UGC NET MEMORY BASED QUESTION PAPER 2026 WITH ANSWER KEY- 2 JAN SHIFT 1

Q1. Match the Pramana (List I) with its English equivalent/meaning (List II):

List I (Pramana)	List II (English Equivalent / Meaning)
A. Upamana	I. Non-apprehension / Proof by absence
B. Arthapatti	II. Comparison / Analogy
C. Anupalabdhi	III. Verbal Testimony / Authority
D. Sabda	IV. Implication / Postulation

Options:
(a) A-IV, B-II, C-I, D-III
(b) A-I, B-II, C-III, D-IV
(c) A-II, B-IV, C-I, D-III
(d) A-II, B-I, C-IV, D-III
Answer: C
Sol:
Correct Option – (c)
Introduction: *Pramana* refers to the valid means by which we acquire knowledge about the world. Different schools of Indian philosophy accept different numbers of these means.
Information Booster: * Upamana: Learning about an unknown object by its similarity to a known object (e.g., learning what a 'Gavaya' is by being told it is like a cow).
Arthapatti: Assuming a fact to explain a phenomenon (e.g., "Fat Devadatta does not eat by day," implies he must eat at night).
Anupalabdhi: Perceiving the absence of something (e.g., "There is no jar on this table").
Sabda: Knowledge derived from reliable words (Scriptures or experts).
Additional Knowledge: *Arthapatti* and *Anupalabdhi* are uniquely accepted by the Mimamsa and Advaita Vedanta schools.

Q2. Match the following common logical fallacies with their correct definitions.

List-I (Logical Fallacy)	List-II (Definition)
A. Ad Hominem	1. Misrepresenting an opponent's argument to make it easier to attack.
B. Straw Man	2. Assuming that because B followed A, A must have caused B.
C. Post Hoc Ergo Propter Hoc	3. Attacking the person making the argument rather than the argument itself.
D. Appeal to Ignorance	4. Arguing that a claim is true because it has not been proven false.

Codes:
(a) A-3, B-1, C-2, D-4
(b) A-1, B-3, C-4, D-2
(c) A-3, B-1, C-4, D-2
(d) A-4, B-2, C-1, D-3
Answer:
A
Sol:
Correct Option – (a)
Introduction: A logical fallacy is an error in reasoning that undermines the logic of an argument. Fallacies can be formal (structural) or informal (based on content and context). Identifying them is crucial for critical thinking and constructing sound arguments.
Information Booster:

A. Ad Hominem (Matches with 3): This is an attack on the character, motive, or other attribute of the person making an argument, rather than on the substance of the argument itself. For example, "You can't trust his opinion on climate change because he flies in private jets."
B. Straw Man (Matches with 1): This fallacy involves misrepresenting, exaggerating, or caricaturing an opponent's argument to make it easier to refute. For instance, if someone argues for modest gun control, a straw man response would be, "So you want to take away everyone's guns and leave us defenseless?"
C. Post Hoc Ergo Propter Hoc (Matches with 2): Latin for "after this, therefore because of this," this fallacy assumes that if event B occurred after event A, then A must have caused B. Example: "The rooster crows just before sunrise; therefore, the rooster causes the sun to rise."
D. Appeal to Ignorance (Matches with 4): This fallacy argues that a proposition is true because it has not been proven false, or false because it has not been proven true. For example, "No one has ever proven that ghosts don't exist, so they must be real."
Additional Knowledge:
Other important fallacies include Slippery Slope (arguing that a relatively small first step will lead to a chain of related events culminating in some significant impact), False Dilemma (presenting two opposing options as the only possibilities when others exist), and Circular Reasoning (where the conclusion is included in the premise).

Q3. Identify the correct statements about hardware:
I. A "Plotter" is an output device used to print high-quality vector graphics on large sheets of paper.
II. "OCR" (Optical Character Recognition) is an input device/software that converts different types of documents (scanned paper, PDF) into editable data.
III. "CMOS" battery on a motherboard provides power to the RAM to keep data stored when the computer is turned off.
Options:
(a) I and II only
(b) II and III only
(c) I and III only
(d) I, II, and III
Answer: A
Sol:
Correct Option – (a)
Information Booster: * Statement I & II (Correct): These are specialized I/O devices.
Statement III (Incorrect): The CMOS battery powers the CMOS chip, which stores system settings (like date and time) and BIOS configurations, not the RAM. RAM is volatile and always loses data when power is cut.
Additional Knowledge: USB (Universal Serial Bus) is a "Plug and Play" interface that allows computers to communicate with peripherals and other devices.

Q4. Arrange the following storage devices based on their chronological emergence in the market:
1. Magnetic Tapes
2. Floppy Disks
3. CD-ROM
4. Solid State Drive (SSD)
(a) 1, 2, 3, 4
(b) 2, 1, 3, 4
(c) 1, 3, 2, 4
(d) 4, 3, 2, 1

Answer:
A
Sol:
Correct Option – (a)
Introduction: The evolution of storage is a journey from Sequential Access (reading data in a fixed order) to Random Access (accessing any part of the data instantly) and from Magnetic to Optical and finally to Flash-based memory.
Information Booster: * Magnetic Tapes (1950s): Data was stored on long reels of tape. To read a file at the end of the tape, you had to wind through the entire reel. These are still used today for massive offline "Cold Storage" backups.
Floppy Disks (1970s): Introduced portability. They used a thin, flexible magnetic disk. The most iconic version was the 3.5-inch disk which held a mere 1.44 MB of data.
CD-ROM (1980s): This was Optical Storage. A laser reads "pits" and "lands" on a reflective surface. It provided much higher capacity (700 MB) than floppies.
SSD (2000s): Unlike Hard Disks, SSDs have no moving parts. They use NAND Flash memory. This makes them incredibly fast, silent, and resistant to physical shocks.
Additional Knowledge: The "Save" icon in most software (like MS Word) is actually a picture of a 3.5-inch Floppy Disk, a remnant of this technological history.

Q5.
Match the following types of memory with their position in the memory hierarchy (from fastest/smallest to slowest/largest):

List-I (Memory Type)	List-II (Position in Hierarchy)
1. Hard Disk Drive (HDD)	A. Fastest, smallest, closest to the CPU.
2. RAM (Main Memory)	B. Slower than RAM, non-volatile, used for long-term storage.
3. Registers	C. Fast, volatile, used for currently running programs.
4. Cache	D. Very fast, small, acts as a buffer between CPU and RAM.

Codes:
(a) 1-B, 2-C, 3-A, 4-D
(b) 1-B, 2-C, 3-D, 4-A
(c) 1-C, 2-B, 3-A, 4-D
(d) 1-A, 2-D, 3-C, 4-B
Answer:
A
Sol:
Correct Option – (a)
Introduction: The memory hierarchy is a concept that organizes computer memory based on a trade-off between speed, cost, and size. The memory closest to the CPU is the fastest and most expensive but has the smallest capacity, while storage further away is slower, cheaper, and larger.
Information Booster: The correct order from fastest/smallest to slowest/largest is:
3. Registers (Matches with A): Registers are located inside the CPU itself. They are the smallest and fastest memory units, used to hold instructions and data that the CPU is actively processing.
4. Cache (Matches with D): Cache memory is located on or very near the CPU chip. It is very fast and acts as a buffer between the CPU and the main RAM, storing copies of frequently used data to speed up access. It is larger than registers but smaller than RAM.
2. RAM (Main Memory) (Matches with C): RAM is the computer's main memory. It is volatile and is used to store data and machine code currently being used. It is slower than cache but much faster than storage drives.

1. Hard Disk Drive (HDD) (Matches with B): The HDD is a form of secondary storage. It is non-volatile, meaning it retains data without power. It is the slowest in the hierarchy but offers the largest capacity for long-term storage of files, documents, and programs.
Additional Knowledge: This hierarchy exists because a perfect memory—one that is fast, large, and cheap—does not exist. The principle of locality of reference (the tendency of a processor to access the same set of memory locations repetitively over a short period) makes this hierarchy highly effective.

Q6.
Match the programming language (List I) with the computer generation it is primarily associated with (List II):

List I (Programming Language)	List II (Computer Generation)
A. Machine Language	I. Second Generation
B. FORTRAN & COBOL	II. Fourth Generation
C. LISP & Prolog	III. First Generation
D. C++ & JAVA	IV. Fifth Generation

Options:
(a) A-III, B-I, C-IV, D-II
(b) A-I, B-III, C-II, D-IV
(c) A-III, B-II, C-IV, D-I
(d) A-IV, B-I, C-II, D-III
Answer:
A
Sol:
Correct Option – (a)
Introduction The evolution of computer hardware was paralleled by the evolution of programming languages, moving from machine-dependent low-level code to more human-readable, high-level languages. Each generation saw the rise of different language paradigms.
Information Booster
A. Machine Language (III. First Generation): Programs were written directly in binary code (0s and 1s). This was the only way to program the first-generation computers (e.g., ENIAC, UNIVAC I).
B. FORTRAN (I. Second Generation): FORTRAN (1957) and COBOL (1959) were the first widely used high-level languages, making programming much easier and more portable. They defined the Second Generation's software environment.
C. LISP & Prolog (IV. Fifth Generation): LISP (1958, but its paradigm became central) and Prolog are key languages used for Artificial Intelligence (AI) and logic programming, which are the core focus of the Fifth Generation.
D. C++ & JAVA (II. Fourth Generation): While C (early 70s) and C++ (early 80s) were developed in the Fourth Generation, they, along with object-oriented languages like Java, became the dominant languages for developing large-scale software, GUIs, and internet applications on PCs and workstations (Fourth Generation systems).
Additional Knowledge The shift from Second to Third Generation involved the introduction of Operating Systems, which managed system resources and allowed for multi-programming. This abstraction layer made programming less machine-specific. The Fourth Generation is also known for the rise of Scripting Languages and database management systems.

Q7. Match List - I with List - II:

List - I (Operating System)	List - II (Task)
A. UNIX	I. Assist users in system maintenance task
B. MS-DOS	II. Mobile device
C. Android OS	III. Single user operating system
D. Utility programs	IV. Multi user operating system

Choose the correct answer from the options given below:
(a) A-III, B-IV, C-I, D-II
(b) A-I, B-II, C-IV, D-III
(c) A-IV, B-III, C-II, D-I
(d) A-III, B-I, C-II, D-IV
Answer:
C
Sol:
Introduction: This question asks to match various operating systems and utility programs with their primary tasks or characteristics. Understanding these distinctions is fundamental to computer science and information technology.
Information Booster: Let's analyze each pairing:

- A. UNIX
  - Task/Characteristic: IV. Multi user operating system. UNIX is a powerful, multi-user, and multi-tasking operating system. It allows multiple users to access the same computer system simultaneously and enables a single user to run multiple programs concurrently. It is widely used in servers, workstations, and supercomputers.
- B. MS-DOS
  - Task/Characteristic: III. Single user operating system. MS-DOS (Microsoft Disk Operating System) was an early, command-line interface operating system. It was primarily a single-user, single-tasking operating system, meaning it could only handle one user and one program at a time.
- C. Android OS
  - Task/Characteristic: II. Mobile device. Android OS is a Linux-based operating system designed primarily for touchscreen mobile devices such as smartphones and tablets. It is the most widely used mobile operating system globally.
- D. Utility programs
  - Task/Characteristic: I. Assist users in system maintenance task. Utility programs (or utilities) are system software designed to help analyze, configure, optimize, or maintain a computer. Examples include antivirus software, disk defragmenters, file compression tools, and backup utilities.

The final answer is (c) A - IV, B - III, C - II, D - I.
Additional Knowledge:Operating systems are the core software that manages computer hardware and software resources and provides common services for computer programs. They are broadly categorized based on their user support (single-user vs. multi-user) and tasking capabilities (single-tasking vs. multi-tasking). The evolution from MS-DOS to UNIX/Linux, and then to mobile OS like Android, showcases the continuous development towards more powerful, flexible, and specialized computing environments. Utility programs, while not operating systems themselves, are crucial for keeping an OS running efficiently and securely.

Q8. Match the following renewable energy sources with their primary limitation/concern.

List-I (Renewable Energy Source)	List-II (Primary Limitation/Concern)
A. Solar Power	1. Habitat destruction and methane emissions from submerged vegetation
B. Wind Power	2. Intermittency and dependence on weather conditions
C. Hydropower (Large Dams)	3. Visual pollution and threat to birdlife
D. Biomass Energy	4. Competition with food crops for land and water

Codes:
(a) A-2, B-3, C-1, D-4
(b) A-3, B-2, C-4, D-1
(c) A-2, B-1, C-3, D-4
(d) A-4, B-3, C-2, D-1
Answer:
A
Sol:
Correct Option – (a)
Introduction: While renewable energy is crucial for a sustainable future, each source comes with its own set of environmental and technical challenges that must be understood for balanced policy-making.
Information Booster:
A. Solar Power (Matches with 2): The primary limitation is intermittency; it only generates power when the sun is shining, requiring energy storage solutions or backup power.
B. Wind Power (Matches with 3): Key concerns include visual pollution (aesthetics of wind farms) and the threat to birds and bats from collisions with turbine blades.
C. Hydropower (Matches with 1): Large dams cause significant habitat destruction by submerging vast areas of land. The decomposition of submerged organic matter can also release methane, a potent greenhouse gas.
D. Biomass Energy (Matches with 4): If derived from energy crops, it can lead to competition with food production for arable land and water resources, potentially raising food prices.
Additional Knowledge:
Geothermal energy, while highly reliable, is geographically limited to tectonically active regions.

Q9. Which of the following statements correctly represent types of communication?
I. Intrapersonal communication refers to communication within oneself, such as thinking and self-reflection.
II. Interpersonal communication is communication between two or more persons, usually involving direct interaction.
III. Group communication always requires the presence of mass media technology to be valid.
IV. Mass communication uses technical media channels to reach large, scattered audiences simultaneously.
Choose the correct answer from the codes given below:
(a) I, II and IV only
(b) II, III and IV only
(c) I and III only
(d) I, II, III and IV
Answer:
A
Sol:

Introduction: Communication can be broadly categorized into intrapersonal, interpersonal, group, and mass communication, each defined by the number of participants and mode of message delivery.
Information Booster:
Intrapersonal communication is the inner dialogue that an individual has with oneself, influencing perception and decision making.
Interpersonal communication refers to face-to-face or mediated communication between two or a few individuals, allowing rich feedback and relationship building.
Mass communication involves using technological channels like TV, radio, newspapers, and digital media to disseminate messages to a large audience.
The classification helps in understanding audience size, feedback type, and media use across different communication contexts.
Additional Knowledge:
Group communication does not require mass media; it can occur in a classroom discussion, committee meeting or seminar without any sophisticated technology.
Mass communication is distinct in its heavy reliance on organized media institutions and professional communicators (journalists, advertisers, producers).

Q10.
Match the LIST-I with LIST-II (Group Communication)

LIST-I (Technique)	LIST-II (Description)
A. Brainstorming	I. Free idea generation
B. Nominal Group	II. Individual silent ranking
C. Fishbowl	III. Observed inner discussion
D. Delphi	IV. Anonymous expert rounds

Choose the correct answer from the options given below:
(a) A-I, B-II, C-III, D-IV
(b) A-II, B-I, C-IV, D-III
(c) A-III, B-IV, C-I, D-II
(d) A-IV, B-III, C-II, D-I
Answer:
A
Sol:
Introduction:
Group communication techniques foster collaboration, correctly A-I (creative), B-II (non-dominant), C-III (observational), D-IV (iterative).
Information Booster:
Brainstorming – Free idea generation (creative):
- Encourages unrestricted, judgment-free sharing of ideas to spark innovation and quantity over quality initially.
- Participants vocalize wild, unconventional thoughts in a group setting, building on others' contributions for synergistic creativity.
- Ideal for divergent thinking phases, where the goal is maximum idea volume before evaluation.

Nominal Group – Individual silent ranking (non-dominant):
- Promotes equal participation by starting with silent, independent idea generation and private ranking, preventing vocal dominators from overshadowing others.
- Follows with round-robin sharing, clarification, and voting to democratize input and refine priorities structuredly.

- Balances individual reflection with group consensus, making it perfect for diverse or hierarchical groups.

Fishbowl – Observed inner discussion (observational):

- Features a small inner circle discussing openly while a larger outer circle observes silently, modeling effective dynamics for learning and analysis.
- Observers gain insights into communication patterns, then often rotate in, fostering active listening and perspective-taking.
- Manages large groups efficiently, highlighting group processes without chaos.

Delphi – Anonymous expert rounds (iterative):

- Uses multiple anonymous questionnaire rounds with controlled feedback to refine expert opinions progressively toward consensus.
- Eliminates bias from dominant personalities through anonymity and iteration, ideal for forecasting or complex decisions.
- Builds accuracy over time, adjusting views based on group summaries without face-to-face influence.

Additional Knowledge:

Brainstorming – Silent ranking: Vocal creativity vs. private. Nominal – Free generation: Structured vs. open.

Q11.

Arrange the following media technologies in the order of their historical emergence:

i. Television Broadcasting
ii. Printing Press
iii. World Wide Web
iv. Radio Broadcasting

Codes:

(a) ii, iv, i, iii
(b) ii, i, iv, iii
(c) iv, ii, i, iii
(d) ii, iv, iii, i

Answer:

A

Sol:

Correct Option – (a)

Introduction: The history of mass media is a story of technological revolution, each new medium transforming how information is produced, distributed, and consumed, and consequently, how society is organized.

Information Booster: The correct chronological order is:

1. ii. Printing Press (c. 1440): Invented by Johannes Gutenberg, the movable type printing press was the first major revolution in mass communication, enabling the mass production of books and pamphlets and laying the groundwork for the newspaper industry.
2. iv. Radio Broadcasting (1920s): Radio became the first electronic mass medium for the home, providing real-time information and entertainment and creating a national audience for the first time. The first radio broadcast in India was by the Radio Club of Bombay in 1923.
3. i. Television Broadcasting (1930s-40s, widespread post-WWII): TV combined audio and visual elements, becoming the most powerful and pervasive mass medium of the 20th century. Regular broadcasting in India began in Delhi in 1959.

4. iii. World Wide Web (1991): Invented by Tim Berners-Lee, the WWW is a system of interlinked hypertext documents accessed via the internet. It has led to the digital, interactive, and convergent media environment we live in today.
Additional Knowledge: This evolution is often described by media theorists like Marshall McLuhan. He characterized the shift from the "Gutenberg Galaxy" (the print-dominated era) to the "Electronic Galaxy," which retribalizes humanity into a global village.

Q12.
Match the following classic Bollywood movies (Column A) with their correct directors and years of release (Column B).

Column A: Bollywood Movie	Column B: Director & Year
1. Mother India	A. Rajkumar Hirani (2009)
2. Sholay	B. Bimal Roy (1953)
3. 3 Idiots	C. Mehboob Khan (1957)
4. Do Bigha Zamin	D. Ramesh Sippy (1975)

Options:
(a) 1-C, 2-A, 3-D, 4-B
(b) 1-B, 2-C, 3-D, 4-A
(c) 1-D, 2-A, 3-B, 4-C
(d) 1-C, 2-D, 3-A, 4-B
Answer:
D
Sol:
Correct Option – (d)
Introduction: Indian cinema has a rich history, and certain films are landmark achievements, not just for their entertainment value but for their cultural, social, and cinematic impact. Recognizing these key works is part of understanding the evolution of mass communication and popular culture in India.
Information Booster:
1. Mother India (C): Directed by Mehboob Khan, this epic drama was released in 1957. A remake of his own 1940 film *Aurat*, it is a seminal work in Indian cinema, nominated for the Academy Award for Best Foreign Language Film. It symbolically represented the newly independent nation.
2. Sholay (D): Directed by Ramesh Sippy and released in 1975, *Sholay* is arguably the most iconic "curry western" in Indian cinema. Its defining feature was its ensemble cast and its genre-blending narrative, making it a cultural phenomenon.
3. 3 Idiots (A): Directed by Rajkumar Hirani and released in 2009, this film became a massive blockbuster. It critiqued the pressures of the Indian education system and was notable for its blend of comedy and social commentary, a hallmark of Hirani's filmmaking.
4. Do Bigha Zamin (B): Directed by Bimal Roy and released in 1953, this film is a cornerstone of Indian parallel cinema. Inspired by Italian neorealism, it poignantly tells the story of a farmer's struggle, showcasing a more realistic and socially conscious form of filmmaking.
Additional Knowledge: The first full-length Indian feature film is widely considered to be Dadasaheb Phalke's *Raja Harishchandra* (1913). Understanding this lineage from the silent era to the social realism of the 1950s (*Do Bigha Zamin*), to the masala films of the 70s (*Sholay*), and the contemporary social-comedies (*3 Idiots*) provides a framework for analyzing how cinema, as a communication medium, reflects and shapes societal values over time.

Q13.

In 2012, ratio of boys in school A to school B is 45 : 52 and total students in both schools in 2012 is 1100. Find the total number of girls in both schools in the same year.Given below is the table which shows the percentage of boys in two school A and B in 5 different years. Read the data carefully and answer the questions.

Year	School A (boys%)	School B (boys%)
2012	54%	52%
2013	60%	64%
2014	48%	44%
2015	62%	56%
2016	48%	50%

Note: Total students in any school = Total boys + Total girls in each school
(a) 568
(b) 528
(c) 518
(d) 418
Answer:
C
Sol:
Solution:
Let total students in A = x, in B = 1100 − x.
Boys A = 54% of x = 0.54x.
Boys B = 52% of (1100 − x) = 0.52(1100 − x).
Given ratio 0.54x : 0.52(1100 − x) = 45 : 52.
Solve: 0.54x × 52 = 0.52(1100 − x) × 45
→ 28.08x = 23.4(1100 − x) = 25740 − 23.4x
→ 28.08x + 23.4x = 25740 → 51.48x = 25740 → x = 500.
So A = 500, B = 600.
Girls in A = 500 − 0.54×500 = 500 − 270 = 230.
Girls in B = 600 − 0.52×600 = 600 − 312 = 288.
Total girls = 230 + 288 = 518.
Answer: (c)

Q14.
If in 2014, boys in school A and B are 288 and 264 respectively then find total number of girls in both schools in 2014.Given below is the table which shows the percentage of boys in two school A and B in 5 different years. Read the data carefully and answer the questions.

Year	School A (boys%)	School B (boys%)
2012	54%	52%
2013	60%	64%
2014	48%	44%
2015	62%	56%
2016	48%	50%

Note: Total students in any school = Total boys + Total girls in each school
(a) 594
(b) 640
(c) 564
(d) 648

Answer:
D
Sol:
Solution:
Boys A = 288 and boys% in A (2014) = 48% → total A = 288 ÷ 0.48 = 600.
Boys B = 264 and boys% in B (2014) = 44% → total B = 264 ÷ 0.44 = 600.
Girls A = 600 − 288 = 312.
Girls B = 600 − 264 = 336.
Total girls = 312 + 336 = 648.
Answer: (d)

Q15.
If boys in school A in 2014 and girls in school B in 2012 are equal then boys in school B in 2012 are what percent of girls in school A in 2014?Given below is the table which shows the percentage of boys in two school A and B in 5 different years. Read the data carefully and answer the questions.

Year	School A (boys%)	School B (boys%)
2012	54%	52%
2013	60%	64%
2014	48%	44%
2015	62%	56%
2016	48%	50%

Note: Total students in any school = Total boys + Total girls in each school
(a) 85%
(b) 100%
(c) 90%
(d) 80%
Answer:
B
Sol:
Solution:
Boys A = 288 and boys% in A (2014) = 48% → total A = 288 ÷ 0.48 = 600.
Boys B = 264 and boys% in B (2014) = 44% → total B = 264 ÷ 0.44 = 600.
Girls A = 600 − 288 = 312.
Girls B = 600 − 264 = 336.
boys in A (2014) = 288. If girls in B (2012) = 288, and girls% in B (2012) = 48%, then total B (2012) = 288 ÷ 0.48 = 600.
Boys in B (2012) = 52% of 600 = 312.
Girls in A (2014) = total A (2014) − boys A (2014) = 600 − 288 = 312.
Required percent = (312 ÷ 312) × 100 = 100%.
Answer: (b)

Q16.
In 2016, girls in school A are 16 4/5% less than girls in school B. Find the ratio of boys in school A to that of school B in 2016.Given below is the table which shows the percentage of boys in two school A and B in 5 different years. Read the data carefully and answer the questions.

Year	**School A (boys%)**	**School B (boys%)**
2012	54%	52%

Year	School A (boys%)	School B (boys%)
2013	60%	64%
2014	48%	44%
2015	62%	56%
2016	48%	50%

Note: Total students in any school = Total boys + Total girls in each school
(a) 100 : 123
(b) 98 : 117
(c) 96 : 125
(d) 92 : 117
Answer:
C
Sol:
Solution:
Let total students in A = A and in B = B.
Girls A = 52% of A = 0.52A.
Girls B = 50% of B = 0.50B.
Given girls A = (1 − 16 4/5%) of girls B. Convert 16 4/5% = 16.8% → 1 − 0.168 = 0.832.
So 0.52A = 0.832 × 0.50B = 0.416B. => A = (0.416 ÷ 0.52) B = 0.8 B = 4/5 B.
Boys A = 48% of A = 0.48A = 0.48 × (4/5)B = 0.384B.
Boys B = 50% of B = 0.50B.
Ratio boys A : boys B = 0.384B : 0.50B = 0.384 : 0.50 = 384 : 500 = divide by 4 → 96 : 125.
Answer: (c)

Q17.
If total students in school A in 2015 and total students in B in 2013 are 700 and 400 respectively, then find the average number of boys in school A in 2015 and boys in school B in 2013.Given below is the table which shows the percentage of boys in two school A and B in 5 different years. Read the data carefully and answer the questions.

Year	School A (boys%)	School B (boys%)
2012	54%	52%
2013	60%	64%
2014	48%	44%
2015	62%	56%
2016	48%	50%

Note: Total students in any school = Total boys + Total girls in each school
(a) 344
(b) 345
(c) 348
(d) 368
Answer:
B
Sol:
Solution:
Boys% in A (2015) = 62% → boys A(2015) = 0.62 × 700 = 434.
Boys% in B (2013) = 64% → boys B(2013) = 0.64 × 400 = 256.
Average = (434 + 256) ÷ 2 = 690 ÷ 2 = 345.

Answer: (b)

Q18.
Which of the following statements are correct is respect of Green House Gases?
A. They are generally of light green colour
B. They absorb thermal radiations emitted by earth.
C. Water vapour is a green house gas.
D. Green house gases cause global warming.
E. Ammonia (NH_3) is a green house gas.
Choose the most appropriate answer from the options given below:
(a) A, B, C, D only
(b) A, C, E only
(c) B, C, D only
(d) A, B, C, D, E only
Answer:
C
Sol:
B. This statement is correct; greenhouse gases absorb and emit thermal radiation, which contributes to the greenhouse effect.
C. Water vapour is a greenhouse gas. It is the most abundant greenhouse gas, but importantly, its concentration in the atmosphere is largely controlled by temperature, not human activity directly.
D. Greenhouse gases cause global warming by trapping heat in the atmosphere. This is the fundamental process behind the greenhouse effect.
Information booster:
A. The statement is incorrect; greenhouse gases are not characterized by their colour. The term "greenhouse" refers to their effect on the Earth's atmosphere, not to their physical appearance.
E. Ammonia (NH3) is not as a greenhouse gas. It can contribute to the formation of aerosols, which have a complex effect on the planet's climate, but it is not a greenhouse gas in the same way as carbon dioxide (CO2), methane (CH4), or nitrous oxide (N2O).

Q19.
Black foot disease is caused by:
(a) Nitrates
(b) Arsenic
(c) Fluoride
(d) Lead
Answer:
B
Sol:
Black Foot Disease (BFD) is a chronic vascular disease caused by prolonged exposure to high levels of arsenic, especially through contaminated drinking water. The disease results in severe peripheral vascular damage, where blood vessels in the lower limbs are constricted or blocked, eventually leading to gangrene and necrosis (blackening of the skin and tissues), hence the name “Black Foot.”
Information booster
Seepage of industrial and mine discharges, fly ash ponds of thermal power plants can lead to arsenic in groundwater.

In India and Bangladesh (Ganges Delta), millions of people are exposed to groundwater contaminated with high levels of arsenic, a highly toxic and dangerous pollutant.
Chronic exposure to arsenic causes black foot disease. It also causes diarrhoea and also lung and skin cancer.

Additional Information
(a) Nitrates: Cause Blue Baby Syndrome (Methemoglobinemia), not Black Foot Disease.
(c) Fluoride: Causes dental and skeletal fluorosis, especially in arid regions with fluoride-rich groundwater.
(d) Lead: Leads to neurological disorders, learning disabilities, and kidney damage, especially in children.

Q20.
In a certain code HEART is written as FGYTR. How is MOUSE written in that code?
(a) KQWQG
(b) KQSUC
(c) OMWQG
(d) OMSUC
Answer:
B
Sol:
Given:
In a certain code HEART is written as FGYTR.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Letter are - 2 and + 2 place alternately.
For, HEART - FGYTR
H - 2 = F, E + 2 = G, A - 2 = Y, R + 2 = T, T - 2 = R
Similarly,
MOUSE - ?
M - 2 = K, O + 2 = Q, U - 2 = S, S + 2 = U, E - 2 = C
So, MOUSE is written as KQSUC.
Thus, corrcet option is (b).

Q21.
Arrange the following landmark education policies/commissions of post-independence India in the chronological order of their establishment/submission:
A. National Education Policy (NEP) 2020
B. Radhakrishnan Commission
C. Kothari Commission
D. National Policy on Education (NPE) 1986
Choose the correct answer:
(a) D, A, B, C
(b) C, B, A, D

(c) A, D, B, C
(d) B, C, D, A
Answer:
D
Sol:
The correct chronological order (earliest to latest) is: B (1948-49), C (1964-66), D (1986), A (2020).
Information Booster:
B. Radhakrishnan Commission (1948-49): Focused primarily on higher education and recommended integrating secondary and higher education more closely. Its key recommendation was the formation of the University Grants Commission (UGC).
C. Kothari Commission (1964-66): Recommended the famous "Education and National Development" strategy, proposing the uniform 10+2+3 structure nationwide and emphasizing the modernization of education.
D. National Policy on Education (NPE) 1986: Aimed at establishing a national system of education, promoting equity, and launching specific schemes like Operation Blackboard for primary schools and the establishment of Navodaya Vidyalayas.
A. National Education Policy (NEP) 2020: The current policy, which proposes replacing the 10+2 system with a 5+3+3+4 curricular structure and aims for universalization of education from pre-school to secondary level.
Additional Information:
The Radhakrishnan Commission (B) heavily influenced the structure of universities and stressed the need for liberal education to foster citizenship.
The Kothari Commission (C) emphasized the link between education and national goals, advocating for common schools, vocationalization, and increasing the expenditure on education to 6% of GDP.
The NPE 1986 (D) was reviewed in 1992 by the Acharya Ramamurti Committee, leading to modifications to the policy.
The NEP 2020 (A) also focuses on multidisciplinarity, a regulatory structure with a single regulator for higher education (excluding legal and medical), and phasing out the affiliation system over 15 years.

Q22.
Choose the correct option
Assertion: The National Assessment and Accreditation Council (NAAC) is responsible for accrediting universities and colleges in India.
Reason: NAAC has categorized Higher Educational Institutions into three major types
(a) Both Assertion and Reason are true, and the Reason is the correct explanation of the Assertion.
(b) Both Assertion and Reason are true, but the Reason is not the correct explanation of the Assertion.
(c) Assertion is true, but the Reason is false.
(d) Assertion is false, but the Reason is true.
Answer:
B
Sol:
The NAAC is indeed responsible for accrediting universities and colleges in India, based on their performance in various parameters and criteria such as curriculum, research, infrastructure, governance, and social responsibility. It assesses the quality of institutions of higher education and awards them grades based on their performance. NAAC has categorized the Higher Educational Institutions into three major types (University, Autonomous College, and Affiliated/Constituent College) and assigned different weightages to these criteria under different key aspects based on the functioning and organizational focus of the three types of HEIs.

Q23. Arrange the following chronologically on the basis of their launch year:
A. Swayamprabha
B. Krishi Darshan
C. Gyandarshan
D. PM eVidyaChoose the correct answer from the options given below:
correct
(a) C, A, B, D
(b) A, C, D, B
(c) B, C, A, D
(d) A, B, D, C
Answer: C
Sol:
Introduction:
Imagine learning about farming, science, or even math through TV or the internet! India has some amazing programs that help students, farmers, and teachers learn in fun and easy ways. Today, we're going to explore four special programs: Krishi Darshan, Gyandarshan, Swayamprabha, and PM eVidya. Each one was started at different times to make education exciting and reachable for everyone. Let's find out when they began and put them in the right order, from the oldest to the newest, to see how India has been making learning better over the years!
Information Booster:
Let's learn about these four programs and when they started, so we can arrange them in the correct order from oldest to newest:
- Krishi Darshan (1967):
  - What is it? Krishi Darshan is a TV show on Doordarshan that teaches farmers about better ways to grow crops, use tools, and take care of animals. It's like a school for farmers on TV!
  - When did it start? It began on January 26, 1967, making it the oldest program in our list. It was one of the first shows to help farmers learn new tricks!
  - Why it's special: It reaches farmers in villages, helping them grow more food for all of us.
- Gyandarshan (2000):
  - What is it? Gyandarshan is a TV channel that shows educational programs for students, teachers, and anyone who loves learning. It's run by Doordarshan and IGNOU (a big university).
  - When did it start? It was launched on January 26, 2000, to bring school lessons to your TV screen.
  - Why it's special: It's like having a classroom at home, with lessons on science, math, and more!
- Swayamprabha (2017):
  - What is it? Swayamprabha is a group of 40 TV channels that show high-quality educational videos 24/7, using a satellite called GSAT-15. You can watch lessons anytime!
  - When did it start? It was launched on July 9, 2017, to help students in schools and colleges learn better.
  - Why it's special: It's free, and you can watch it even in places with no internet!
- PM eVidya (2020):
  - What is it? PM eVidya is a big program that brings learning online, on TV, and on radio. It includes apps, websites, and 200 TV channels to help students study from home.
  - When did it start? It was launched on May 17, 2020, during the COVID-19 pandemic to keep schools open in a new way.
  - Why it's special: It helps millions of students, even those with no internet, by using TV and radio.

Correct Order: Krishi Darshan (1967), Gyandarshan (2000), Swayamprabha (2017), PM eVidya (2020).
So, the answer is B, C, A, D.

Additional Information:

Here are some extra facts and ideas to make these programs even more exciting for you:

- Why These Programs Are Awesome:
  - They make learning fun and easy for everyone, whether you're a farmer, a student, or a teacher. From helping grow better crops to studying science at home, these programs are like superheroes for education!
  - They reach faraway places in India, so even kids in villages can learn.
- Cool Facts:
  - Krishi Darshan was one of the first TV programs in India to teach people something useful, way back when TVs were new!
  - Gyandarshan works with IGNOU, a university that helps people study from home, even adults!
  - Swayamprabha has 40 channels, and each one is like a different subject in school, from math to history.
  - PM eVidya won a big award from UNESCO in 2022 for making education accessible to everyone

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Q24.

What should come in place of the question mark (?) in the given series?

275, 230, 190, 155, 125, ?

(a) 95

(b) 100

(c) 105

(d) 90

Answer:

B

Sol:

Given: 275, 230, 190, 155, 125, ?

Logic: Numbers are decreasing with differences in AP: −45, −40, −35, −30, … so next difference = −25.

275 − 45 = 230

230 − 40 = 190

190 − 35 = 155

155 − 30 = 125

125 − 25 = 100

Thus, the correct option is (B) 100.

Q25.

Match List I with List II:

List I (Verticles of Higher Education Commission of India (HECI))	List II (Name of the Vertical)
A. First Vertical of HECI	I. General Education Council (GEC)
B. Second Vertical of HECI	II. National Higher Education Regulatory Council (NHERC)
C. Third Vertical of HECI	III. National Accreditation Council (NAC)
D. Fourth Vertical of HECI	IV. Higher Education Grants Council (HEGC)

Choose the correct answer from the options given below:

Match the Following:

(a) A-II, B-III, C-IV, D-I

(b) A-III, B-II, C-IV, D-I

(c) A-II, B-IV, C-III, D-I
(d) A-III, B-IV, C-II, D-I
Answer:
A
Sol:
The correct matching is: (a) A-II, B-III, C-IV, D-I
A. First Vertical of HECI - II. National Higher Education Regulatory Council (NHERC)
B. Second Vertical of HECI - III. National Accreditation Council (NAC)
C. Third Vertical of HECI - IV. Higher Education Grants Council (HEGC)
D. Fourth Vertical of HECI - I. General Education Council (GEC)
Information Booster:
1. HECI: The Higher Education Commission of India is proposed to regulate higher education in India.
2. NHERC: The first vertical of HECI, responsible for the regulation and oversight of higher education institutions.
3. NAC: The second vertical focuses on the accreditation and quality assurance of institutions.
4. HEGC: The third vertical is responsible for disbursing grants and financial aid to educational institutions.
5. GEC: The fourth vertical establishes the general academic standards and guidelines for higher education.

Q26.
Below are the two statements
Statement I: Bloom's Taxonomy is a framework for assessing student learning outcomes.
Statement II: Bloom's Taxonomy is a hierarchical model that categorises learning objectives into six levels of cognitive complexity.
Which of the following options best describes the relationship between the two statements?
(a) Both statements are true, and Statement II explains Statement I.
(b) Both statements are true, but Statement II does not explain Statement I.
(c) Statement I is true, but Statement II is false.
(d) Statement I is false, but Statement II is true.
Answer:
A
Sol:
Correct Option - (a)
Introduction:
Bloom's Taxonomy is a widely used framework in education that categorizes learning objectives into cognitive levels.
Both statements are accurate. Bloom's Taxonomy is indeed a framework for assessing student learning outcomes, and it categorizes objectives into six cognitive levels, making Statement II an explanation for Statement I.
Information Booster:
Understanding the relationship between these statements helps educators appreciate the hierarchical nature of Bloom's Taxonomy.
Additional Knowledge:
The hierarchical structure of Bloom's Taxonomy allows educators to build upon previously learned skills, promoting a deeper understanding of the subject matter.

Q27. Which of the following commissions recommended the introduction of a common school system to promote equality of educational opportunity in India?
(a) Mudaliar Commission
(b) Kothari Commission
(c) Radhakrishnan Commission
(d) University Grants Commission (UGC) Review Committee
Answer:
B
Sol:
Explanation:
Kothari Commission (1964-66): This commission, also known as the Indian Education Commission, was the first to provide a comprehensive framework for a national system of education in India. Its report recommended the introduction of a Common School System (CSS). The goal of the CSS was to provide "equal opportunities for education to all children irrespective of caste, creed, or economic background" and to reduce disparities between different types of schools.
Information Booster:
Kothari Commission (1964–66) was headed by Dr. D.S. Kothari, the then Chairman of the UGC.
Submitted its report titled: "Education and National Development".
Major recommendation: 10+2+3 structure of education.
Proposed a National Policy on Education and vocationalisation at the secondary stage.
Recommended universal access and retention at the elementary level.
Emphasized science education, work-experience, and moral values.
Urged for a Common School System to curb social segregation in schooling.
Additional Knowledge:
Mudaliar Commission (1952-53): This commission focused on secondary education and its reorganization. Its recommendations included diversifying the curriculum and introducing a 3-year undergraduate degree, but it did not propose a common school system to address educational inequality in the same comprehensive way as the Kothari Commission.
Radhakrishnan Commission (1948-49): This commission was specifically concerned with university education in India. While it made recommendations on various aspects of higher education, such as improving teacher standards and establishing a University Grants Commission, it did not address the concept of a common school system at the primary or secondary level.
University Grants Commission (UGC) Review Committee: The UGC is a statutory body established in 1956 to coordinate, determine, and maintain standards of higher education in India. While it has released various guidelines and recommendations related to universities, it is not an educational commission that recommended the establishment of a common school system for all levels of schooling.

Q28.
Match the following Models of Teaching with their Key Proponents:

List I (Model of Teaching)	List II (Proponent)
A. Concept Attainment Model	I. Bruce Joyce & Marsha Weil
B. Jurisprudential Inquiry Model	II. Hilda Taba
C. Inductive Thinking Model	III. Herbert Thelen
D. Synectics Model	IV. William J. Gordon

Choose the correct option:
(a) A-I, B-II, C-III, D-IV
(b) A-I, B-III, C-II, D-IV
(c) A-II, B-III, C-I, D-IV

(d) A-IV, B-I, C-III, D-II
Answer:
B
Sol:
Correct Answer: (b)
Introduction: This question requires matching specific models of teaching with their key proponents or developers. Understanding these associations is important for recognizing the origins and theoretical foundations of different pedagogical approaches.
Information Booster: Let's match each Model of Teaching with its primary proponent:
A. Concept Attainment Model:
Proponent: This model was originally developed by Jerome Bruner. However, Bruce Joyce & Marsha Weil are widely recognized for their comprehensive work in classifying, describing, and popularizing various models of teaching, including Concept Attainment, in their influential book "Models of Teaching." In some contexts, they are associated with the discussion and application of many models.
Matches with: I. Bruce Joyce & Marsha Weil (Acknowledging Bruner as the original developer, but Joyce & Weil as significant proponents in the broader field of teaching models).
B. Jurisprudential Inquiry Model:
Proponent: This model was developed by Donald Oliver and James P. Shaver. It falls under the "Social Family" of models. Herbert Thelen is another key proponent within the Social Family, known for the "Group Investigation Model." While not the direct developer of Jurisprudential Inquiry, Thelen's work shares a common philosophical ground concerning social interaction and democratic processes in learning.
Matches with: III. Herbert Thelen (Recognizing the close alignment within the Social Family, even if not the direct developer).
C. Inductive Thinking Model:
Proponent: This model was developed by Hilda Taba. It focuses on helping students organize information, form concepts, and generalize through an inductive process.
Matches with: II. Hilda Taba (Direct and widely accepted association).
D. Synectics Model:
Proponent: This model was developed by William J. Gordon. It is a creative problem-solving approach that uses metaphors and analogies to foster innovative thinking.
Matches with: IV. William J. Gordon (Direct and widely accepted association).

Q29.
Which of the following are types of Validity related to criterion-related validity?
A. Concurrent validity
B. Content validity
C. Predictive validity
D. Face validity
Choose the correct answer from the options given below:
(a) A and C only
(b) B and D only
(c) C and B only
(d) C and D only
Answer:
A
Sol:

Criterion-related validity refers to how well a test predicts or correlates with an external criterion. It has two main types: Concurrent validity (the test correlates with a criterion measured at the same time) and Predictive validity (the test predicts future performance on a criterion). Both involve comparing test scores to an external standard or outcome.

Information Booster:

• Reliability (from the original question) refers to the consistency and stability of test scores across different conditions

• Internal consistency reliability measures whether items within a test measure the same construct (assessed through Split-half and KR-20/Cronbach's alpha)

• Validity refers to whether a test measures what it claims to measure

• Criterion-related validity examines how well test scores relate to concrete outcomes or criteria

• Concurrent validity is established when a test correlates with a criterion measured simultaneously

• Predictive validity is established when a test accurately forecasts future performance or behavior

Additional Knowledge:

• Content validity (Option B) is incorrect because it relates to how well test items represent the entire domain of content being measured, not to correlation with external criteria

• Face validity (Option D) is incorrect as it refers to whether a test appears to measure what it's supposed to measure based on superficial inspection, which is the weakest form of validity

• Other types of validity include construct validity (whether the test measures the theoretical construct) and consequential validity (the social consequences of test use)

• Test-Retest reliability (mentioned in the original) measures stability over time, while Inter-rater/Scorer reliability measures agreement between different evaluators

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Q30. A and B have money in the ratio 3 : 2. If A gives Rs 5 to B, the ratio of the money will become 4 : 11. Initially, how much money did A and B have respectively?

(a) Rs 54, Rs 36

(b) Rs 3, Rs 2

(c) Rs 9, Rs 6

(d) Rs 8, Rs 12

Answer:

C

Sol:

Initial ratio of A and B = 3 : 2

After A gives Rs 5 to B, the ratio becomes 4 : 11

We need to find the initial amounts of A and B.

Solution:

Let initial amounts be:

A = 3x, B = 2x

After A gives Rs 5 to B:

A = (3x - 5), B = (2x + 5)

New ratio:

$$\frac{3x-5}{2x+5}=\frac{4}{11}$$

$$11(3x-5)=4(2x+5)$$

$$33x-55=8x+20$$

$$25x=75$$

$$x=3$$

Initial amounts:

A = 3x = Rs. 9, B = 2x = Rs. 6

Q31.

Which of the following statements A–D are correct?

A. The average of the numbers 18, 26, 32, 44 and 60 is 38.

B. If the marked price of an article is increased by 25% and then a discount of 20% is offered, the net effect is a 10% gain on cost price.

C. If A : B = 3 : 4 and B : C = 6 : 5, then A : B : C = 9 : 12 : 10.

D. A machine depreciates 10% in the first year and 20% in the second year. If initial value is Rs. 50,000, its value after 2 years is Rs. 36,000.

(a) A and C only
(b) C and D only
(c) A, B and C only
(d) A, B, C and D
Answer:
B
Sol:
Correct option: (b)
Solution:
A. Sum = 18 + 26 + 32 + 44 + 60 = 180 Average = 180 ÷ 5 = 36 ≠ 38 → False
B. CP = 100 MP = 100 × 1.25 = 125 SP = 125 × 0.80 = 100 No gain → False
C. A:B = 3:4 → A = 3k, B = 4k B:C = 6:5 → B = 6m, C = 5m Equate B: 4k = 6m → k = 3m/2 A = 9/2 m, B = 6m, C = 5m Multiply by 2 → 9 : 12 : 10 → True
D. After year 1: 50000 × 0.90 = 45000 After year 2: 45000 × 0.80 = 36000 → True
True statements: C and D → option (b)

Q32. Match the following sampling techniques with their appropriate descriptions and applications.

List-I (Sampling Technique)	List-II (Description & Application)
A. Stratified Random Sampling	1. Selecting every nth element from sampling frame - Efficient for large populations
B. Cluster Sampling	2. Dividing population into homogeneous subgroups - Ensures representation of all segments
C. Systematic Sampling	3. Using readily available participants - Prone to bias but convenient
D. Purposive Sampling	4. Selecting natural groups randomly - Cost-effective for geographically dispersed populations

Codes:
(a) A-2, B-4, C-1, D-3
(b) A-4, B-2, C-1, D-3
(c) A-2, B-1, C-4, D-3
(d) A-3, B-4, C-1, D-2
Answer:
A
Sol:
Correct Option – (a)
Introduction: Sampling is a critical aspect of research design that determines both the efficiency of data collection and the generalizability of findings. Different sampling techniques serve different research purposes and constraints.
Information Booster:
A. Stratified Random Sampling (Matches with 2): Involves dividing population into homogeneous subgroups (strata) and randomly sampling from each. Ensures representation of all key segments (e.g., sampling equal numbers from different income groups).
B. Cluster Sampling (Matches with 4): Involves selecting natural groups (clusters) randomly and studying all members within chosen clusters. Cost-effective for geographically dispersed populations (e.g., selecting schools rather than individual students).
C. Systematic Sampling (Matches with 1): Involves selecting every nth element from a sampling frame after random start. Efficient for large populations but risks periodicity bias if patterns exist in the frame.

D. Purposive Sampling (Matches with 3): A non-probability technique involving selecting participants based on specific characteristics or knowledge. Prone to bias but useful for qualitative studies seeking information-rich cases.
Additional Knowledge:
Snowball sampling is another non-probability technique where existing participants recruit future participants, particularly useful for studying hidden populations. The sampling method choice depends on research objectives, resources, and required generalizability.

Q33.
Identify the correct statements regarding qualitative research:
A. In purposive sampling, participants are selected based on specific characteristics relevant to the study.
B. Triangulation involves using multiple data sources to enhance the credibility of findings.
C. Member checking is a process where participants validate the researcher's interpretation of data.
D. Qualitative data analysis often begins during the data collection phase.
Choose the correct answer from the options given below:
(a) A, B, and C only
(b) A, B, C, and D
(c) B, C, and D only
(d) A, C, and D only
Answer:
B
Sol:
Qualitative research is an interpretive approach aimed at understanding social phenomena through the meanings people assign to them; the correct answer includes all statements (A), (B), (C), and (D).
Information Booster:
Purposive Sampling (Statement A): Unlike quantitative research which relies on random selection, qualitative research uses purposive (or purposeful) sampling. Researchers hand-pick participants who possess specific characteristics or experiences that are central to the research question to ensure "information-rich" cases.
Triangulation (Statement B): To increase the credibility and trustworthiness of the results, researchers use triangulation. This involves cross-checking data from multiple sources (e.g., comparing interview transcripts with field observations) to ensure a comprehensive understanding of the phenomenon.
Member Checking (Statement C): Also known as participant validation, this is a technique where the researcher shares their findings or themes with the participants. It allows the subjects to confirm if the researcher's interpretation accurately reflects their views and experiences, reducing researcher bias.
Ongoing Data Analysis (Statement D): In qualitative studies, data collection and analysis are not linear. Analysis often starts while data is still being collected. This "iterative" process allows the researcher to refine interview questions or pursue new leads based on early findings.
Additional Knowledge: Understanding the Depth of Qualitative Rigor
Subjectivity vs. Objectivity: While quantitative research strives for objectivity, qualitative research acknowledges the subjective nature of reality. The researcher is considered the primary instrument for data collection.
Saturation Point: Researchers continue sampling and collecting data until they reach "saturation," which is the point where no new information or themes are observed in the data.
Transferability vs. Generalizability: Qualitative research does not aim for statistical generalizability. Instead, it aims for transferability, providing enough "thick description" so that readers can determine if the findings apply to their own unique contexts.

Q34.
Arrange the following key events in the development and implementation of SWAYAM Prabha in chronological order:
1. GSAT-15 satellite launched
2. Launch of 32 SWAYAM Prabha DTH channels
3. BISAG-N starts central uplink services
4. National Education Policy 2020 recommends scaling up e-content channels
Choose the correct sequence:
(a) 1 – 3 – 2 – 4
(b) 2 – 1 – 4 – 3
(c) 1 – 2 – 3 – 4
(d) 3 – 1 – 2 – 4
Answer: A
Sol:
Correct Option – (a)
Introduction: The development of SWAYAM Prabha involved multiple technological and policy milestones that contributed to its expansion.
Information Booster:
(1) GSAT-15 launch – 2015: Provided the transponders needed for DTH educational broadcasting.
(3) BISAG-N uplink services – Began after GSAT-15's deployment to operationalize content broadcasting.
(2) Launch of 32 Channels – Mid-2017: Initial launch phase of SWAYAM Prabha with content from IGNOU, CEC, NIOS, etc.
(4) NEP 2020 – Emphasized the need to scale up quality digital content and DTH education platforms like SWAYAM Prabha.
Additional Information:
The launch of GSAT-15 was critical to DTH educational outreach.
BISAG-N provided the technical groundwork.
NEP 2020 further legitimized and expanded the scope of such initiatives.