1. Define the Zone of Proximal Development (6)

The ZPD is defined as the gap between actual and potential development, that is, the gap between what a child can do unaided by an adult and what he or she can do under the guidance of an adult or in collaboration with more capable peers.

The ZPD helps teachers to realise that two children who are capable of the same performance at present may not achieve the same level of performance 6 months from now. By observing how learners perform on problem-solving when they are assisted, teachers have a better indicator of potential performance than they do by considering just what learners can do on unaided tests.

The ZPD is important because it emphasises social interaction in facilitating development

(SG p 17)

Illustrate how you, as a teacher can discover your learner's ZPD (6)

1.Observation

- of learners during class activities. This will enable you to become aware of their developmental levels and the type of instructional activities that suit them better.

2. **Interviewing or questioning**

- learners one-on-one. By means of questioning them, you can probe their reasoning behind answers and discover how they construct knowledge, possibly giving you better insight into how they process information.

3. **Conducting formal assessments**

- of learners' capabilities. This will enable you to determine what learners can do unassisted (on their own), and what kind of support they need.

(SG p 18)

2. List and Explain Piaget's Stages of Cognitive Development (12)

- Sensory-motor stage (0-2 years)
- Pre-operational stage (2-6 years)
- Concrete operational stage (7-11 years)
- Formal operational stage (12 years and older)

<u>The sensory-motor stage (birth to about 2 years)</u>

- Infants' gross motor skills develop quickly during the first year, culminating in the ability to start walking at the age of 14 or 15 months.
- Fine motor skills also develop quickly during this period, so that by the middle of their first year, babies can already coordinate both hands to pick up and manipulate objects.
- Perceptual skills are already functioning shortly after birth and improve quickly during the first year
- Sub-stages of sensory-motor stage:
    - ★ ***Sub stage 1: The practising of reflexes (from birth to approximately 1 month)***
        - → We know that new-born babies already possess certain reflexes, such as the sucking reflex. As with any motor skill, this reflex improves, over time, so that the older baby can suck more strongly than the new-born baby.

    - ★ ***Sub stage 2: Adaptation of reflexes (from approximately 1 to 4 months)***
        - → During this period, reflexes become used as a means to achieve a goal.
        - → Whereas the baby first sucked its thumb purely as a reflex action, now it learns to bring the thumb to its mouth in order to repeat the satisfying sucking sensation = "primary circular reaction".

    - ★ ***Sub stage 3: Taking notice of objects separate from the body (from approximately 4 to 8 months)***
        - → The primary circular reaction, which was primarily focused on the baby's body, such as sucking its thumb and grasping its own limbs, is now followed by an interest in objects.
        - → Objects are grasped and first of all brought to the mouth, where the primary need for sucking is still centred.
        - → Whereas the baby performed the primary circular reactions with its own body, now it begins to do this with objects.
        - → This is called the secondary circular reaction and is characterised by more purposeful actions than in sub stage 2.
        - → These actions are aimed at exploring the world around the baby, beginning with an examination of objects.

    - ★ ***Sub stage 4: Carrying out one task in order to carry out a subsequent task (approximately 8 to 12 months)***
        - → For the first time, the motor activity reveals a purposeful movement directed at reaching a goal.
        - → If, for instance, a baby reaches for a toy and a cloth is placed over the toy, the baby will lift up the cloth to reach the toy.
        - → This movement is called the tertiary circular reaction.

★ ***Sub stage 5: Experimentation (from about 12 to 18 months)***

→ In this stage, babies are able to begin experimenting with the tertiary circular reactions already established.

→ They can already make the movements, but now they use them simply to see what will happen.

→ If a baby boy has learnt that some toys rattle, he will also pick up a teddy bear and shake it to see if it rattles. If he puts a soft rubber toy in his mouth and is able to chew on it, he will try it with a woolly toy to see what happens.

→ So this stage consists of the repetition of certain movements to see what the result will be. There is thus an element of estimation and expectation involved.

★ ***Sub stage 6: The use of symbols (approximately 18 to 24 months)***

→ During this stage, children can already say words and make gestures to show what they want.

→ They have already learnt that the word or the gesture stands for something else.

→ Naming is an important intellectual activity and will be discussed in more detail under the development of language.

→ The use of symbolism can now be observed in the baby's play as well.

→ For example, a baby will hold a toy that looks like a telephone to his ear or use an object that looks like a pencil to scribble on a surface in front of him.

- By the time babies can use symbols, they can begin to foresee the consequences of their actions. For example, a baby will see that putting yet another block on her already toppling tower of blocks will mean that the tower will tumble down. So she puts down the block and pushes over the whole tower herself to get more fun out of it.
- The ability to use symbols marks the end of the sensorimotor stage and the beginning of pre-operational thought.

<u>The pre-operational thought stage (2 to 6 years)</u>

- We have seen that even in the sensorimotor stage, the baby began to make use of symbols.
- Because pre-schoolers have only just learnt to use symbolism, we can presume that their use of symbolism is at a beginner's level, rather than advanced.
- Characteristics of symbolic thinking in the pre-operational stage:

★ ***Egocentrism***

→ Children in the pre-operational stage believe that others see the world as they see it.

→ The concept of egocentrism therefore indicates that children find it difficult to see the world from another's viewpoint.

→ For example, Thandi plays on her mother's bed while her mother is dressing for work. She discovers the shoulder pads inside the dress lying on the bed. "I know why dresses have these little cushions in," she remarks. "Why, Thandi?" her mother asks. "So that babies can sleep on their mommy's shoulder when they get tired in church."

→ This is a typical example of egocentric thought; preschool children view and evaluate everything in relation to themselves.

★ ***Centration***

→ Children in the pre-operational stage often cannot see another person's perspective.

→ Children in this stage often focus on only one aspect of a problem and completely ignore other equally important aspects.

→ Piaget tried to find out whether children realise that important characteristics of objects or sets of objects remain the same, even if their physical appearance changes, so he conducted a series of experiments.

★ ***Appearance as reality***

→ Preschool children deduce the nature of an object from its appearance. For example, a child who is looking at a glass of milk through dark glasses will believe that the milk is brown. Similarly, a child will take a bite out of a piece of brown plasticine if it looks to him like chocolate.

→ The absence of a familiar component of a specific event may also cause the child to think that the event never happened.

<u>The concrete operational stage (7 to 11 years)</u>

- In this stage, children make use of mental operations to solve problems.
- Mental operations are strategies and rules which make thought more systematic and powerful
- The prerequisite is that children need a concrete object to be present for the thinking process to take place.
- This means that the young child still cannot solve problems using abstract concepts.

<u>The formal operational stage (from about 11 years upwards)</u>

- From about the age of 11, children become able to think hypothetically and to reason deductively
- Children in the formal operational stage of thought can also estimate the consequences and implications of a situation by not having to stick to familiar rules.
- If you were to ask a five-year-old child what would happen if fish could fly, the child would answer that fish cannot fly. There is no such possibility, because the question does not relate to reality. An older child, on the other hand, would be able to imagine the possibilities of flying fish and come up with a number of creative ideas.
- Aspects of thought characteristic of the formal operational stage:

★ ***Abstract thought***

→ The development of concrete thinking strategies gives children's thoughts a more logical, rule-oriented quality, which was not evident in the<pre-operational> stage of intellectual development.

→ Now, because children in the formal operational stage are no longer bound by the concrete, they are able to examine the possibilities in a situation, namely that which could or might be.

→ They realise that tangible reality is not the only possibility in problem-solving.

→ They can think about and reason on abstract concepts such as poverty and wealth. They can also perceive the relationship between such concepts

★ ***Propositional thought***

→ This ability enables children to form hypotheses.

→ A hypothesis is an estimate of the possible solution of a problem and a deduction is a provisional conclusion about what could happen.

→ Before children know what the result is, they can test the result and then accept or reject their hypothesis

★ ***Hypothetical-deductive thought***

→ Some processes, constructs or situations are not directly observable, although we know they exist.

→ Examples would be the concepts of discipline or love or the force of gravity.

→ But how do we know such things exist, and can we prove it? Who has ever seen or touched the force of gravity? And who can say that they have seen or touched discipline or love?

→ We simply deduce that these qualities exist, or we deduce the existence of a process such as the force of gravity from the effect it has on the environment.

→ The pattern of hypothetical-deductive thought is as follows:

- ❖ Certain behaviour is observed;
- ❖ a position is deduced from the behaviour;
- ❖ and future behaviour is determined or anticipated

→ Because we cannot visibly observe the position, we must believe that it does exist; we therefore start from a theoretical basis.

PHASE	AGE	CHARACTERISTICS
Sensory-motor phase	± 0-2 yrs	• Functioning changes from a reflex level to a goal-directed activity • Characterised by sensory and motor adaptations • Begins to make use of memory, thought and imitation
Pre-operational phase	± 2-7 yrs	• Displays the ability to represent matters intellectually or symbolically • Language development is central • Does not readily see other people's point of view • ± 4-7 years stage of intuitive thought.
Concrete-operational phase	± 7-11 yrs	• Is capable of cognitive acts concerning concrete, real matters • Understands laws of conservation and is able to classify and seriate • Understands reversibility
Formal-operational phase	± 11-15 yrs	• Capable of carrying out formal operations, can think abstractly and logically • Can handle possibilities and hypotheses; though is more scientific • Develops concerns about social issues and identity.

3. List and Explain the first six stages of Erikson's theory of Psychosocial Development (12)

Stage	Age	Explanation
Trust vs Mistrust	Birth to ± 18 months	• An infant is almost entirely dependent upon mother for food, sustenance and comfort • Mother is the primary representative of society to the child • If she does her infant-related duties with warmth, regularity and affection, then the infant will develop a feeling of trust towards the world • This trust is a comfortable feeling in the infant that someone will always be around to care for his needs, even though the infant experiences numerous perceptual disappearance of the mother (and for the new-born, an object out of perceptual range is thought to be gone forever) • On the other hand, an infant may develop a sense of mistrust or fearful uncertainty if the mother fails to provide the necessary qualities in the caretaking setting. Such a mother is setting up a distrusting attitude in her child that will follow the child throughout his life
Autonomy vs Shame and doubt	18 months to ± 3 years	• The infant begins to gain control over her bowel and bladder. • Parents begin to demand that the child conform to socially acceptable forms and occasions for relieving herself/ eliminating bodily waste • The child may develop the healthy attitude that she is capable of independent or autonomous control of her own action, or she may develop the unhealthy attitude of shame and may grow to doubt that the is capable of this control
Initiative vs Guilt	3 to ± 6 years	• The child may discover ways to overcome his feeling of powerlessness by engaging in various activities; if he succeeds, then the overall healthy feeling of being an initiator of action will result. • Alternatively, the child may fail to discover such paths of action and may feel guilty about his sense of being dominated by the environment

Industry vs Inferiority	6 to ±12 years	• This stage coincides with the time when schooling begins and the child is involved in absorbing knowledge and developing intellectual and physical skills. • As the child is drawn into the social culture of her peers, she naturally comes to evaluate her accomplishment by comparing herself with others. • If she views herself as basically competent, she will feel productive and industrious • If she views herself as incompetent, particularly in comparison with her peers, then she will feel unproductive and inferior. • This unhealthy attitude may negatively colour her whole approach to life and learning; consequently, she may tend to withdraw from new and challenging situations, rather than meeting them with confidence and enthusiasm
Identity vs Role diffusion	Adolescence	• Adolescents enter what Erikson refers to as a "psychological moratorium" – a gap between the security of childhood and the new autonomy of approaching adulthood. • At this point, world views begin to be important to the adolescent. Numerous identities now become available to him from the surrounding culture, and he can experiment with different roles, trying each one out and seeing which ones he likes. • The youth who successfully copes with these alternative identities and conflicts during adolescence emerges with a new sense of self that is both refreshing and acceptable. • The adolescent who unsuccessfully resolves this identity crisis suffers from what Erikson refers to as identity or role confusion. This confusion may take one of two courses: the adolescent may withdraw and isolate himself from his peers and family, or he may lose his own identity in the mob. • The adolescent wants to be able to decide freely for himself such matters as what career he will pursue, whether he will go to university or look for a job after matriculation, and whether he will get married. • Adolescents, who have done well enough to obtain a job that is held in reasonably high esteem, will experience the least stress during their attempt to find an identity.

Intimacy vs Isolation	Young adult	• Early adulthood is usually associated with a career and the opportunity to form an intimate relationship with a member of the opposite sex • If the young adult forms friendships with other and a significant, intimate relationship with one individual in particular, then a basic feeling of closeness with others will result. • A feeling of isolation may result from the inability to form friendships and, particularly, and intimate relationship.
Generativity vs Stagnation	Young adulthood to middle age	• A chief concern of adults is to assist the younger generation in developing and leading useful lives. • This concern focuses on successful child-rearing • Childless adults may need to interact with young people through adoption, guardianship or a close relationship with the children of relatives and friends • Generativity, or the feeling of helping to shape the next generation, is the positive outcome that may emerge. • Stagnation, or a feeling of having done nothing for the ne
Integrity vs Despair	Later adulthood to old age	• The later years of life are a time for looking back at what we have done with our lives. • If an older person has developed a positive outlook in each of the preceding periods of emotional conflict or stages of development, retrospective glances will reveal a picture of a life well spent, and the person will feel satisfied (ego integrity) • However, the older person may have resolved one or more of the crises in a negative way. • If so, retrospective glances will likely yield doubt, gloom and despair over the sum worth of his life

4. Define the following terms:

4.1 Assimilation

- The way a child fits new learned information into existing schemas/ network of intellectual or cognitive structure

4.2 Motivation

- A child has intrinsic motivation like self-discipline, confidence, a good self-esteem and will to achieve in academics that are all pillars of motivation. This child will perform well in school, concentrate and have the enthusiasm to learn new knowledge and be motivated to do well in all areas of development – social, cognitive and physical development.
- Motivation can be defined as the desire to take part in the learning process and it involves the goals that underlie an individual's involvement or non-involvement in activities.
- Motivation plays a vital role in the learning process.
- It is therefore important for teachers to take special care in ensuring that all learners are constantly motivated

What is motivation?

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- Motivation plays a vital role in the learning process. It is therefore important for teachers to take special care in ensuring that all learners are constantly motivated

Intrinsic Motivation

- Intrinsic motivation refers to motivation coming from within oneself. An individual that is intrinsically motivated participates in an activity out of curiosity, in order to know more about a specific object or event
- Even though the task may be difficult to complete, the individual who is intrinsically motivated will persist , without any rewards or incentives
- These students are more likely to be excited by the challenge of the activity and are able to retain learned concepts and feel confident about tackling unfamiliar learning tasks

Extrinsic motivation

- Extrinsic motivation refers to circumstances when an individual is rewarded or encouraged by an outside factor, such as another person or thing
- Students whom are extrinsically motivated have to constantly be encouraged, enticed or prodded by a teacher
- These students often need to be rewarded by teachers in order to participate or complete an activity. These incentives can either be tangible (e.g. sweets or money) or non-tangible (i.e. verbal praise, a smile or pat on the back.)
- Extrinsically motivated students take part in activities purely attaining a reward or for avoiding some punishment

(Myunisa notes)

4.3 Self –Concept

- Self-concept can be defined as a set of beliefs about one's own characteristics. It is often associated with a person's beliefs about how others regards him or her.
- For example: "I am beautiful". "I am stupid".

4.4 Self - esteem

- Self-esteem refers to someone's evaluation of her self-concepts and the feelings associated with that evaluation
- For example: When two people possess the same characteristic – stubbornness, for example, but one person may judge being stubborn as being positive, while the other person sees it as a negative attribute, depending on their values

(Self-concept and self-esteem SG p 23)

5. Discuss the seven roles of educators as given in the Norms and Standards for Educators (2000) (14)

1. **Learning mediator**-

    - in a manner that is sensitive to the diverse needs of the learners,
    - Communicate effectively by showing recognition and respect for the differences of others.
    - Demonstrate sound knowledge of subject content, various principles, strategies and resource appropriate to learning

2. **Interpreter and designer of learning programmes and materials**-

    - The design original learning programmes,
    - identify the requirements for a specific context of learning and
    - select and prepare suitable textual and visual resources for learning.
    - Also select, sequence and pace learning in a manner sensitive to the differing needs of the learners

3. **Leader, administrator and manager-**

    - Make decisions appropriate to the level
    - Manage learning in the classroom
    - Carry out classroom administrative duties effectively
    - Participate in school decision-making structures
    - Perform above in way that is democratic, supporting learners and colleagues and demonstrating responsiveness to changing circumstances and needs

4. **Scholar, researcher and lifelong learner**

    - Educator will achieve ongoing personal, academic, occupational and professional growth through pursuing reflective study and research in their learning area.

5. **Community, citizenship and pastoral role**

    - Practice and promote a critical, committed and ethical attitude towards developing a sense of respect and responsibility towards others.
    - Uphold the constitution
    - Promote democratic values and practices
    - To develop a supportive and empowering environment for the learner
    - Respond to educational and other needs of the learners
    - Help develop supportive relations with parents

6. **Assessor**

    - Understand that assessment is an essential feature of the teaching and learning process
    - Know how to integrate into this process
    - Have an understanding of the purposes, methods and effects of assessment
    - Provide helpful feedback to learners
    - Design formative and summative assessment- appropriate to the level and purpose of the learning meeting the requirements od accrediting bodies
    - Keep detailed diagnostic records of assessment
    - Understand how to interpret and use assessment results

7. **Learning area/subject/discipline/phase specialist**

    - Educator will be grounded in the knowledge, skills, values, principles, methods and procedures relevant to the discipline, subject, learning area, phase of study, or professional or occupational practice
    - Know about different approaches to teaching and learning
    - Know how to use them appropriately to the learner and the context.
    - Educator will have a well-developed understanding of the content knowledge appropriate to the specialism

6.1 Give 5 reasons for using Problem Solving as a teaching strategy (10)

- PS engages learners actively and purposefully in learning by focusing their attention on what they need to learn. It develops their thinking and reasoning skills; that is, their ability to analyse situations, to apply their existing knowledge to new situations, to recognise the difference between facts and opinions and to make objective judgements.
- Problem solving helps learners to see a need for making sense of the subject they are studying
- Problem solving enables learning to be focused on the concerns and interests of learners and encourages them to discover answers to questions that arise from those concerns and interests.
- When the problems are engaging and difficult, higher levels of comprehension and skills development occur than in direct instruction, because developing meaningful solutions to problems lead do deeper understanding of the subject matter
- Problems solving develops learners' ability to make informed judgements and emphasises the importance of being able to explain and justify those judgements.
- Problem solving can develop learners' critical thinking skills and their ability to adapt to new learning situations, but only if they 'have learned to be conscious of what they are doing'.
- Problem solving in groups promotes learner interaction and teamwork, thereby enhancing learners' interpersonal skills.
- Problem solving helps learners to see the teacher as a resource who can help them learn, rather than just as a source of information
- Engaging learners in problem solving can give the teacher a better understanding of the abilities and special talents of the learners.

(Teaching strategies, p 264-266)

6.2 Give five reasons for using Direct Instruction as a teaching strategy (10)

- Direct instruction reduces the cognitive load on student's working memory, particularly for those learners with limited prior knowledge
- Direct instruction allows the teacher to highlight important points or possible difficulties for learners, so that their exposure to these things is not left to chance
- Direct instruction can be equally effective with large and small classes and with learners from most cultures, particularly when teaching factual information
- Direct instruction can be a useful way to provide information for learners who are poor readers or who are not very skilled at locating, organising and interpreting information
- Direct instruction can be a useful way to provide information for learners who are poor readers or who are not very skilled at locating, organising and interpreting information
- Direct instruction can be an effective way of demonstrating to learners that there alternative perspectives on issues
- Many students learns more deeply from strongly guided learning than from discovery
- Demonstrations are useful when there is insufficient equipment or resources to enable learners to work individually or in small groups
- Direct instruction lends itself well to teacher reflection, as it simplifies the process of gathering data to connect what the teacher does with what the learners achieve.

(Teaching strategies, p 139-140)

7.1 Explain 6 of the steps you should follow when preparing to use Cooperative Learning (12)

1. Give learners guidance and practice in helping one another to learn

- You have to spend time helping learners to develop strategies for assisting one another before hey attempt to master academic outcomes through structured co-operative learning activities.

2. Specify clearly what outcomes you want the learners to achieve

- This will include academic outcomes and social outcomes.
- Remember that 'co-operative learning groups are a means to an end (student learning) rather than an end in themselves'

3. Decide what content (issues, problems, theories) learners will focus on

- It is vital that the co-operative learning task is relevant to all members of the group, and that it provides opportunities for them to offer diverse opinions, otherwise they will not be interested and their exchanges of ideas will be very limited.

4. Select what you think will be the most appropriate from of co-operative learning to use

- - Based on the information here and elsewhere and on your own experiences

5. Prepare the materials

- Or arrange access to the materials that learners will need in order to learn and to help one another

6. Decide how to form the groups

- Most commonly, it is recommended that the groups be mixed (males and females, high and low achievers etc)

7. Decide how you will explain the co-operative learning process to learners

- = What you expect of them, how you will assist them and how they will be assessed.
- It is essential that the learners understand the concept of co-operation and how to use it to achieve success on academic tasks.
- Emphasise that group decisions need to be reached through consensus rather than majority rule, as students are likely to take greater responsibility for decisions reached in this way and have greater commitment to the actions that follow those decisions.

8. Develop a system for recognising and rewarding the learning of individual learners as well as the achievement of groups

- Group rewards based on individual learning have an indirect effect – they motivate learners to engage in certain behaviours, such as giving one another elaborate explanations, and this, in turn, enhances learning
- Students must believe and feel that they can earn the rewards for their efforts only when the members (of their group) collectively have been successful.
- The rewards need to be seen by learner as designed to provide them with feedback on their learning, so they should be based clearly on academic achievement.
- For many learners, the recognition that they are learning and being supported in their learning will be sufficient award.

9. Prepare appropriate assessment instruments

- Learners will be able to demonstrate their mastery and retention of academic content and skills after the co-operative groups have completed their work
- It must be clear that each learner is responsible for mastering all the outcomes.

10. Develop a system for keeping records.

- Records of learner and group achievement , and for publicly acknowledging the achievements of the groups

11. Plan a period of reflection

- After the groups have completed their tasks and received their feedback, the learners can analyse their achievements and their group processes

Describe the factors that should be taken into account when a teacher is grouping learners in preparation for a co-operative learning activity

- Co-operative learning works well if peers can learn from each other. If the “peer-teaching” is ineffective, the learners may learn more from direct teaching.
- Co-operative learning does not hold the same level of effectiveness on all types of learning. It is more effective during conceptual knowledge, than on procedural knowledge.
- Not all learners work well in groups, though it is beneficial for some, others may struggle to function in a group and will prefer to work on their own. Learners who prefer to apply their intelligence away from others are called internals.
- Different cultural, socio-economic and educational backgrounds may cause conflict between the different members of a group. The individuals may approach a situation differently as result to their different background or upbringing.
- Co-operative learning will be more pleasant and effective if it is used in a regular basis, opposed to once in a while.
- Slavin (1996) suggested that a detailed record of each learners performance during each learning task should be kept, and that sufficient time is spend in calculating the group’s achievement.
- Students have to learn how to be self-reliant, as well as how to work as a member of a group.
- A learner’s perception of the group members can have a great effect on the functioning of the co-operative group. It is important to highlight that everyone has unique abilities and that everyone’s contribution to the group is important.
- Some learners will depend on the performance of their fellow team members. It should be emphasised that the learning should be done by the individuals in order to demonstrate achievement.
- Learners may be reluctant to work in a group, if they do not want to lose their personal ownership in what the group is producing.
- Co-operative learning holds many difficulties, as well as gains. It is important to keep both aspects into consideration.

(Teaching p 238,239)

7.2 Explain 6 of the steps you should follow when preparing to use Group Work (12)

Step 1: Plan well ahead

- The lesson must be a part of a carefully planned programme.
- Group work will not be a suitable strategy in all lessons, so you have to use it at the times when it will be most effective
- Group work will be most effective when planned ahead

Step 2: Prepare your learners for group work

- Tell the learners why they will be working in groups.
- If they are not accustomed to group work, introduce them to it gradually – let them work in pairs before larger groups, and keep the group activities short until you are confident that learners can take on more substantial group tasks
- It is a great advantage to establish the groups, select the leaders and establish the rules n the lesson before the group work is done
- The students will then know what is expected of them in the group-work lesson, and will be able to get down to business quickly.

Step 3: Prepare or gather resource materials

- You need to decide what resources the learners will need and gather these yourself, or prepare guidelines to help learners find the resources

Step 4: Develop detailed guidelines for learners

- Learners need to know:
  - Why they are doing this group work
  - What outcomes they are supposed to achieve
  - What they have to do
  - What decisions they have to make
  - What product they have to produce; and
  - How they will be assessed.
- It is very important for the learners to understand why they are working in groups, particularly if this is a strategy that you o not use very often.
- If you don't' explain why you are using this strategy, some learners may think that you are simply trying to make life easy for yourself by having the learners do all the work

Step 5: Introduce the issue or problem

- Revise the important prerequisite knowledge that learners will build on in their group work.
- Remind learners of any prior reading they need to do and of any equipment or materials that they need to bring to the group-work lesson.

(Teaching strategies, p 207, 208)

8. Discuss 6 things that teachers can do to create a positive (quality) learning environment.(12)

- Create an environment that is safe and comfortable (both physically and psychological)
- Structure learning experiences to take learners purposefully towards important meaningful long-term goals
- Create learning experiences that are interesting, challenging and realistic, and that give learners opportunities to work collaboratively on open-ended tasks
- Give learners experiences of using and discussing the methods of the field of study
- Value learners' efforts and help them see the importance of effort in successful learning
- Trust learners and give them some say in what, when and how they learn, and allow them to participate in establishing classroom norms
- Expect learners to work hard to achieve high standards that have been made explicit
- Require learners to be responsible for their behaviour and their learning

- Create a learning environment that is comfortable and safe for the learners – This includes both physical and psychological safety. Ensure that there are no hazardous items in the classroom which can cause harm or injury to the learners. Keep the classroom clean and organised so that the learner may learn as comfortably as possible. Be sure to treat all of the learners with, respect so that they can be in an environment of trust and security.
- Create lessons and learning experiences that are challenging, interesting and realistic. If a learner is excited by the learning material, he/she will be more willing to concentrate in class and have a positive outlook and attitude on the tasks that are expected of them. Set realistic expectation so that the learners don't feel discouraged during lessons and activities.
- Trust the learners enough to give them a say in what, when and how they learn. Each learner has a specific learning style and technique, allowing them to feel that they have a say in how they approach a task in class, will lead to a better end result. They will be able to personalize their methods, so that the process is most beneficial to them.
- Value the efforts of the learners, so that they may see how important it is to work hard in order to achieve their goals. Learners may also be rewarded for their hard work if their efforts were seen as sufficient.
- Each learner needs to be responsible for their own behaviour and learning – this includes the rewards and consequences that follow. Be sure to focus on the individual and his or her achievements and mistakes. Do not punish the whole class because of one, or reward those who did not bring their part. This will ensure that each learner feels responsible for their own actions and attitudes.

(Teaching strategies, p 72)

9. List and explain the 4 types of knowledge according to the Anderson-Krathwohl Taxonomy (8)

Knowledge type	Subtype	Examples
Factual knowledge (basic knowledge required to work in a discipline)	• The knowledge of terminology that is used to communicate ideas in a particular discipline. For example	• the symbols for chemical elements, • parts of a machine's names, • musical symbols and • technical vocabulary
	• Knowledge of certain details such as facts and their resources.	• sequence of alphabet letters, • sequence of the periodic table of elements and • dates of events in history.
Conceptual knowledge (knowledge of how things are related)	• The knowledge that groups elements of content into classifications and categories	• classifying animal species, • Western music types and • the forms of business ownerships
	• The knowledge of principles and generalisations that is used to organise ideas.	• Newton's laws of motion, • The theorem of Pythagoras and • The law of supply and demand.
	• The knowledge of models, structures and theories that are used to explain and predict	• the evolution theory, • the information-processing model of cognition.
Procedural knowledge (knowledge of how to do things)	• The knowledge of subject-specific skills and algorithms that produce foreseeable results	• The skills used while drawing a house plan • An algorithm for multiplying fractions
	• The knowledge of methods that lead to open-ended results and subject-specific techniques	• The technique of interviewing and • A scientific process of inquiry
	• The knowledge of criteria for establishing when and why use specific procedures	• The criteria to establish when to use the 'guess and check' method to solve a problem. • The criteria to judge the feasibility of using co-operative learning as a strategy to teach

Metacognitive knowledge (knowledge of cognition in general, and awareness of one's own cognition and how to control one's thinking)	• The strategic knowledge to aid in memorising or assisting in developing understanding	• The knowledge of flowcharting as a way of showing the relationships among elements of a process
	• The knowledge about cognitive tasks and the strategies that can be applied to them	• The knowledge of cognitive demands of particular tasks. • The knowledge of ways in which understanding is typically tested by teachers
	• Self-knowledge about one's approach to and success with cognitive tasks.	• Being aware of one's own knowledge level. • Knowledge about one's own personal strengths and weaknesses in academic tasks

(Teaching strategies, p 105,106)

10. Name the 6 cognitive processes, according to Anderson-Krathwohl Taxonomy, and explain what learners are required to do at each level (12)

Cognitive process	What learners are required to do
Remember	• Learners are required to retrieve long-term memory knowledge and use that knowledge in a simple way
Understand	• Learners are required to construct personal meaning derived from information and demonstrate comprehension
Apply	• Learners are required to use a standard procedure or technique in any situation (either routinely or after deciding which method that has to be used.
Analyse	• Learners are required to divide information into parts and establish how the parts are related to one another and how they relate to an overall purpose or structure.
Evaluate	• Learners are required to make judgements bases on criteria and/or standards (either developed or given)
Create	• Learners are required to reorganise elements into a new pattern or structure, and to put elements together to form a logical or functional whole

(Teaching strategies, p104)

11. List and explain 5 levels of Bloom's Taxonomy for the cognitive domain (20)

Cognitive process	What learners are required to do	Examples of action verbs
Remember	• Learners are required to retrieve long-term memory knowledge and use that knowledge in a simple way	recognition, recall, define, describe, identify, list, label, match, name, reproduce, select, state (eg: Name the provinces of SA)
Understand	• Learners are required to construct personal meaning derived from information and demonstrate comprehension	This include: interpret, paraphrase, give examples, summarise, classify, infer, deduce, compare, discuss, explain, rewrite (eg: explain the difference between velocity and acceleration)
Apply	• Learners are required to use a standard procedure or technique in any situation (either routinely or after deciding which method that has to be used.	Calculate, demonstrate, predict, relate, solve, determine, execute, operate, use, communicate, construct, illustrate (eg: Solve routine mathematics problems)
Analyse	• Learners are required to divide information into parts and establish how the parts are related to one another and how they relate to an overall purpose or structure.	Analyse, compare, contrast, organise, distinguish, examine, illustrate, point out, relate, explain, differentiate, attribute, deconstruct, outline, structure, investigate (eg: Compare the writing styles of two authors)
Evaluate	• Learners are required to make judgements bases on criteria and/or standards (either developed or given)	Assess, appraise, comment on, check, criticise, judge, critique, discriminate, justify, interpret, support, review, decide, conclude, test, prioritise, recommend (eg: Critique and experimental process in science)
Create	• Learners are required to reorganise elements into a new pattern or structure, and to put elements together to form a logical or functional whole	Combine, design, plan, rearrange, write, compose, reconstruct, rewrite, generate, produce, make , invent, initiate (eg: Design a web page)

(On page 104 of Teaching Strategies, and myunisa notes it is stated that Bloom's cognitive domains and the Anderson-Kratwohl processes are similar. Bloom's is discussed in the old prescribes book, and this question is developed from the 2014/2015 question papers)

12 Give an example of how teachers can use Bloom's taxonomy to plan their lessons based on learning outcomes? (2)

1. What type of cognitive processes does the outcome require? Will they use remembering, understanding, applying techniques, or help them create?

- The teachers can use mind maps to help the learners understand and memorise a certain aspect of an subject

2. With what type of knowledge will the learners be dealing when demonstrating the outcome? Will they use factual, conceptual, procedural or metacognitive knowledge levels to help the students?

- The teacher can use symbols, classification charts etc. to help the students learn better.

(Myunisa notes)

13. Explain the concept 'Identity diffusion' as proposed by James Marcia (8)

- Marcia regards identity diffusion as a situation where adolescents avoid thinking about lifestyle decisions and are unable to develop a clear sense of self
- A young person who is unable to commit to decisions or unable to postpone decisions by declaring a psychosocial moratorium may seek another solution to the developmental crisis – a solution that Erikson called a negative identity, which is an aspect of identity diffusion.
- Young people who adopt a negative identity are often those who rebel against authority figures, such as parents and teachers
- Typically, these young people are disorganised, they act impulsively and they are not goal-orientated.
- They often avoid making a commitment to schoolwork or to interpersonal relationships

(SG p 27)

14. List 5 steps that the teacher can follow to help change the disruptive behaviour of learners in class so that the teaching – learning process becomes more effective and meaningful. (10)

- Always acknowledge the learners and try to understand their problem, get to know the child and the child and the child's background to understand the problem better
- Be there for them and listen
- Be warm, respectful and understanding
- Make them understand that they need to take responsibility for their actions and guide them to make the right decisions
- Make sure the child understand that they are behaving incorrectly – cultural differences
- Motivate the child to do better by letting them set their own goals and guide them to achieve it
- Be positive, enthusiastic and a sympathetic listener
- Create an environment where error is welcomed as a learning opportunity. Learners can feel safe to learn, relearn and explore knowledge and understanding
- Create an environment that will support and encourage learning and that is warm and non-judgemental

(Myunisa_

15. Explain how teachers can create a culture-fair classroom (4)

- Help learners to construct their own understanding of cultural differences and have discussions about the topic.
- Integrate new info with existing info – do an activity on cultural differences and let every learners to a presentation on their culture, tradition and ethnic background
- Create a learning environment that is culture friendly, respectful and accepting of differences between students
- Maintain high expectations of all students no matter what their ethnic background
- Express interest in the ethnic background of students and facilitate learners to do the same
- Ask to meet with a Traditional Teacher and have them come and tell the learners about their tradition and culture

(Myunisa)

Define the following terms/concepts:

16. Formal Operations (stage of cognitive development) (3)

- From about the age of 11, children become able to think hypothetically and to reason deductively
- Children in the formal operational stage of thought can also estimate the consequences and implications of a situation by not having to stick to familiar rules.
- If you were to ask a five-year-old child what would happen if fish could fly, the child would answer that fish cannot fly. There is no such possibility, because the question does not relate to reality. An older child, on the other hand, would be able to imagine the possibilities of flying fish and come up with a number of creative ideas.
- Aspects of thought characteristic of the formal operational stage:

    ★ ***Abstract thought***
        → The development of concrete thinking strategies gives children's thoughts a more logical, rule-oriented quality, which was not evident in the<pre-operational> stage of intellectual development.
        → Now, because children in the formal operational stage are no longer bound by the concrete, they are able to examine the possibilities in a situation, namely that which could or might be.
        → They realise that tangible reality is not the only possibility in problem-solving.
        → They can think about and reason on abstract concepts such as poverty and wealth. They can also perceive the relationship between such concepts

    ★ ***Propositional thought***
        → This ability enables children to form hypotheses.
        → A hypothesis is an estimate of the possible solution of a problem and a deduction is a provisional conclusion about what could happen.
        → Before children know what the result is, they can test the result and then accept or reject their hypothesis

- ★ ***Hypothetical-deductive thought***
  - → Some processes, constructs or situations are not directly observable, although we know they exist.
  - → Examples would be the concepts of discipline or love or the force of gravity.
  - → But how do we know such things exist, and can we prove it? Who has ever seen or touched the force of gravity? And who can say that they have seen or touched discipline or love?
  - → We simply deduce that these qualities exist, or we deduce the existence of a process such as the force of gravity from the effect it has on the environment.
  - → The pattern of hypothetical-deductive thought is as follows:
    - ❖ Certain behaviour is observed;
    - ❖ a position is deduced from the behaviour;
    - ❖ and future behaviour is determined or anticipated
  - → Because we cannot visibly observe the position, we must believe that it does exist; we therefore start from a theoretical basis.

(SG p 14)

17. Scaffolding (3)

- = Providing a student with enough help to complete a task and then gradually decreasing the help as the learner becomes able to work independently
- Scaffolding is a process whereby the more advanced people change the amount or kind of support provided to the less skilled people, as the latter become more proficient in the skill.
- Usually the teacher s the more knowledgeable partner in the learning relationship, but this may also be a fellow student who is able to scaffold instructions for the less knowledgeable learners.

(SG p18, Teaching strategies p 48)

18. Constructivism (3)

Constructivism means many different things.

Cognitive constructivism - can be defined as an approach in learning in which 'learners are provided with the opportunity to construct their own sense of what is being learned by building internal connections or relationships among the ideas and facts that are being taught.

Cognitive constructivism focuses on the cognitive processes which help people to make sense of the world. This approach emphasises the fact that learners construct knowledge for themselves by forming their own representations about the material that is learned. They select the information they perceive as relevant on the basis of their knowledge and needs. When a person learns something new, they bring to that experience, all the knowledge that they learned before, as well as mental patterns. We construct and reconstruct knowledge in order to make it meaningful.

Social Constructivism:

Students obtain knowledge from their interaction with the environment and not just merely from the teacher's lectures. Because there are so many perspectives on constructivism there is no prescribed way to plan constructivism in the curriculum. However Constructivism teaching is based on the generalized idea that learners develop understanding when they seek solutions themselves – or much of learning originates inside of the child.

(Teaching Strategies p.46-47)

19. Problem-solving (3)

Problem solving helps learners to engage in developing deep understanding and applying ideas to real live situations. It has the potential to motivate learners and show them practical reasons for learning. Advantages can be obtained in all learning areas.

There are many different ways that you can use problem solving in teaching. This can be divided into 3 categories:

- Teaching for problem solving
- Teaching about problem solving
- Teaching through problem solving

Before we can use problem solving as an effective teaching strategy, you might have to first spend time helping your learners to become effective thinkers. So help learners to think.

Problem solving is a basic human learning process. We are faced with problems to solve everyday.

Three things to consider when using problem solving:

1. People must know why they are trying to solve the problem at hand.

2. A need to learn something is generated when people are faced with real-life problems and they do not have all the knowledge and skills to solve the problem

3. Real-life problems rarely have only one solution, and often do not have a best solution. Such problems are ill defined.

(Teaching strategies p. 258.

20. Direct Instruction (3)

The term direct instruction usually refers to the whole class expository technique. Basic forms of direct instruction includes lectures and demonstrations. They are teacher centred approaches in which the teacher delivers academic content in a highly structured format that directs the activities of the learners and maintains the focus on academic achievement.

Important features of direct instruction:

- The required learning outcome and success criteria are made clear before instructions start
- The teacher organises and controls the sequencing of all lesson activities
- Strong emphasis on academic performance
- The teacher monitors the learners' activities and gains frequent feedback on their understanding
- The teacher provides frequent, clear feedback to learners

(Teaching strategies, p.136)

Ways to adapt instruction to meet individual meets:

- Present material on tape for students who not read successfully.
- Allow students to tape-record answers if writing is difficult
- Provide lots of visual reminders (pictures, maps, charts, graphs) for students who have trouble listening or attending
- Break directions and assignments into small steps. Completion of each step is an accomplishment. Reward steps completed.
- Give tests orally if the child has trouble with reading, spelling, or writing. Testing the learners skills, not language skills
- Emphasize quality rather than quantity of writing
- Carefully establish routines so that students with disabilities do not become further handicapped by the confusion of unclear expectations.
- Arrange desks, tables, and chairs so every person ca be seen easily and every word heard easily. Remember students with hearing defects need to see your face as you speak.
- Provide screens for students who are easily distracted.

(MyUNISA notes)

Differentiate between:

22. Negative reinforcement and Punishment (4)

Negative reinforcement	**Punishment**
• Negative reinforcement occurs when a certain stimulus (usually an aversive stimulus) is *removed* after a particular behaviour is exhibited. • The likelihood of the particular behaviour occurring again in the future is increased because of removing/avoiding the negative consequence. • Negative reinforcement should not be thought of as a punishment procedure. With negative reinforcement, you are increasing a behaviour, whereas with punishment, you are decreasing a behaviour. • Example: A child is bought a sweet in order to get him to stop crying in a mall instead of punishing him to stop crying	• Punishment is a process by which a consequence immediately follows a behaviour which decreases the future frequency of that behaviour. • Like reinforcement, a stimulus can be added (positive punishment) or removed (negative punishment). • Example: A child is grounded after misbehaving

23. Assimilation and Accommodation (4)

Assimilation	Accommodation
• The way a child fits new learned information into existing schemas/ network of intellectual or cognitive structure • Assimilation is an adaptation process by which new information is taken into the previously existing schema. • This is how humans perceive and adapt to new ideas. • Here, the learner fits the new idea into what he already knows • Through this process, we add new information or experiences to our existing knowledge base, sometimes reinterpreting these new experiences so that they will fit in with previously existing information • Assimilation occurs when someone makes use of the pre-existing knowledge to make sense of the new knowledge.	• Accommodation is the process by which pre-existing knowledge is altered in order to fit in the new information. • A new schema might be created in this process. This happens when the existing knowledge is not accurate. • More difficult because we need to change our mental schema or create a new one to fit the new information or experience, in other words, the new information or experience does not fit existing schemas • For example, a child knows that a dog has four legs. When the child sees a horse for the first time, he calls it dog as it has four legs. He fits in the new animal with the existing knowledge; this is assimilation. But an adult points out that it is a horse, not a dog; then the child alters his knowledge that all four-legged animals are not dogs.

24. Low Self Esteem and Negative Self Concept (4)

Low self-esteem	Negative self-concept
• Self-esteem refers to someone's evaluation of her self-concept and the feelings associated with that evaluation. • When a person has a low self-esteem, they may view a characteristic such as being stubborn as a negative characteristic	• Self-concept can be defines as a set of beliefs about one's own characteristics. It is often associated with a person's beliefs about how others regard him • Self-concept is a person's description of herself in terms of roles, attributes or characteristics

25. Concrete operations and Formal operations (4)

Concrete operations	Formal operations
• Is capable of cognitive acts concerning concrete, real matters • Understands laws of conservation and is able to classify and seriate • Understands reversibility	• Is capable of carrying out formal operations, can think abstractly and logically • Can handle possibilities and hypotheses; thought is more scientific • Develops concerns about social issues and identity

26. Provide guidelines on how the teacher can develop the adolescent learner's self-concept and self-esteem in a class room

- Value and accept all learners, for their attempts, as well as for their accomplishments.
- Make standards of evaluation clear.
- Model appropriate methods for self-criticism and self-reward.
- Know all learners' names, addresses and interests.
- Treat every learner equally
- Reinforce positive behaviour
- Let the learners compete with themselves and not with others

27. Discuss 6 thinking skills that a teacher can use when planning ways to enhance learners' thinking and problem solving abilities (12)

Ways to enhance thinking skills:

1. Focusing

- Learners will not be able to think of solutions unless they can focus their thinking on specific issues.

2. Information gathering

- Learners will need to gather information and they need to develop the idea of the type of information to gather, formulate a question to guide their information gathering and gather information by observation or by appropriate form of research

3. Organising

- While learners are gathering information, they must be able to organise the information to enable them to solve a problem. They should be able to compare information, characterise information and represent information.

4. Analysing and integrating

- Once information has been gathered and organised, it needs to be placed within a suitable conceptual framework. They have to be able to identify main ideas in the information, use appropriate methods to identify important elements, relationships and patterns in the information. They need to identify errors in the facts and modify their existing knowledge structures to accommodate the new information.

5. Evaluating

- Learners need to evaluate information and ideas to that they can decide whether or not they are reliable and useful.

6. Generating ideas

- Learners need to be able to solve particular types of problems and using different ideas (possible solutions) that could solve the problem is a skill.

(Teaching p 284, 285)

28. List and explain Kohlberg's levels of moral development. (15)

Pre-conventional level

- The most important issue for people at this level of reasoning is punishment and reward. Virtually the entire moral reasoning of most children and many adolescents is governed by this kind of obedience, consisting of a fear of punishment and a hope of reward.

Stage 1: Obedience reasoning – focus on consequences of actions

- Petrus's four-year-old sister is still at this phase of moral reasoning. She looked at the dog with wide eyes and said: "I wouldn't go near a strange dog. Mommy said I mustn't."

Stage 2: Instrumental exchange – egocentric orientation

- Petrus's five-year-old brother had this to say: "But you're not allowed to climb over the wall. You'll be caught."

Conventional level

- At this level of reasoning, law and order and existing rules are the most important consideration.

Stage 3: Interpersonal conformity – do what is expected of you

- Petrus's granny came to see what was going on. She said: "This isn't the way your mommy and daddy brought you up. Why did you take another person's dog?"

Stage 4: Law and order – the rules of the social system

- Petrus's mother was very upset: "If the police had seen you, they would have arrested you. It is against the law to climb over other people's fences."

Postconventional level

- At this level of reasoning, personal norms and values are what count, even if they do not always accord with the law and the social system.

Stage 5: Social contract – rules cannot provide for every eventuality

- Petrus's older brother looked at the little dog and said: "There was nothing else you could have done. You had to climb over the fence to help the dog. I'm sure the people will understand."

Stage 6: Universal ethical principles

- Petrus's father thought over the incident and said: "The dog would have died if you had not helped him. You did break a rule, but you obeyed a more important rule: you saved his life."

LEVEL	STAGE	DESCRIPTION
Pre-conventional **(birth to 9 years)**	1. Obedience reasoning	• The child behaves in order to avoid punishment
	2. Instrumental exchange	• Start of “social reciprocity” – scratch my back and I’ll scratch yours
Conventional **(9 years to young adulthood)**	3. Interpersonal conformity	• Focus on the expectations of others, especially authority figures and peers. • Value approval from others
	4. Law and order	• A moral person follows laws without questions • Laws are necessary and good
Post-conventional **(adulthood)**	5. Social contract	• Laws now become open to evaluation. • There may be good reasons for disregarding laws
	6. Universal ethical principles	• A person chooses a belief system and a set of principles that guide their behaviour.

(SG p 29,30)