in by the Gupta dynasty (4th to 6th centuries A.D.) saw a flowering of Indian science, art, and culture. Islam spread across the subcontinent over a period of 700 years. In the 10th and 11th centuries, Turks and Afghans invaded India and established the Delhi Sultanate. In the early 16th century, the Emperor BABUR established the Mughal Dynasty, which ruled India for more than three centuries. European explorers began establishing footholds in India during the 16th century. By the 19th century, Great Britain had become the dominant political power on the subcontinent. The British Indian Army played a vital role in both World Wars. Years of nonviolent resistance to British rule, led by Mohandas GANDHI and Jawaharlal NEHRU, eventually resulted in Nationalist Party (BNP) in 1978. That government also ended in a coup in 1981, followed by military-backed rule until democratic elections occurred in 1991. The BNP and AL alternated in power between 1991 and 2013, with the exception of a military-backed, emergency caretaker regime that suspended parliamentary elections planned for January 2007 in an effort to reform the political system and root out corruption. That government returned the country to fully democratic rule in December 2008 with the election of the AL and Prime Minister Sheikh HASINA. In January 2014, the incumbent AL won the national election by an overwhelming majority after the BNP boycotted, extending HASINA's term as prime minister. With the help of international development assistance, Bangladesh has reduced the poverty rate from over half of the population to less than a third, achieved Millennium Development Goals for maternal and child health, and made great progress in food security since independence. The economy has grown at an annual average of about 6% over the last two decades and the country reached World Bank lower-middle income status in 2015. Indian independence, which was granted in 1947. Large-scale communal violence took place before and after the subcontinent partition into two separate states - India and Pakistan. The neighboring nations have fought three wars since independence, the last of which was in 1971 and resulted in East Pakistan becoming the separate nation of Bangladesh. India's nuclear weapons tests in 1998 emboldened Pakistan to conduct its own tests that same year. In November 2008, terrorists originating from Pakistan conducted a series of coordinated attacks in Mumbai, India's financial capital. Despite pressing problems such as significant overpopulation, environmental degradation, extensive poverty, and widespread corruption, economic growth following the

launch of economic reforms in 1991 and a massive youthful population are driving India's emergence as a regional and global power.

Q.2 Describe the cognitive and intellectual development of a child at different levels.

The mental (cognitive) changes children undergo during the middle childhood era are often more pronounced and noticeable than their physical changes. Children's ability to consciously, thoughtfully and pro-actively choose to pursue goals (instead of simply reacting to the environment) appears during this developmental period. In addition, children's thinking style gradually becomes more logical, organized, and flexible as they enter Piaget's "Concrete Operational" thinking stage. A mental operation, in the Piagetian way of thinking, is the ability to accurately imagine the consequences of something happening without it actually needing to happen. During a mental operation, children imagine "what if" scenarios which involve the imaginal transformation of mental representations of things they have experienced in the world; people, places and things. The ability to perform mental arithmetic is a good example of an operation. Children at this age become capable of mastering addition and subtraction and similar operations and consequently are able to tell you that if they eat one cookie out of a jar containing five, that there will be four cookies left in the jar. Importantly, they can do this without actually eating a cookie and then counting the remaining cookies in the jar because they are able to model the cookie jar in their minds and operate on the contents of that mental jar so as to arrive at the answer without having to actually do the experiment.

These sorts of operations are "concrete" because they are based on actual people, places and things that children have observed in the environment. Children's mental representations remain concretely linked to things they have seen and touched throughout the middle childhood period. Because their representations are limited to the tangible, touchable and concrete, their appreciation of the consequences of events is similarly limited, local and concrete in scope. At this age, children can easily tell you that if the fence breaks open, that the dog will be able to get out. However, they cannot easily think about more abstract things like what it will really mean for the family if a parent loses her job. In the Piagetian theory, it is not until children enter adolescence that they become capable of more abstract "formal" operations involving representations of things that are intangible and abstract (without any tight link back to a tangible person, place or thing), such as "liberty", "freedom" or "divinity".

Piaget described multiple operations that children begin to master in middle childhood, including conservation, decantation, reversibility, hierarchical classification, serration, and spatial reasoning. These are technical terms, all of which will be described below in greater detail. Obviously, children do not learn the names of these various operations or proudly point out to their parents that they've mastered these skills. Children just start doing these things without having realized what they've accomplished. However, these new skills are often noticeable by outside observers familiar with children's progress. In their own subtle way, children's mastery of these operations is a tremendous accomplishment, easily as impressive a feat as any physical accomplishment children might learn.

The stage-by-stage nature of Piaget's theory, with each stage linked to an age group for whom the stage is typical, strongly suggests to many people that at a particular age, children are supposed to be functioning at a particular stage. It's important to keep in mind that Piaget's theory is intended to talk about how an average child might be functioning at a particular age; it is not a pronouncement about how any particular individual child should be functioning. Children develop uniquely and at their own pace depending upon their temperament (the inherited component of their personalities), genetic makeup, supports available to them in their environments, and their learning experiences. Different children will show mastery of specific operations sooner than will others, or display them in some situations but not in others. Newer research also shows that context affects children's abilities as well. Most children will display more advanced operations when in familiar or mandatory environments (e.g., at school, working on school tasks). They may tend to become confused and perform more poorly when confronted with novel situations.

Let's now explore the various concrete operations children start to master during this middle childhood stage of their development: Conservation involves the ability to understand when the amount of something remains constant across two or more situations despite the appearance of that thing changing across those situations. The idea of conservation can be applied to any form of measurement, including number, mass, length, area, volume, etc. Piaget's famous example of conservation was performed using liquids poured into different shaped containers. Though the volume of liquid remains constant across the two containers, each container has a very different visual appearance, with one being tall and thin, while another was short and wide. Using this setup, Piaget was able to show that middle childhood-aged children were able to appreciate that the total amount of liquid was unchanged despite being poured into differently shaped containers. Younger children were characteristically fooled by the appearance of the containers and tended to conclude that wider, shorter containers held less water than taller, thinner containers.

In everyday life, children demonstrate conservation of number (of counting) when they realize that 10 cookies will remain constant in number no matter whether they are spread out or stacked into a tower. Children who grasp conservation of mass realize that their body weight will remain consistent, whether they stand up straight or sit cross-legged on a scale. Similarly, children who understand conservation of length understand that a rope is the same length regardless of whether it's laid out straight or coiled up. Children who understand conservation of area know that the total space on a tabletop remains constant regardless of whether it is cluttered with objects or cleared. Recent research suggests that children in Western cultures tend to achieve conservation of number by age 7, conservation of mass and length by age 7 or 8, and conservation of area by age 8 or 9.

Last, Piaget primarily examined white, middle-class children from developed countries in his work. As a result, his findings may be skewed to this subset of people, and may not apply as directly to other groups or locations.

Q.3 Elaborate the theories of personality development by focusing on the role of family in the personality development of a child.

Personality development is the development of the organized pattern of behaviors and attitudes that makes a person distinctive. Personality development occurs by the ongoing interaction of **temperament** , character, and environment.

Personality is what makes a person a unique person, and it is recognizable soon after birth. A child's personality has several components: temperament, environment, and character.

Temperament is the set of genetically determined traits that determine the child's approach to the world and how the child learns about the world. There are no genes that specify personality traits, but some genes do control the development of the nervous system, which in turn controls behavior.

A second component of personality comes from adaptive patterns related to a child's specific environment. Most psychologists agree that these two factors—temperament and environment— influence the development of a person's personality the most. Temperament, with its dependence on genetic factors, is sometimes referred to as "nature," while the environmental factors are called "nurture."

Finally, the third component of personality is character—the set of emotional, cognitive, and behavioral patterns learned from experience that determines how a person thinks, feels, and behaves. A person's character continues to evolve throughout life, although much depends on inborn traits and early experiences. Character is also dependent on a person's **moral development** . During the first two years of life, an infant goes through the first stage: Learning Basic Trust or Mistrust (Hope) . Well-nurtured and loved, the infant develops trust and security and a basic optimism. Badly handled, the infant becomes insecure and learns "basic mistrust."

Toddlerhood

The second stage occurs during early childhood, between about 18 months to two years and three to four years of age. It deals with Learning Autonomy or Shame (Will) . Well-parented, the child emerges from this stage with self-confidence, elated with his or her newly found control. The early part of this stage can also include stormy **tantrums** , stubbornness, and negativism, depending on the child's temperament.

Preschool

The third stage occurs during the "play age," or the later **preschool** years from about three to entry into formal school. The developing child goes through Learning Initiative or Guilt (Purpose) . The child learns to use imagination; to broaden skills through active **play** and fantasy; to cooperate with others; and to lead as well as to follow. If unsuccessful, the child becomes fearful, is unable to join groups, and harbors guilty feelings. The child depends excessively on adults and is restricted both in the development of play skills and in imagination.

School age

The fourth stage, Learning Industry or Inferiority (Competence) , occurs during school age, up to and possibly including junior high school. The child learns to master more formal skills:

- relating with peers according to rules
- progressing from free play to play that is structured by rules and requires teamwork (team sports)

- learning basic intellectual skills (reading, arithmetic)

At this stage, the need for self-discipline increases every year. The child who, because of his or her successful passage through earlier stages, is trusting, autonomous, and full of initiative, will quickly learn to be industrious. However, the mistrusting child will doubt the future and will feel inferior.

Adolescence

The fifth stage, Learning Identity or Identity Diffusion (Fidelity) , occurs during adolescence from age 13 or 14. Maturity starts developing during this time; the young person acquires self-certainty as opposed to self-doubt and experiments with different constructive roles rather than adopting a negative identity, such as delinquency. The well-adjusted adolescent actually looks forward to achievement, and, in later adolescence, clear sexual identity is established. The adolescent seeks leadership (someone to inspire him or her), and gradually develops a set of ideals to live by. Renowned psychologist Carl Rogers emphasized how childhood experiences affect personality development. Many psychologists believe that there are certain critical periods in personality development—periods when the child will be more sensitive to certain environmental factors. Most experts believe that a child's experiences in the **family** are important for his or her personality development, although not exactly as described by Erikson's stages, but in good agreement with the importance of how a child's needs should to be met in the family environment. For example, children who are toilet trained too early or have their **toilet training** carried out too strictly may become rebellious. Another example is shown by children who learn appropriate behavior to their sex lives when there is a good relationship with their same-sex parent.

The rule role of family in the personality development of a child.

Social and Emotional Competence

Social and personality development is built from the social, biological, and representational influences discussed above. These influences result in important developmental outcomes that matter to children, parents, and society: a young adult's capacity to engage in socially constructive actions (helping, caring, sharing with others), to curb hostile or aggressive impulses, to live according to meaningful moral values, to develop a healthy identity and sense of self, and to develop talents and achieve success in using them. These are some of the developmental outcomes that denote social and emotional competence.

Social Understanding

As we have seen, children's experience of relationships at home and the peer group contributes to an expanding repertoire of social and emotional skills and also to broadened social understanding. In these relationships, children develop expectations for specific people (leading, for example, to secure or insecure attachments to parents), understanding of how to interact with adults and peers, and developing self-concept based on how others respond to them. These relationships are also significant forums for emotional development. The **security of attachment** is an important cornerstone of social and personality development, because infants and young children who are securely attached have been found to develop stronger friendships with peers, more advanced emotional understanding and early conscience development, and more positive self-concepts, compared with

insecurely attached children (**Thompson, 2008**). This is consistent with attachment theory's premise that experiences of care, resulting in secure or insecure attachments, shape young children's developing concepts of the self, as well as what people are like, and how to interact with them.

Q.4 Discuss the questioning technique and its contribution in developing higher mental processes.

Questioning techniques are a heavily used, and thus widely researched, teaching strategy. Research indicates that asking questions is second only to lecturing. Teachers typically spend anywhere from 35 to 50 percent of their instructional time asking questions. But are these questions effective in raising student achievement? How can teachers ask better questions of their students? How can current educational research inform practice?

Teachers ask questions for a variety of purposes, including:

- To actively involve students in the lesson
- To increase motivation or interest
- To evaluate students' preparation
- To check on completion of work
- To develop critical thinking skills
- To review previous lessons
- To nurture insights
- To assess achievement or mastery of goals and objectives
- To stimulate independent learning

A teacher may vary his or her purpose in asking questions during a single lesson, or a single question may have more than one purpose.

In general, research shows that instruction involving questioning is more effective than instruction without questioning. Questioning is one of the nine research-based strategies presented in Classroom Instruction That Works (Marzano, Pickering, and Pollock 2001).

One important finding is that questions that focus student attention on important elements of a lesson result in better comprehension than those that focus on unusual or interesting elements. Questions should also be structured so that most elicit correct responses.

Educators have traditionally classified questions according to Bloom's Taxonomy, a hierarchy of increasingly complex intellectual skills. Bloom's Taxonomy includes six categories:

- Knowledge – recall data or information
- Comprehension – understand meaning
- Application – use a concept in a new situation
- Analysis – separate concepts into parts; distinguish between facts and inferences
- Synthesis – combine parts to form new meaning
- Evaluation – make judgments about the value of ideas or products

Some researchers have simplified classification of questions into lower and higher cognitive questions. Lower cognitive questions (fact, closed, direct, recall, and knowledge questions) involve the recall of information. Higher cognitive questions (open-ended, interpretive, evaluative, inquiry, inferential, and synthesis questions) involve the mental manipulation of information to produce or support an answer.

Regardless of the classification, traditional wisdom holds that the higher cognitive questions lead to higher-quality answers and increased learning and achievement. However, the research has mixed conclusions in this area. Some studies found that higher level questions did indeed produce deeper learning, while others found that not to be the case.

According to some studies, lower cognitive questions (knowledge and comprehension on Bloom's Taxonomy) may be most beneficial for primary students. Lower cognitive questions are also more effective when the goal is to impart factual knowledge and commit it to memory.

This finding does not mean that primary teachers should avoid all higher cognitive questions. Certainly, primary students need to have chances to speculate, imagine, and manipulate the information being presented. Some research, however, suggests that for these youngest students, these questions should be used more sparingly.

Higher cognitive questions (application, analysis, synthesis, and evaluation) should make up a higher percentage of questions asked above the primary grades. Studies show that a combination of lower and higher questions is more effective than the exclusive use of one or the other. Increasing the use of higher cognitive questions can produce superior learning gains for older students, particularly those in secondary school, and does not reduce student performance on lower cognitive questions.

It is important to note, though, that simply asking these kinds of questions does not guarantee higher responses or greater learning gains. Students need explicit instruction in answering these types of questions, including making inferences. This instruction, in conjunction with the use of higher cognitive questions, can positively impact student achievement.

The use of a high frequency (50 percent or more) of higher cognitive questions with older students is positively related to increases in on-task behavior, length of student responses, the number of relevant contributions, the number of student-to-student interactions, student use of complete sentences, speculative thinking, and relevant questions posed by students.

Wait-time is another crucial factor in questioning techniques. Wait-time can be defined as the amount of time a teacher allows to elapse after he or she has posed a question. (A less frequently used and researched definition is the amount of time that a teacher allows to elapse before responding after a student stops speaking.) While traditional wisdom advocates a brisk pace of instruction to maintain interest and cover more material, research shows that slowing slightly to include more wait-time promotes achievement.

In the classrooms studied, the average wait-time after a question was posed was one second or less. Students perceived as slow or poor learners were afforded less wait-time than students viewed as more capable. This amount of wait-time is not sufficient for students, particularly for those that experience difficulty.

Studies show that for lower cognitive questions, a wait-time of three seconds is most effective in terms of achievement. Shorter or longer times were less positively correlated with student success.

For higher cognitive questions, no wait-time threshold was observed. Researchers noted that students seemed to become more engaged and successful the longer the teacher waited (within reason, of course).

Increased wait-time is related to a number of student outcomes, including improved achievement and retention, greater numbers of higher cognitive responses, longer responses, decreases in interruptions, and increased student-student interactions. These outcomes are quite similar to those observed with an increased frequency of higher cognitive questions. In fact, researchers believe that a causal relationship may exist between the two: higher cognitive questions require more wait-time, and more wait-time allows for the implementation of higher cognitive discussions.

How can teachers make use of these findings? Teachers often have little or no training in questioning techniques, so being familiar with the research is a good place to start. Improving in this area requires a reflective and metacognitive approach. For example, teachers may choose to:

- Plan and write out the questions to be used in a lesson. How many are lower cognitive questions? Higher cognitive questions? Is the percentage appropriate for the age and ability level of your students?

- Anticipate possible student responses, especially partially correct or incorrect ones. How will you probe for further information or redirect?

- Ask a colleague to observe a lesson, paying particular attention to the types of questions and student responses. Meet to discuss the observations and plan for improvement.

- Videotape yourself teaching a lesson. When you watch, record your wait-time for each question. Also note if you provide longer wait-times to certain students. Or examine your feedback. Are you specific and focused on the students' responses?

- Seek out resources and professional development that can help you improve your questioning techniques. If possible, start a study group with colleagues.

Q.5 Discuss the techniques of questioning for the development of higher mental processes from teacher's as well as pupils' point of view.

Asking and answering questions is a key ingredient in the learning process and in effective teaching. using a variety of questions in the classroom can serve many different purposes — they can be used to:

- diagnose students' level of understanding
- help students retain material but putting into words otherwise unarticulated thoughts
- involve and engage students in their learning process, especially critical thinking and reflection
- test students' knowledge
- dispel misconceptions
- summarize and review key points and highlighting main themes, ideas and skills
- stimulate creativity

- modifying students' perception of the subject
- encourage students to become self-directed learners(

If students are interested and engaged in the course content, they should be asking questions. As TAs and CIs, we should welcome and encourage questions from our students. Hence, it is important to follow certain **basic rules around student questions**:

- **take questions seriously** — treat every inquiry as a genuine attempt at intellectual curiosity, probing and exploration
- **be positive and encouraging** — promote the idea that every student question is useful, important and appreciated.
- **draw all class members into the conversation** — whenever you field a question, repeat it to the entire class and answer to the entire class
- **avoid embarrassing students who have asking problematic questions** — avoid making the questioner feel foolish especially when a question reveals the individual student's lack of awareness or knowledge

You should **encourage your students to create their own questions about course content**. ask students to:

- suggest and submit quiz, mid-term or exam questions
- get student to quiz each other on the tutorial/lesson/lecture content
- get students to write down one or two remaining questions at the end of tutorial (Centre for Teaching Excellence, Cornell University; Cashlin, 1995)

Avoid the "Are there any questions?" Turn these reflective moments into opportunities for students to demonstrate their understanding as a check of their learning:

- "Now, I am sure you have some questions?"
- "That was complicated. What did I leave out?"
- "This is a difficult topic with lots of controversial issues. Which area do you think remains controversial?"

Responding to student questions about content also requires some basic rules:

- **reinforce good questions and answers** — reinforce participation on a continuous basis and in a variety of direct and indirect ways by praising students for asking or answering a question
- **answer as pointedly and briefly as possible** – be straightforward in your answer and avoid providing all information that you know about the topic
- **answer questions immediately** – always provide a response to avoid discouraging students; however, you can ask other students to respond or postpone the question (if it is too divergent or complex) until after class
- **relate questions to the course content, even if they are tangential** – remind students of how a seemingly unrelated question does pertain to course content as every question if a learning

opportunity

- **ask for comments or answers from other students** – you can redirect a question from one student to the entire class

Strategies to improve the distribution of your questioning

1. Introduce hands down questioning - where you decide who to ask. Tell the pupils clearly "This is a hands down question - I expect you all to be able to give me an answer, even if that answer is 'I'm not sure'." It takes some training, but it's worth it!

2. If you tend to question the same pupils try moving about the classroom. Teachers seem to ask those pupils seated in a sort of "shifting spotlight " in front of them By moving to different areas of the room you are likely to ask a wider range of pupils.

3. Distribute slips of paper/card at the beginning of the lesson. As pupils answer a question, they hand over one of their cards. Teachers can see clearly who has still all their cards and can target an appropriate question! This technique also allows teachers to engage reluctant pupils, who may be given fewer cards.

4. Address a question directly to a named pupil. Keep others involved by asking them to consider what they could add/ whether they agree etc. e.g. "John, do you think that Macbeth really wants to kill the King at this point? Sam, do you agree? What evidence can you find? Does anyone think something different?"

5. Use the 'thinking time' pause after asking the question to consider who has answered questions already. Try simple strategies like asking a pupil who often answers to select two or three others to answer - thus keeping them involved.