UGC NET MEMORY BASED QUESTION-PAPER 1

TOPICS ASKED IN UGC NET PAPER - 1 (8 JANUARY 2025 SHIFT- 1)

ICT- KB, PB, GB, MALWARE
H.E.- OPEN UNIVERSITIES CHRONOLOGY, COMMISSION RECOMMENDATION, 10TH 5 YEAR PLAN, NIC NET YEAR
TEACHING- CLASSROOM TEACHING, SELF LEARNER, MOODLE, EDX, COURSERA, EFFECTIVE TEACHING, TRANSFER OF LEARNING
COMM. – SMCR MODEL, GROUP COMM., BAARIERS, PHATIC COMM.
RESEARCH- PLAGRISM, HISTORICAL RESEARCH, INTRADISCIPLINARY RESEARCH
P.D.- IMPACT OF SO2, SOURCE OF METHANE, TOXIC CHEMICAL USED IN TRANSFORMER, DISASTERS, NUCLEAR DISASTERS AFFECTED COUNTRY, CLASSICAL SMOG, GLOBAL WARMING
LR. – SYLLOGISM, SQUARE OF OPPOSITION, NYAYA PHILOSOPHY, 2 SERIES- ALPHABET ND NUMBER SERIES
MATHS- PROFIT LOSS, INTEREST

MEMORY BASED QUES

Q1. A certain sum of money becomes Rs.28800 in 2 years at 20% per annum of compound interest (Compounded annually). The sum of money is:
(a) Rs.24000
(b) Rs.22000
(c) Rs.21000
(d) Rs.20000
Ans.(d)
Sol. Given:
Rate of interest = 20%
Time = 2 years
Principle = ₹ 28,800

Compounded Amount $= Principle \times (1 + \frac{r}{100})^t$
Let the Principle be P.

$28800 = P \times (1 + \frac{20}{100})^2$

$28800 = P \times (\frac{5+1}{5})^2$

$28800 = P \times (\frac{6}{5})^2$

$28800 = P \times (\frac{36}{25})$

$P = 28800 \times (\frac{25}{36})$

= ₹ 20000

Q2. According to Classical Indian School of logic (Nyaya) which fallacy is committed in the following statement?
"The sky rose is fragrant, because it is a rose like the rose on the earth".
(a) Asadharana
(b) Badhita
(c) Viruddha
(d) Asraya siddha

Ans.(d)

Sol. The statement commits the Asraya siddha fallacy, also known as the fallacy of a non-existent subject. In Nyaya logic, this fallacy occurs when the subject of the statement does not exist or is unreal. The argument presented implies that 'sky rose' is a real entity similar to earthly roses and possesses their qualities, such as fragrance. However, 'sky rose' is a mythical or imaginary object and does not exist in reality. Hence, making any assertion about its characteristics based on the comparison with real roses leads to a logical error where the premise is based on an unreal, non-existent subject.

Information Booster:

(a) Asadharana: This fallacy occurs when a reason is too uncommon or peculiar, not allowing for a generalizable conclusion.

(b) Badhita: This refers to a fallacy where there is a contradiction of the conclusion by another more reliable source or evidence.

(c) Viruddha: Also known as contradictory reason, this fallacy happens when the reason itself is in direct opposition to the conclusion. In this scenario, the reason provided is not contradictory but based on an incorrect assumption (non-existent subject).

Q3. In a certain coding language 'KANPUR' is coded as 'JBMQTS'. How 'BOMBAY' will be coded in that language?

(a) ALPCZZ

(b) APLCZZ

(c) APCLZZ

(d) APLZCZ

Ans.(b)

Sol. +1, - 1 pattern

KANPUR' is coded as 'JBMQTS'

BOMBAY is coded as 'APLCZZ'

Q4. Arrange the following open Universities according to their year of establishment in Chronological order (Older -New):

A. Yashwant Rao Chavan Maharashtra Open University

B. Karnataka State Open University

C. U. P. Rajarshi Tandon Open University

D. Kota Open University

E. Madhya Pradesh Bhoj Open University

Choose the correct answer from the options given below:

(a) A, B, C, D, E

(b) D, A, E, B, C

(c) B, C, E, A, D

(d) D, A, B, C, E

Ans.(b)

Sol. The correct chronological order of the establishment of the open universities is as follows:

1. **Kota Open University** (D) - Established in 1987, it was one of the earliest state open universities in India.

2. **Yashwant Rao Chavan Maharashtra Open University** (A) - Founded in 1989, it is located in Nashik, Maharashtra.

3. **Madhya Pradesh Bhoj Open University** (E) - Set up in 1991 in Bhopal, it offers a wide range of distance learning courses.

4. **Karnataka State Open University** (B) - Established in 1996, it is based in Mysuru.

5. **U. P. Rajarshi Tandon Open University** (C) - Founded in 1999 in Prayagraj, Uttar Pradesh.

Information Booster: 1. Kota Open University, now known as Vardhman Mahaveer Open University, was one of the pioneers in distance education.

2. Yashwant Rao Chavan Maharashtra Open University specializes in flexible education for rural and tribal populations.

3. Madhya Pradesh Bhoj Open University is named after the great ruler Bhoj, reflecting its commitment to historical values and modern education.

4. Karnataka State Open University primarily caters to the educational needs of learners from Karnataka.

5. U. P. Rajarshi Tandon Open University is named after Rajarshi Purushottam Das Tandon, who was known for his efforts in promoting education in Uttar Pradesh.

Q5. Identify the correct order of the following data transfer rates measured in bits per second (bps) ranked from smallest to largest:

(A) 1500 Kbps

(B) 1500 Mbps

(C) 1 Mbps

(D) 1 Gbps

Choose the correct answer from the options given below:

(a) (C), (A), (B), (D)

(b) (A), (C), (D), (B)

(c) (C), (D), (A), (B)

(d) (C), (A), (D), (B)

Ans.(d)

Sol. From smallest to largest, data transfer rates rank as follows:

1. **1 Mbps**

2. **1500 Kbps**

3. **1 Gbps**

4. **1500 Mbps**

Information Booster:

1. **Conversion Basics:**

1 Mbps = 1000 Kbps

1 Gbps = 1000 Mbps

2. **Ranking Data Rates:** Compare based on bps values.

Additional Knowledge:

Kbps is smaller than Mbps, which is smaller than Gbps.

Conversion errors often lead to misinterpretation in ranking.

Q6. Which of the following are the learner related factors that influence learning?

A. Leaner's level of aspiration and achievement motivation

B. Learner's readiness and will power

C. Basic potential of the learner

D. Leaner's physical and mental health

E. Personality trails and behavior of teacher

Choose the correct answer from the options give below:

(a) A, B and E only

(b) A, B, C and D only

(c) C and E only

(d) C, D and E only

Ans.(b)
Sol. The correct answer is (b) A, B, C and D only. Learner-related factors that influence learning encompass various aspects of the learner's internal and external state that can affect their ability to learn and perform academically. These factors include:

A. Learner's level of aspiration and achievement motivation: This involves the learner's goals, ambitions, and the drive to achieve success in learning tasks.

B. Learner's readiness and will power: Readiness refers to the learner's preparedness or state of being adequately equipped to undertake learning tasks. Will power involves determination and persistence in pursuing learning goals.

C. Basic potential of the learner: This refers to the innate abilities or capacities of the learner, including cognitive capabilities and learning aptitudes.

D. Learner's physical and mental health: A learner's health status can significantly impact their ability to concentrate, persist with tasks, and ultimately, their learning outcomes.

E. Personality traits and behavior of teacher: While the teacher's personality and behavior can indeed affect the learning environment and the learner's experience, this factor is not directly related to the learner but rather to the external conditions influencing learning.

Therefore, options A, B, C, and D focus on factors directly related to the learner and their internal state or conditions, making (b) A, B, C and D only the correct answer. Option E, which concerns the teacher's characteristics, does not fall under learner-related factors.

Q7. The mechanical model of mass communication is characterized by
1. Multiple ways flows
2. One-way flow
3. From one-to-many
4. Can be anonymous
5. Active audience
Choose the correct answer from the option given below:
(a) A, B, C only
(b) B, C, D only
(c) C, D, E only
(d) A, D, E only
Ans.(b)
Sol. The mechanical model of mass communication is characterized by a one-way flow of information, from one source to many receivers, and the potential for the audience to be anonymous. This model does not consider feedback from the audience, thus emphasizing the sender's control over the message and the lack of interaction with the audience.

Q8. Identify the nuclear disasters among the following:
(A) Love cannal
(B) Fukushima
(C) Kyshtym
(D) Chernobyl
(a) B and C Only
(b) B, C and D Only
(c) A, B and D Only
(d) D Only

Ans.(b)
Sol.
1. **(B) Fukushima:**
Nuclear disaster. Occurred in **2011** at the Fukushima Daiichi Nuclear Power Plant in Japan following a massive earthquake and tsunami. It resulted in reactor meltdowns and significant radioactive contamination.
2. **(C) Kyshtym:**
Nuclear disaster. Took place in **1957** at the Mayak Production Association in the Soviet Union (now Russia). It is considered one of the worst nuclear accidents before Chernobyl, caused by the explosion of a radioactive waste storage tank.
3. **(D) Chernobyl:**
Nuclear disaster. Happened in **1986** at the Chernobyl Nuclear Power Plant in Ukraine (then part of the Soviet Union). It is the world's worst nuclear disaster, leading to widespread radioactive contamination and long-term health and environmental impacts.
Information Booster: · Fukushima (2011): Level 7 disaster on the International Nuclear Event Scale (INES), the same as Chernobyl.
Kyshtym (1957): Classified as a Level 6 disaster on the INES, caused by the release of radioactive material from a poorly maintained storage facility.
Chernobyl (1986): Triggered by a reactor explosion during a safety test, resulting in massive radioactive fallout across Europe.
Additional Knowledge: · (A) Love Canal:
Not a nuclear disaster. Love Canal refers to an environmental disaster in the United States during the late 1970s. Toxic chemical waste was improperly buried under a residential neighborhood in New York, leading to severe health and environmental problems.
Love Canal: While not related to nuclear materials, it raised awareness about the consequences of toxic waste mismanagement and inspired the creation of the Superfund program in the United States.

Q9. Which of the following can be cultural barriers in classroom communication?
(A) Language
(B) Signs and symbols
(C) Stereotypes
(D) Individual creativity
(E) Intercultural orientation
Codes:
(a) (A) and (B) only
(b) (B) and (C) only
(c) (A), (B) and (C) only
(d) (C), (D) and (E) only
Ans.(c)
Sol. Language, **signs and symbols**, and **stereotypes** are all common cultural barriers in classroom communication. Differences in language can create misunderstandings or misinterpretations. **Signs and symbols** may have different meanings in different cultures, leading to confusion. **Stereotypes** can lead to bias and affect how students perceive and communicate with each other.
Information Booster:
Cultural barriers affect both verbal and non-verbal communication, often leading to misunderstandings in multicultural classrooms.
Overcoming cultural barriers requires cultural sensitivity, awareness, and adaptation in communication strategies.

Additional Knowledge:
Individual creativity: Typically enhances communication, encouraging diverse perspectives and innovative ideas, rather than being a barrier.
Intercultural orientation: Refers to being open and adaptable to different cultures, which is generally seen as an asset in fostering better communication, not a barrier.

Q10. Which of the following are sources of data in historical research?
(A) Personal observation
(B) Focused group discussion
(C) Oral testimony
(D) Relics
(E) Actuaries
Choose the correct answer from the options given below:
(a) A, B, C Only
(b) B, C, D Only
(c) A, C, D Only
(d) C, D, E Only
Ans.(d)
Sol. In **historical research**, sources of data typically include **oral testimony (C)**, **relics (D)** (artifacts, documents, and physical evidence from the past), and **actuaries (E)** (historical records, often related to statistical data, vital statistics, or life tables). These sources provide insight into past events and conditions. While personal observation and focused group discussions are common in contemporary research, they are not typically used in historical research as sources of historical data.
Information Booster: 1. **Oral testimony** refers to accounts and stories passed down through generations, often used to supplement historical records in the absence of written documentation.
2. **Relics** include artifacts, objects, or documents from the past that help reconstruct historical events.
3. **Actuaries** in historical research refer to statistical records, such as census data, birth and death records, and other demographic data.
4. **Personal observation** is more aligned with fieldwork or ethnographic studies and is not typically a primary source in historical research.
5. **Focused group discussions** are contemporary qualitative methods, more relevant to modern social science research rather than historical analysis.