MAH B.Ed CET Teaching Aptitude

Sample Paper – 6 | Detailed Solutions

Detailed Solutions

Q1.

Solution

Concept: Characteristics of an effective classroom teacher.

Research consistently shows that effective teachers are characterised by their use of **evidence-based instructional strategies**, systematic lesson organisation, genuine **empathy** for students' academic and emotional needs, and the ability to use ongoing formative assessment to **adapt instruction** in response to student understanding. Effectiveness is not primarily about charisma or entertainment but about deliberately designed, responsive teaching.

Why other options are wrong:

- (A) Personal charisma and entertaining delivery are insufficient on their own and are not evidence-based determinants of student learning.
- (C) Strict syllabus adherence without accommodating student questions reflects an inflexible, content-centred approach rather than effective teaching.
- (D) Relying only on end-of-term examinations eliminates the formative feedback loop that effective teachers use continuously.

Final Answer: (B)

Answer: (B) **Go Back to Q 1**

Q2.

Solution

Concept: Hierarchy of aims, goals, and objectives in education.

Educational purposes operate at three levels of specificity: **Aims** are the broadest, long-term aspirations that describe the overall purpose of education (e.g., "develop responsible citizens"). **Goals** are intermediate statements for a programme or course (e.g., "develop scientific literacy"). **Objectives** are the most specific, written for individual lessons or units, and must be **measurable** (e.g., "The student will be able to balance a simple chemical equation"). This hierarchical distinction guides curriculum planning from the macro to the micro level.

Why other options are wrong:

- (A) This reverses the correct descriptions—aims are broad, not specific.
- (B) Goals and objectives are distinct in scope and measurability and are not interchangeable.
- (D) The three terms carry meaningful technical distinctions in curriculum theory and practice.

Final Answer: (C)

Answer: (C) **Go Back to Q 2**

Q3.

Solution

Concept: Bloom's revised taxonomy — Evaluate level (sixth level).

In Anderson and Krathwohl's revised Bloom's taxonomy (2001), the six levels are: Remember → Understand → Apply → Analyse → Evaluate → Create. The **Evaluate** level requires the learner to **make judgements** about the value, quality, credibility, or validity of material using established criteria. Judging the reliability of a study by examining its methodology and sample size is a classic Evaluate-level task.

Why other options are wrong:

- (A) Summarising a chapter in one's own words represents the **Understand** level.
- (B) Applying Newton's second law to a novel problem represents the **Apply** level.
- (C) Comparing and contrasting two events using a T-chart represents the **Analyse** level.

Final Answer: (D)

Answer: (D) **Go Back to Q 3**

Q4.

Solution

Concept: Effective questioning strategies during live instruction.

As shown in the diagram, effective classroom questioning involves directing **different question types** to different categories of students: open questions to volunteers, directed questions to non-volunteers, probing questions to deepen a response, and redirecting to extend participation to additional students. This ensures **equitable engagement**, prevents over-reliance on a small group of volunteers, and pushes thinking to deeper levels.

Why other options are wrong:

- (B) Accepting only volunteer answers marginalises non-participating students and reduces equity and breadth of engagement.
- (C) Reserving questions only for the end of the lesson removes questioning as a live diagnostic and engagement tool during instruction.
- (D) Written-only questions eliminate the interactive, spontaneous quality that makes live questioning a powerful instructional strategy.

Final Answer: (A)

Answer: (A) **Go Back to Q 4**

Q5.

Solution

Concept: Continuing Professional Development (CPD) of teachers.

CPD is a **career-long, ongoing commitment** to professional growth. It encompasses formal and informal learning activities—workshops, conferences, peer collaboration, action research, mentoring, self-study, and reflective practice—that collectively expand a teacher's knowledge, skills, and professional identity over time. CPD is not a one-time event but a sustained process embedded throughout a teacher's career.

Why other options are wrong:

- (A) A one-time pre-service orientation is induction, not CPD—CPD is continuous, not a single event.
- (C) A formal qualification obtained once describes pre-service education, not ongoing professional development.
- (D) An annual performance appraisal is a summative evaluation tool, not a professional development activity.

Final Answer: (B)

Answer: (B) Go Back to Q 5

Q6.

Solution

Concept: Teacher as diagnostician — identifying and remediating learning difficulties.

A teacher functioning as a **diagnostician** systematically analyses student work and behaviour to identify the **specific nature and causes** of learning difficulties (e.g., a conceptual misconception, a skill gap, or a processing difficulty), and then **prescribes targeted instructional interventions** to address those particular gaps. This is analogous to a physician who diagnoses before prescribing treatment—it is data-driven, individualised, and purposive.

Why other options are wrong:

- (A) Designing engaging games describes the teacher as motivator/facilitator, not diagnostician.
- (B) Adhering to the prescribed textbook describes a transmissive, content-centred approach—no diagnosis is involved.
- (D) Using praise and rewards describes the teacher as motivator, not diagnostician.

Final Answer: (C)

Answer: (C) Go Back to Q 6

Q7.

Solution

Concept: Simpson's psychomotor domain — Guided Response stage.

Simpson's psychomotor taxonomy (1966) has seven levels: Perception → Set → **Guided Response** → Mechanism → Complex Overt Response → Adaptation → Origination. The **Guided Response** stage involves the learner **attempting a new physical skill** with the help of a teacher/model, through imitation or trial and error. The learner is not yet proficient; external guidance and corrective feedback are still required.

Why other options are wrong:

- (A) Performing a skill consistently and independently without assistance describes the **Mechanism** or higher level (habitual performance).
- (B) Noticing the demonstration and preparing to attend describes the **Perception** and **Set** stages.
- (C) Combining multiple techniques into a smooth coordinated procedure describes the **Complex Overt Response** stage.

Final Answer: (D)

Answer: (D) **Go Back to Q 7**

Q8.

Solution

Concept: Krathwohl's affective domain — Organisation level (Level 4).

Krathwohl's affective taxonomy progresses: Receiving (1) $\rightarrow$ Responding (2) $\rightarrow$ Valuing (3) $\rightarrow$ **Organisation (4)** $\rightarrow$ Characterisation (5). At the **Organisation** level, the learner **reconciles competing values**, builds a personal value system by comparing, relating, and synthesising different values, and develops a framework that guides complex decisions. Confronting a tension between individual freedom and social responsibility and constructing a personal reconciling framework is a textbook Organisation-level response.

Why other options are wrong:

- (B) Following the teacher's instructions obediently reflects Responding or even Receiving—no personal value synthesis is involved.
- (C) Listening attentively describes the Receiving (awareness) level.
- (D) Participating after being asked describes the Responding level.

Final Answer: (A)

Answer: (A) **Go Back to Q 8**

Q9.

Solution

Concept: Dramatization method — primary educational purpose.

The dramatization (drama) method engages students in **role enactment and lived experience**, making it uniquely powerful for the **affective domain**: it builds empathy by requiring students to inhabit perspectives other than their own, encourages **creative expression**, and deepens understanding of social situations, moral dilemmas, historical events, and literary characters in a way that cognitive or behavioural methods alone cannot achieve.

Why other options are wrong:

- (A) Rote memorisation through repetition describes drill and practice, not the purpose of drama.
- (C) Replacing written assessment for ease of scoring is not the educational purpose of drama; drama assessment is complex and holistic.
- (D) Channelling physical energy to manage behaviour misidentifies the method's educational function.

Final Answer: (B)

Answer: (B) **Go Back to Q 9**

Q10.

Solution

Concept: Team teaching — types of arrangements.

The diagram shows three distinct team teaching models. **Station Teaching** is characterised by **student rotation**: the class is divided into groups that move through different stations, each staffed by one co-teacher who delivers a different portion of the content or a different skill. This maximises personalised contact and allows both teachers to lead substantive instruction simultaneously on different material.

Why other options are wrong:

- (A) Both teachers teaching the same content simultaneously to the whole class describes **Parallel Teaching**, not Station Teaching—and the key feature of Parallel Teaching is the class split, not simultaneous delivery to the undivided group.
- (B) One teacher delivering while the other monitors behaviour from the back describes **One Teach, One Monitor** (a subtype of One Teach, One Assist)—

not Station Teaching.

- (D) Both teachers alternating sections with alternate halves describes a hybrid that does not match the rotating station model.

Final Answer: (C)

Answer: (C) **Go Back to Q 10**

Q11.

Solution

Concept: Field trip — primary educational benefit.

A field trip takes students **out of the artificial classroom environment** into authentic, real-world settings. Its primary educational value lies in providing **direct, first-hand, contextualised experience**: students observe, touch, smell, and interact with phenomena in their natural or cultural context. This makes learning **concrete and memorable** in ways that no amount of textbook description or classroom simulation can fully replicate (Dewey's experiential learning principle).

Why other options are wrong:

- (A) Field trips are logistically complex and often expensive—convenience and cost are not their strengths.
- (B) A field trip rarely allows faster syllabus coverage; it typically requires considerable preparation time.
- (C) Identical outcomes for all students are not guaranteed—field trips are valued precisely because each student's contextual experience is unique and personal.

Final Answer: (D)

Answer: (D) **Go Back to Q 11**

Q12.

Solution

Concept: The Winnetka Plan — key distinguishing feature.

The **Winnetka Plan**, developed by Carleton Washburne in Winnetka, Illinois (1919), was a pioneering individualised instruction system distinguished by two features: (1) **self-corrective practice materials** that allowed students to check their own work immediately after each unit, and (2) **self-paced progression** so that each student advanced to the next unit only after demonstrating mastery of the current one, regardless of the class's general pace.

Why other options are wrong:

- (B) Interest-based cooperative group projects describe elements of a project-based or activity curriculum, not the Winnetka Plan.
- (C) Organising subjects around broad social themes is a core curriculum or integrated curriculum approach (e.g., Harold Rugg's social reconstructionism).
- (D) Oral recitation and public examination describe traditional Herbartian or monitorial school practices, not Winnetka.

Final Answer: (A)

Answer: (A) **Go Back to Q 12**

Q13.

Solution

Concept: Problem-Based Learning (PBL) — defining feature.

PBL (Barrows & Tamblyn, 1980) is structured around an **ill-structured, authentic, real-world problem** presented at the beginning of the learning cycle. Rather than content being pre-taught and then applied to a problem, the **problem itself drives** the identification of what students need to learn. Students work collaboratively to investigate, construct knowledge, and arrive at solutions—mirroring how professionals actually encounter and resolve complex challenges.

Why other options are wrong:

- (A) Textbook study followed by practice exercises describes traditional direct instruction—knowledge precedes application, the opposite of PBL.
- (C) Teacher-modelled worked examples in ascending difficulty describes explicit/direct instruction with guided practice.
- (D) Extended independent research on self-chosen topics with no collab-

oration describes an inquiry project, not PBL's collaborative ill-structured-problem approach.

Final Answer: (B)

Answer: (B) **Go Back to Q 13**

Q14.

Solution

Concept: Learning Together (Johnson & Johnson) — defining principle.

Johnson and Johnson's **Learning Together** model (1975) is built on **positive interdependence**: students in small, heterogeneous groups work toward a **shared group goal** and submit a single group product. Group rewards are based on the combined performance of all members. The model emphasises five elements: positive interdependence, individual accountability, face-to-face promotive interaction, social skills, and group processing.

Why other options are wrong:

- (A) Each member assigned unique content to teach the others describes the **Jigsaw** model (Aronson), not Learning Together.
- (B) Groups competing for a reward given only to the winner describes an **intergroup competition** structure, not cooperative learning.
- (D) Independent completion followed by peer comparison describes peer review, not cooperative learning.

Final Answer: (C)

Answer: (C) **Go Back to Q 14**

Q15.

Solution

Concept: Structured Academic Controversy (SAC) — four steps.

SAC (Johnson & Johnson, 1988) is a four-step cooperative strategy: (1) Pair A researches and presents Position A; (2) Pair B presents Position B; (3) **Both pairs reverse roles and argue the opposing position** (to develop perspective-taking and deeper content understanding); (4) all four students **drop advocacy** and work together to construct a synthesis that integrates the best evidence from both sides. As shown in the diagram, Step 3 (role reversal) immediately follows both presentations.

Why other options are wrong:

- (A) Teacher declaring a winner contradicts SAC's cooperative synthesis goal—SAC is not a competitive debate.
- (B) Individual reflection papers describe a reflective writing assignment, not the SAC procedure.
- (C) Parliamentary rules with a panel of judges describe formal debate, not SAC's consensus-building structure.

Final Answer: (D)

Answer: (D) **Go Back to Q 15**

Q16.

Solution

Concept: Pavlov's classical conditioning — spontaneous recovery.

Spontaneous recovery is the phenomenon in which an **extinguished conditioned response (CR) re-emerges spontaneously** after a period of rest (inactivity), even though no further conditioning trials have been given. When the conditioned stimulus (CS) is presented again after the rest interval, the CR reappears—typically at a weaker strength than during original conditioning—demonstrating that extinction does not completely erase the conditioning but rather suppresses it.

Why other options are wrong:

- (B) The CS gradually losing its power through repeated presentation without the UCS describes **extinction**.
- (C) A similar stimulus triggering a similar CR describes **stimulus generalisation**.
- (D) Strengthening the CR through additional CS-UCS pairings describes **reconditioning** or additional acquisition trials.

Final Answer: (A)

Answer: (A) **Go Back to Q 16**

Q17.

Solution

Concept: Token economy as an operant conditioning application in classroom management.

A **token economy** is a structured behaviour management system directly derived from Skinner's operant conditioning. Students earn **tokens** (e.g., chips, stickers, points) as **conditioned (secondary) reinforcers** when they display targeted desired behaviours. Accumulated tokens are later exchanged for **backup reinforcers** (preferred activities, privileges, tangible rewards). The system works by making reinforcement **immediate, consistent, and contingent** on behaviour, precisely as operant theory prescribes.

Why other options are wrong:

- (A) Removing all natural reinforcers permanently is not the definition—tokens supplement, not replace, natural reinforcement.
- (C) Pairing a neutral sound with an unconditioned stimulus describes **classical conditioning**, not a token economy.
- (D) Token economies typically use *positive* reinforcement (earning tokens); they are not exclusively punishment-based.

Final Answer: (B)

Answer: (B) **Go Back to Q 17**

Q18.

Solution

Concept: Thorndike's Law of Effect — practical classroom application.

Thorndike's **Law of Effect** (1911) states that a stimulus-response (S-R) bond is strengthened when a **satisfying state of affairs** follows the response, and weakened when an **annoying state of affairs** follows. In classroom terms: **immediate positive feedback** after a correct response stamps in the correct S-R bond; corrective feedback (or absence of reward) after an incorrect response weakens that erroneous bond. This directly guides the teacher's feedback practices.

Why other options are wrong:

- (A) Simple repetition without regard to outcome reflects Thorndike's **Law of Exercise** (partially abandoned by Thorndike himself), not the Law of Effect.
- (B) Readiness based on nervous system preparation describes Thorndike's **Law of Readiness**.

- (D) Learning through imitation describes Bandura's **Social Learning/Observational Learning** theory, not the Law of Effect.

Final Answer: (C)

Answer: (C) **Go Back to Q 18**

Q19.

Solution

Concept: Piaget's assimilation and accommodation — definitions and contrast.

Piaget's **adaptation** involves two complementary processes:

- **Assimilation**: fitting new information into an **existing** schema without changing the schema (e.g., calling a robin a "bird" using the existing bird schema).
- **Accommodation**: **modifying an existing schema** or creating a **new schema** when new information does not fit (e.g., creating a separate "penguin" schema when a penguin cannot be assimilated into the general bird schema).

Option (D) correctly captures this distinction as illustrated in the diagram.

Why other options are wrong:

- (A) This *reverses* the definitions of assimilation and accommodation.
- (B) Intersubjectivity is a **Vygotskyan** concept describing shared understanding between learner and teacher—not Piagetian adaptation.
- (C) Biological maturation describes a separate factor (maturation) in Piaget's model, not accommodation per se.

Final Answer: (D)

Answer: (D) **Go Back to Q 19**

Q20.

Solution

Concept: Vygotsky — inner speech as internalised social speech.

Vygotsky proposed that **thought and language** are interrelated and that higher cognitive functions originate in **social interaction**. The developmental sequence is: social (external) speech between child and others → **private speech** (child talks aloud to themselves while problem-solving, visible around ages 3–7) → **inner speech** (fully internalised, silent verbal thought that regulates cognition). Inner speech is therefore not innate but is **socialised and internalised** from the external social plane.

Why other options are wrong:

- (B) Vygotsky explicitly argued that higher functions, including inner speech, originate socially—they are not innate.
- (C) Translating mathematical symbols is a narrow, specific cognitive task, not what Vygotsky meant by inner speech.
- (D) Vygotsky's research showed private speech declining and going underground (becoming inner speech) before formal schooling, not as a result of it.

Final Answer: (A)

Answer: (A) **Go Back to Q 20**

Q21.

Solution

Concept: Gestalt perceptual principle of Proximity.

The diagram shows two groups of nine dots each: the left group has dots **closely spaced** and is perceived as a single unit; the right group has dots **widely spaced** and is perceived as separate elements. This directly illustrates the Gestalt principle of **Proximity**: the closer objects are to each other in space, the more strongly they are perceptually grouped into a single unit.

Why other options are wrong:

- (A) Similarity involves grouping based on *shared attributes* (colour, shape, size), not spatial closeness—the dots in this diagram differ only in spacing, not appearance.
- (C) Closure involves completing *incomplete* figures; all dots here are complete and discrete.

- (D) Good Continuation involves perceiving *continuous lines or curves* as unified; this diagram uses discrete dots, not continuous paths.

Final Answer: (B)

Answer: (B) **Go Back to Q 21**

Q22.

Solution

Concept: Bloom's original taxonomy (1956) — Synthesis level action verbs.

In Bloom's original six-level taxonomy, **Synthesis** (fifth level) requires learners to **combine elements into a new whole**—to create an original product, plan, or communication. Appropriate action verbs include: **compose, design, construct, formulate, devise, plan, produce, create, arrange, assemble**. These verbs signal the generation of something new, which is the defining cognitive operation at Synthesis.

Why other options are wrong:

- (A) Define, Explain, Classify, Summarise are **Knowledge** and **Comprehension** level verbs.
- (B) Analyse, Differentiate, Examine, Attribute are **Analysis** level verbs (fourth level).
- (D) Evaluate, Judge, Critique, Justify are **Evaluation** level verbs (sixth, highest level in the original taxonomy).

Final Answer: (C)

Answer: (C) **Go Back to Q 22**

Q23.

Solution

Concept: Maslow's self-actualisation in the educational context.

Maslow's hierarchy culminates in **self-actualisation**: the need to **fulfil one's full potential**, realise one's capacities, and pursue personal growth and meaning for its own sake—driven by **growth motivation** (Being-needs) rather than **deficiency motivation**. In education, self-actualised learning manifests as a student who is not driven by grades, recognition, or social approval, but by the intrinsic desire to develop their unique talents and live authentically.

Why other options are wrong:

- (A) Receiving recognition and a trophy satisfies **Esteem needs** (Level 4).
- (B) A stable friendship group satisfies **Love/Belonging needs** (Level 3).
- (C) Reliable provision of food, shelter, and rest satisfies **Physiological needs** (Level 1).

Final Answer: (D)

Answer: (D) **Go Back to Q 23**

Q24.

Solution

Concept: Amotivation — definition and classroom implications.

In Deci and Ryan's **Self-Determination Theory** (1985), motivation exists on a continuum from intrinsic motivation through various forms of extrinsic regulation to **amotivation**—the complete absence of motivation. An **amotivated student** perceives no contingency between their actions and any outcome (neither intrinsic satisfaction nor external reward), lacks intention, and is fully disengaged. Addressing amotivation requires building competence, autonomy, and relatedness through meaningful tasks and supportive relationships.

Why other options are wrong:

- (B) Studying to earn prizes is **identified or external regulation**—a form of extrinsic motivation, not amotivation.
- (C) Genuine curiosity and love of subject describes **intrinsic motivation**.
- (D) Competing for top rank to satisfy parental expectations describes **introjected or external extrinsic motivation**.

Final Answer: (A)

Answer: (A) **Go Back to Q 24**

Q25.

Solution

Concept: SMART goals in education (Locke & Latham's goal-setting theory).

Locke and Latham's **Goal-Setting Theory** (1990) demonstrates that specific, challenging goals improve performance. The **SMART** acronym operationalises this: **S**pecific (clearly defined), **M**easurable (progress can be tracked), **A**chievable (realistic but challenging), **R**elevant (aligned to the learner's broader objectives), **T**ime-bound (has a deadline). SMART goals improve student motivation and accountability by making the target and progress criteria explicit.

Why other options are wrong:

- (A) "Simple, Manageable" misrepresents the S and M—SMART goals are *specific* and *measurable*, not just simple or easy.
- (C) "Strategic, Motivational, Aligned, Realistic, Transferable" is a fabricated expansion.
- (D) "Systematic, Meaningful, Attainable, Rewarding, Timed" is also fabricated—SMART has a standard, established meaning.

Final Answer: (B)

Answer: (B) **Go Back to Q 25**

Q26.

Solution

Concept: Peer assessment — advantages for learning and metacognition.

As the cycle diagram illustrates, peer assessment is a **reciprocal process** in which each student both assesses and is assessed. When students evaluate a peer's work against shared criteria, they must internalise and apply those quality standards themselves—which **deepens their understanding** of what constitutes good performance. The process also activates **metacognition**: students reflect on criteria, compare their peer's work to standards, and implicitly evaluate whether their own work meets the same standards.

Why other options are wrong:

- (A) Research consistently shows peer assessment *increases* metacognitive awareness—evaluating others develops self-regulatory thinking.
- (B) While peer assessment has validity concerns, it is widely used effectively in classrooms as a formative tool when properly scaffolded.
- (D) The learning benefit is substantial and well-documented—peer assess-

ment benefits the assessor as much as the recipient of feedback.

Final Answer: (C)

Answer: (C) **Go Back to Q 26**

Q27.

Solution

Concept: Criterion-referenced assessment — definition.

Criterion-referenced assessment (Glaser, 1963) evaluates student performance against a **fixed, pre-established standard** (criterion) that defines mastery—regardless of how other students perform. A student's score is interpreted by asking "Has this student demonstrated the specified competency?" rather than "How does this student rank relative to peers?" Examples include driving tests, professional licensing exams, and mastery-based classroom tests.

Why other options are wrong:

- (A) Comparing a score to the class average describes **norm-referenced assessment**.
- (B) Ranking students from highest to lowest and assigning grades by relative position also describes **norm-referenced assessment**.
- (C) Criterion-referenced assessment is appropriate and widely used at all levels of education, including primary and secondary school.

Final Answer: (D)

Answer: (D) **Go Back to Q 27**

Q28.

Solution

Concept: True/false questions — fundamental limitation.

The cardinal weakness of true/false items is the **50% guessing probability**: with only two options, a student who knows nothing can expect to answer correctly half the time by random chance alone. This makes it impossible to distinguish genuine knowledge from lucky guessing, severely undermining the **validity** (does it measure what it claims to?) and **reliability** (are the scores consistent?) of the assessment. Additionally, true/false items are susceptible to absolute language that makes them trivially easy or misleading.

Why other options are wrong:

- (B) True/false questions are among the *easiest* to construct—requiring no distractors or model answers—and no specialised psychometric expertise.
- (C) True/false questions are best suited to factual recall; they are poorly suited to assessing analytical thinking due to their binary format.
- (D) True/false questions require only a tick or cross, making them among the *fastest* to score—no extended answers are involved.

Final Answer: (A)

Answer: (A) **Go Back to Q 28**

Q29.

Solution

Concept: Formative vs summative assessment — fundamental distinction.

The classic Scriven (1967) distinction: **Formative assessment** occurs *during* instruction, is **continuous and diagnostic**, and its primary purpose is to **improve ongoing learning** by providing feedback to both teacher and student. **Summative assessment** occurs *after* instruction (at the end of a unit, semester, or year), judges the **totality of learning achieved**, and is used for **grading, certification, and accountability**. Bloom (1968) described formative assessment as "assessment for learning" and summative as "assessment of learning."

Why other options are wrong:

- (A) This reverses the timing—formative is continuous/during, summative is end-of-period.
- (C) Ranking for selection purposes is a use of norm-referenced summative assessment but is not the fundamental distinction between formative and summative.
- (D) Providing real-time feedback for immediate instructional adjustment is the *formative* function—summative assessment does not do this.

Final Answer: (B)

Answer: (B) **Go Back to Q 29**

Q30.

Solution

Concept: Horseshoe/laboratory seating arrangement — features and purpose.

As shown in the diagram, the **horseshoe/laboratory arrangement** places students at paired **shared workbenches** arranged in a horseshoe or U-shaped pattern. This design:

- Facilitates **peer collaboration** and discussion between bench partners.
- Enables **hands-on, practical activity** at shared workstations.
- Maintains an **open central space** that gives the teacher easy access to all groups.
- Allows students to see the teacher and the board while also facing their partner.

Why other options are wrong:

- (A) The horseshoe arrangement is very different from rows-and-columns—it is specifically designed for collaborative practical work.
- (B) Whole-class direct instruction is best served by rows-and-columns (all attention to the front), not horseshoe.
- (D) Preventing all communication describes an examination layout with individual separated desks—the opposite of a collaborative horseshoe.

Final Answer: (C)

Answer: (C) **Go Back to Q 30**

Q31.

Solution

Concept: Behaviour modification in classroom management.

Behaviour modification (Applied Behaviour Analysis in educational settings) is a **systematic, evidence-based application** of Skinner's operant conditioning principles. It involves:

- **Positive reinforcement** (adding a pleasant stimulus to increase desired behaviour).
- **Negative reinforcement** (removing an aversive stimulus to increase desired behaviour).
- **Extinction** (withholding reinforcement to reduce undesired behaviour).
- **Shaping** (reinforcing successive approximations toward a target behaviour).

- **Token economies** (structured reinforcement schedules).

The key characteristic is that it is **planned, consistent, and systematic**, not ad hoc.

Why other options are wrong:

- (A) Classroom decoration is an environmental design strategy unrelated to behaviour modification.
- (B) A single conversation is an informal discussion, not behaviour modification's systematic approach.
- (C) Behaviour modification uses both reinforcement *and* extinction/punishment—it is not exclusively punitive.

Final Answer: (D)

Answer: (D) **Go Back to Q 31**

Q32.

Solution

Concept: Transition management in classroom management.

Transition management refers to the teacher's strategies for moving students efficiently from one activity or phase of a lesson to another with minimal **loss of instructional time** and minimal disruption. Kounin's (1970) research identified transition smoothness as a key determinant of classroom order. Effective techniques include: signal systems, pre-established routines, having materials pre-distributed, brief verbal countdowns, and providing students with clear instructions about what to do *during* and *after* the transition.

Why other options are wrong:

- (B) Preparing students for the move from primary to secondary school is a **school transition** programme—a developmental/pastoral issue, not classroom transition management.
- (C) Managing paperwork for teacher transfers is an **administrative HR** function, not classroom management.
- (D) Allowing ten minutes of free time between activities creates dead time, which Kounin identified as a leading cause of classroom disruption.

Final Answer: (A)

Answer: (A) **Go Back to Q 32**

Q33.

Solution

Concept: Piaget's preoperational characteristic — Animism.

Animism is one of several cognitive limitations Piaget identified in the **preoperational stage** (ages 2–7). An animistic child **attributes life, consciousness, feelings, and intentionality to inanimate objects**: the sun "wants" to shine, a chair "feels" pain when someone sits on it, clouds "decide" to move. This reflects the preoperational child's inability to distinguish between the properties of living and non-living things—a distinction that emerges gradually during the concrete operational stage.

Why other options are wrong:

- (A) Judging morality by consequences alone describes Piaget's concept of **moral realism** (heteronomous morality), not animism.
- (C) Objects existing out of sight describes **object permanence**, a Sensorimotor-stage achievement.
- (D) Mentally reversing operations describes **reversibility**, a Concrete Operational-stage achievement.

Final Answer: (B)

Answer: (B) **Go Back to Q 33**

Q34.

Solution

Concept: Kohlberg's moral development — Stage 3 (Conventional level).

Kohlberg's **Conventional level** (Stages 3 and 4) is characterised by conformity to social expectations. **Stage 3 — Interpersonal Concordance** (the "good-boy/nice-girl" orientation): the individual makes moral decisions to gain **approval from significant others** (family, friends, teachers). "Good" behaviour is what pleases others, earns praise, and is seen as kind and caring. Intentions now matter (unlike Stage 1–2). This stage is common in adolescence and many adults.

Why other options are wrong:

- (A) Obeying authority to avoid punishment describes **Stage 1** (Punishment-Obedience, Preconventional level).
- (B) Self-interest and reciprocal exchange ("what's in it for me?") describes **Stage 2** (Instrumental Purpose and Exchange, Preconventional level).
- (D) Strict adherence to societal laws to maintain order describes **Stage 4**

(Law and Order, Conventional level).

Final Answer: (C)

Answer: (C) **Go Back to Q 34**

Q35.

Solution

Concept: Metalinguistic awareness — definition and development.

Metalinguistic awareness is the **conscious, explicit ability to treat language as an object of thought**—to reflect on, analyse, and manipulate linguistic units independent of their communicative content. As shown in the developmental diagram, tasks progress from earlier-developing (rhyme detection, syllable counting) to later-developing, finer-grained (phoneme segmentation). This awareness is closely linked to **literacy acquisition**: it typically emerges between ages 4–8 and is both a prerequisite for and product of learning to read and write.

Why other options are wrong:

- (A) Automatic, unconscious processing describes **implicit linguistic knowledge**—the opposite of metalinguistic awareness, which is by definition conscious and explicit.
- (B) Metalinguistic awareness is strongly shaped by literacy instruction and social exposure; it is not a purely innate, environmentally independent module.
- (C) Understanding vocabulary in two languages describes **bilingual lexical competence**, not metalinguistic awareness.

Final Answer: (D)

Answer: (D) **Go Back to Q 35**

Q36.

Solution

Concept: Gardner's Musical Intelligence — classroom accommodation.

Students with strong **musical intelligence** (Gardner, 1983) are sensitive to **rhythm, pitch, melody, and musical patterns**. Effective classroom accommodations leverage this strength by: incorporating **songs, jingles, and musical mnemonics** to encode academic content, allowing students to set key concepts or vocabulary to melody, using rhythmic chants for sequences (e.g., the water cycle, historical timelines), or inviting students to **compose** raps that summarise content—making learning both memorable and personally meaningful.

Why other options are wrong:

- (B) Colour-coding in visual diagrams accommodates **spatial/visual intelligence**, not musical.
- (C) Extended lab experiments and model building accommodate **bodily-kinaesthetic intelligence**.
- (D) Leadership in debates accommodates **verbal-linguistic** or **interpersonal intelligence**.

Final Answer: (A)

Answer: (A) **Go Back to Q 36**

Q37.

Solution

Concept: Learner-centred curriculum — defining principle.

A **learner-centred curriculum** (associated with Dewey, Kilpatrick, and humanistic educators) places the **student's interests, needs, developmental readiness, and lived experience** at the heart of curriculum design. The **teacher becomes a guide and co-learner** rather than the sole authority; students have genuine **agency** in deciding what to learn and how to demonstrate learning. The curriculum is flexible, emergent, and responsive to the learner rather than rigidly pre-determined.

Why other options are wrong:

- (A) Teacher determining all content and pace describes a **teacher-centred** or **subject-centred** curriculum.
- (C) Allowing subject choice while retaining teacher authority is a minor flexibility in a subject-centred model, not learner-centredness.
- (D) Prioritising competitive testing to identify talented students describes an

elitist selection model antithetical to learner-centred education.

Final Answer: (B)

Answer: (B) **Go Back to Q 37**

Q38.

Solution

Concept: Principle of balance in curriculum design.

Balance as a curriculum design principle requires that no single content area, type of learning, or educational purpose **disproportionately dominates** the curriculum. It demands equilibrium across multiple dimensions:

- **Breadth vs depth**: covering many topics vs treating fewer in greater depth.
- **Cognitive vs affective vs psychomotor** learning.
- **Academic vs vocational** content.
- **Compulsory vs elective** subjects.

A balanced curriculum ensures that all aspects of human development and all key knowledge domains are given appropriate—not necessarily equal—weight.

Why other options are wrong:

- (A) Equal distribution of Bloom's levels in every examination is one narrow application of balance, not its full definition.
- (B) Teaching the same topics at the same depth each year describes the principle of **Continuity**, not balance.
- (D) Equal time division among all subjects regardless of importance violates rational curriculum planning—balance is not mathematical equality.

Final Answer: (C)

Answer: (C) **Go Back to Q 38**

Q39.

Solution

Concept: NEP 2020 — vocational education integration from Grade 6.

As shown in the diagram, NEP 2020 restructures school education into four stages: Foundational (5 years, ages 3–8), Preparatory (3 years, ages 8–11), Middle (3 years, ages 11–14), and Secondary (4 years, ages 14–18). A key innovation of NEP 2020 is integrating **vocational education from Grade 6** (the start of the Middle stage), where students are introduced to skills such as carpentry, pottery, gardening, and electronics through **hands-on internships with local artisans**, making vocational education part of mainstream schooling rather than a separate stream.

Why other options are wrong:

- (A) Vocational education before the Foundational stage is not mentioned in NEP 2020—the Foundational stage focuses on basic literacy and numeracy.
- (B) Restricting vocational education to Grades 9–12 was the *old* approach; NEP 2020 explicitly brings it forward to Grade 6.
- (C) NEP 2020 integrates vocational education *alongside*—not in replacement of—academic subjects.

Final Answer: (D)

Answer: (D) **Go Back to Q 39**

Q40.

Solution

Concept: Overhead projector (OHP) — pedagogical advantage.

The key pedagogical advantage of the OHP over the traditional blackboard is that the teacher can **face the class** while writing on or displaying transparency sheets. On a blackboard, the teacher must turn away from students, losing eye contact and the ability to monitor comprehension and behaviour. The OHP also allows pre-prepared transparencies to be used for **efficiency** and **legibility**, and overlays can be used to build up diagrams step-by-step.

Why other options are wrong:

- (B) The OHP is a purely optical device—it has no audio capability and does not play pre-recorded lectures.
- (C) A traditional OHP uses transparencies and a lamp—it does not connect to the internet; that describes a digital projector or interactive whiteboard.

- (D) The OHP is a flat 2D projection device, unsuitable for displaying three-dimensional objects or living specimens.

Final Answer: (A)

Answer: (A) **Go Back to Q 40**

Q41.

Solution

Concept: MOOCs — primary defining feature.

A **MOOC (Massive Open Online Course)**, popularised from 2008 onwards (Siemens & Downes; later Coursera, edX, NPTEL), is defined by three features embedded in its name: **Massive** (no cap on enrolment—thousands to millions can participate simultaneously), **Open** (free or very low-cost access with no admission requirement), and **Online** (delivered via the internet). This combination democratises access to high-quality education from leading institutions globally.

Why other options are wrong:

- (A) Exclusive, fee-based, restricted access describes a traditional *paid* online course, not a MOOC—the defining feature of a MOOC is its openness.
- (C) In-person workshops for employees describes corporate training, not a MOOC.
- (D) Offline software with no internet describes computer-assisted instruction (CAI), not a MOOC.

Final Answer: (B)

Answer: (B) **Go Back to Q 41**

Q42.

Solution

Concept: AI tools in education — current applications.

Artificial intelligence is increasingly integrated into education through several applications:

- **Adaptive learning systems** (e.g., Khan Academy, Carnegie Learning) personalise content difficulty in real time based on student performance data.
- **Automated Essay Scoring (AES)** provides instant written feedback on student essays.

- **Intelligent Tutoring Systems (ITS)** simulate one-on-one tutoring by customising explanations to each learner's misconceptions.
- **AI-generated quizzes** adapt question difficulty dynamically.

Option (C) correctly identifies these substantive, classroom-relevant AI applications.

Why other options are wrong:

- (A) Library cataloguing is a narrow, non-instructional application—AI's role in education extends far beyond administration.
- (B) One-way communication channels describe email or SMS notification systems, not AI tools.
- (D) AI educational tools have proven, documented classroom applications and are widely used globally—they are not banned.

Final Answer: (C)

Answer: (C) **Go Back to Q 42**

Q43.

Solution

Concept: Graphic organizers — definition and types.

Graphic organisers are **visual-spatial frameworks** that represent knowledge relationships diagrammatically, helping students **organise, classify, and connect ideas**. Common types include:

- **KWL chart** (Know, Want to know, Learned): activates prior knowledge and monitors new learning.
- **Venn diagram**: shows similarities and differences between two or more concepts.
- **T-chart**: compares two ideas or presents pros/cons.
- **Concept map/mind map**: shows hierarchical and relational links between concepts.
- **Story map**: organises narrative elements (setting, characters, plot).

Research (Marzano, 2001) shows they significantly improve comprehension and retention.

Why other options are wrong:

- (A) Political boundary maps are geographical maps—not graphic organisers as understood in educational psychology.

- (B) MCQ grids are assessment formats, not graphic organisers.
- (C) Narrated slide shows with music are multimedia presentations, not graphic organisers.

Final Answer: (D)

Answer: (D) **Go Back to Q 43**

Q44.

Solution

Concept: Continuum of services in inclusive education.

Reynolds and Birch (1977) conceptualised a **cascade/continuum of services** for students with special educational needs, ranging from the least restrictive to the most restrictive environment:

(a) Full inclusion in the mainstream classroom (most inclusive).
(b) Mainstream with consulting teacher support.
(c) Resource room (part-time specialist withdrawal).
(d) Special class within a mainstream school.
(e) Day special school.
(f) Residential special school (least inclusive).

The principle is that placement decisions are made **individually**, using the **least restrictive environment** appropriate to each student's needs.

Why other options are wrong:

- (B) Only two options (full inclusion or full segregation) ignores the entire middle ground of the continuum.
- (C) A ranking by severity for financial support is an administrative tool, not the definition of the continuum of services.
- (D) A hierarchy of specialists describes a **tiered support model** (e.g., Multi-Tiered System of Supports, MTSS), not the continuum of placement settings.

Final Answer: (A)

Answer: (A) **Go Back to Q 44**

Q45.

Solution

Concept: ASD — sensory accommodations in a mainstream classroom.

Many students with ASD experience **sensory processing differences**: they may be hypersensitive (over-reactive) or hyposensitive (under-reactive) to sensory input—light, sound, touch, smell, movement. Evidence-based sensory accommodations include: providing a **quiet workspace**, offering **noise-cancelling headphones**, reducing harsh fluorescent lighting, allowing **fidget tools**, minimising cluttered visual environments, and maintaining **predictable routines** (which reduce anxiety caused by unexpected sensory transitions). These adjustments reduce sensory overload and help the student remain regulated and available for learning.

Why other options are wrong:

- (A) Maximising sensory stimulation is the opposite of what most students with ASD need; it would likely cause sensory overload and dysregulation.
- (C) ASD frequently involves sensory processing differences that require active accommodation—claiming no effect is factually incorrect.
- (D) Systematic exposure without support ("flooding") is not a recommended or ethical accommodation and can cause distress.

Final Answer: (B)

Answer: (B) **Go Back to Q 45**

Q46.

Solution

Concept: Resource room model in inclusive education.

The **resource room** is a designated specialist room within a mainstream school where a student with special educational needs is **withdrawn for part of the school day** to receive **targeted, small-group or individual instruction** from a specialist (resource) teacher. The student spends the majority of their time in the **mainstream classroom** and is withdrawn only for specific support sessions. This model preserves inclusion (the student is based in mainstream) while providing the intensive specialised support the student requires.

Why other options are wrong:

- (A) Permanent placement in a separate self-contained classroom describes a **special class**, which is more restrictive than the resource room model.

- (B) The specialist delivering instruction inside the mainstream classroom throughout every lesson describes a **co-teaching or push-in** model, not resource room.
- (D) A central room storing assistive technology equipment describes an **assistive technology resource centre**, not the resource room model.

Final Answer: (C)

Answer: (C) **Go Back to Q 46**

Q47.

Solution

Concept: Demonstration method — key procedural steps.

As shown in the flowchart, an effective demonstration lesson follows four phases:

(a) **Preparation**: Teacher activates students' prior knowledge and gathers/checks all materials.
(b) **Presentation**: Teacher performs the procedure step-by-step while explaining the purpose and rationale of each step, ensuring all students can see clearly.
(c) **Student Practice**: Students replicate the demonstrated procedure, first with teacher guidance, then independently.
(d) **Evaluation**: Teacher assesses accuracy of student replication and provides specific corrective feedback.

Skipping any phase—especially practice and evaluation—undermines the pedagogical value of the demonstration.

Why other options are wrong:

- (A) An unannounced show followed immediately by a test omits preparation and student practice—critical scaffolding steps.
- (B) Handing materials to students without any modelling or guidance converts demonstration into unguided inquiry, losing the method's defining feature (teacher models first).
- (C) Calling evaluation the only critical phase and making preparation and presentation optional inverts the pedagogical logic of the demonstration method.

Final Answer: (D)

Answer: (D) **Go Back to Q 47**

Q48.

Solution

Concept: Collegiality as a professional value for teachers.

Collegiality (Barth, 1990; Hargreaves, 1994) is the professional disposition that recognises teaching as inherently **collaborative work**. Collegial teachers: share instructional resources and expertise openly, engage in **peer observation and coaching**, participate in **joint curriculum planning**, provide and receive honest professional feedback, and accept **shared moral responsibility** for the learning and wellbeing of all students in the school—not only those in their own classroom. It contrasts with professional isolation ("my classroom, my students").

Why other options are wrong:

- (B) Competing with colleagues for resources is the antithesis of collegiality—it describes individualistic or competitive professional culture.
- (C) Maintaining strict distance to avoid relationships describes **professional detachment**, not collegiality—genuine collegiality involves authentic professional relationships.
- (D) Always agreeing to avoid conflict describes **contrived collegiality** (Hargreaves) or conflict avoidance—real collegiality involves honest, critical dialogue.

Final Answer: (A)

Answer: (A) **Go Back to Q 48**

Q49.

Solution

Concept: Tomlinson's differentiated instruction — differentiation by learning environment.

Carol Tomlinson (1999) identifies four elements of differentiation: Content, Process, Product, and **Learning Environment**. Differentiation **by learning environment** addresses the **physical and social conditions** of learning: flexible seating that allows students to choose where they work best (standing desk, floor cushion, traditional desk), designated quiet zones for independent work, collaborative corners for group work, natural light areas, and norms for when to work alone versus with peers. It recognises that the **setting and climate** of learning affect engagement and performance.

Why other options are wrong:

- (A) Changing reading difficulty or text quantity describes differentiation **by content**.
- (C) Varying the format of the final product (poster, essay, presentation) describes differentiation **by product**.
- (D) Assigning different devices to student groups does not address the environmental dimension—it is closer to a *content or process* variation.

Final Answer: (B)

Answer: (B) **Go Back to Q 49**

Q50.

Solution

Concept: Mezirow's transformative learning theory.

Jack Mezirow (1978, 1991) proposed that adult learning at its deepest level is **transformative**: a **disorienting dilemma** (an experience that challenges existing assumptions) triggers **critical self-reflection** on one's **meaning structures** (frames of reference, assumptions about the world). Through **rational discourse** with others who share the dilemma, the learner constructs a **new, more inclusive perspective**. This perspective transformation leads to **transformed action** and ultimately re-integration into life with a revised worldview. As the cycle diagram illustrates, the process is iterative and continues throughout adult life.

Why other options are wrong:

- (A) Memorising content and converting it to procedural knowledge through drill describes **rote/procedural learning**—the opposite of perspective transformation.
- (B) Accumulating new facts without changing underlying assumptions describes **additive (informational) learning**—Mezirow explicitly distinguished this from transformative learning.
- (D) Shaping observable conduct through reinforcement describes **Skinnerian behaviourism**—a theory focused on overt behaviour, not perspective transformation.

Final Answer: (C)

Answer: (C) **Go Back to Q 50**

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	C	3	D	4	A	5	B
6	C	7	D	8	A	9	B	10	C
11	D	12	A	13	B	14	C	15	D
16	A	17	B	18	C	19	D	20	A
21	B	22	C	23	D	24	A	25	B
26	C	27	D	28	A	29	B	30	C
31	D	32	A	33	B	34	C	35	D
36	A	37	B	38	C	39	D	40	A
41	B	42	C	43	D	44	A	45	B
46	C	47	D	48	A	49	B	50	C