

## UGC NET Dec 2020 and June 2021 21<sup>st</sup> November Evening Shift

1.) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by Company (in Thousands)		Percentage (%) of PCs sold by Company	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

What is the total number of PCs produced by Company A which remain unsold in all the six years together?

- (A) 137400
- (B) 144340
- (C) 152200
- (D) 168000

2.) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

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2018	72	65	40%	80%
2019	90	80	60%	50%

What is the ratio of the number of PCs sold by Company B in 2018 to the number of PCs that remained unsold by Company A in the year 2015?

- (A) 5 : 2
- (B) 4 : 1
- (C) 5 : 3
- (D) 4 : 3

3.) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

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2018	72	65	40%	80%
2019	90	80	60%	50%

What is the difference between the total number of PCs sold and the total number of unsold PCs of Company B in all the six years together?

- (A) 68700
- (B) 70500
- (C) 72100
- (D) 73800

4.) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

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2018	72	65	40%	80%
2019	90	80	60%	50%

The number of PCs sold by Company A in 2015 is what percentage of the number of PCs sold by Company B in the year 2019?

- (A) 82.5%
- (B) 87.5%
- (C) 90%
- (D) 97.5%

5.) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by Company (in Thousands)		Percentage (%) of PCs sold by Company	
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2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

The number of PCs sold by Company A in year 2017 is what percentage more than the number of PCs unsold by Company B in year 2016?

- (A) 250%
- (B) 200%
- (C) 120%

(D) 80%

6.) Which level of teaching is also designated as 'exploratory understanding'?

- (A) Memory level
- (B) Understanding level
- (C) Reflective level
- (D) Autonomous development level

7.) Identify the characteristics of 'Field-independent learner'

- A. Seeks guidance and demonstrations from teacher
- B. Focuses on details of curriculum materials
- C. Likes to compete
- D. Relates concepts to personal experience
- E. Can organize information by himself or herself

Choose the correct answer from the options given below:

- (A) A, B and C only
- (B) A, C and D only
- (C) B, C and E only
- (D) C, D and E only

8.) Match List I with List II

List I	List II
(Teaching Method)	(Examples)
A. Monologic teaching method	I. Cybernetics and computer-aided instruction
B. Dialogic teaching method	II. Case studies and tutorials
C. Action based teaching method	III. Team teaching and demonstration
D. Self study based teaching method	IV. Simulation and role playing

Choose the correct answer from the options given below:

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

9.) Given below are two statements:

Statement I: Engagement in the learning process refers to the amount of time students devote to learning in the classroom.

Statement II: Formative assessment is formal whereas summative assessment is informal.

In the light of the above statements, Choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true.
- (B) Both Statement I and Statement II are false.
- (C) Statement I is true but Statement II is false.
- (D) Statement I is false but Statement II is true.

10.) Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Teaching support system as provided by ICT based gadgets is intended to optimise learning and interest in learning material.

Reasons R: Any meaningful support in teaching has to be instrumental in augmenting learning conditions and outcomes.

In the light of the above statements, Choose the most appropriate answer from the options given below:

- (A) Both A and R are correct and R is the correct explanation of A
- (B) Both A and R are correct but R is NOT the correct explanation of A
- (C) A is correct but R is not correct
- (D) A is not correct but R is correct

11.) Data of research take the forms of words or pictures with the researcher as the key instrument in which of the following studies?

- (A) Participant observation based Studies
- (B) Ex Post Facto Studies
- (C) Experimental Studies
- (D) Descriptive survey Studies

12.) Identify the characteristic features of ‘Hypothetico-deductive research’ paradigm:

- A. Researcher is detached from the study to avoid bias
- B. Researcher becomes immersed in the research situation present or past
- C. The researcher seeks to establish relationships and explains causes of changes in measured social facts
- D. Actual settings are the direct source of data
- E. An attempt is made to set up universal context free generalizations.

Choose the correct answer from the options given below:

- (A) A, B and C only
- (B) B, C and D only
- (C) A, C and E only
- (D) C, D and E only

13.) Match List I with List II

List I	List II
Research Types	Goal of Research
A. Fundamental Research	I. Appraising impact of interventions
B. Applied Research	II. Amelioration of a given situation
C. Action of Research	III. Exploring applicability of already established principles
D. Evaluative Research	IV. Advancing the corpus of knowledge in a field

Choose the correct answer from the options given below:

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

14.) Given below are two statements:

Statement I: At every step of research genuineness is to be vouched. Hence the issue of research ethics becomes germane.

Statement II: ICT application in research is supportive and facilitative rather than mandatory and absolute.

In the light of the above statements, choose the most appropriate answer from the options given below:

- (A) Both Statement I and Statement II are correct
- (B) Both Statement I and Statement II are incorrect
- (C) Statement I is correct but Statement II is incorrect
- (D) Statement I is incorrect but Statement II is correct

15.) Given below are two statements: One is labelled as Assertion A and the other is labeled as Reason R.  
Assertion A: Research Hypothesis (H1) cannot be directly verified.  
Reasons R: Null Hypothesis (H0) is helpful in making a claim by the researcher that his/her findings are not fortuitous or by chance.  
In the light of the above statements, Choose the most appropriate answer from the options given below:  
(A) Both A and R are correct and R is the correct explanation of A  
(B) Both A and R are correct but R is NOT the correct explanation of A  
(C) A is correct but R is not correct  
(D) A is not correct but R is correct

16.) Which type of Communication is most difficult in gearing message to an audience?  
(A) Interpersonal Communication  
(B) Mass Communication  
(C) Intrapersonal Communication  
(D) Group Communication

17.) Given below are two statements:  
Statement I: Audience noise is potent when the message is controversial.  
Statement II: It is impossible for any communication to convert an audience from one viewpoint to another.  
In the light of the above statements, choose the correct answer from the options given below :  
(A) Both Statement I and Statement II are true  
(B) Both Statement I and Statement II are false  
(C) Statement I is true but Statement II is false  
(D) Statement I is false but Statement II is true

18.) Given below are two statements: One is labelled as Assertion A and the other is labeled as Reason R.  
Assertion A: Research has shown that the two-step flow theory is oversimplified for every field of interest.  
Reasons R: People tend to make great use of the media now in their respective interest.  
In the light of the above statements, Choose the most appropriate answer from the options given below:  
(A) Both A and R are correct and R is the correct explanation of A  
(B) Both A and R are correct but R is NOT the correct explanation of A  
(C) A is correct but R is not correct  
(D) A is not correct but R is correct

19.) Physical barriers to communication are rapidly disappearing, but psychological obstacles remain owing to which of the following?  
A. By formal language  
B. By visual presentation  
C. By use of technology  
D. By emotional appeal  
E. By cultural attitude  
Choose the correct answer from the options given below:  
(A) A, D and E only  
(B) A, B and C only  
(C) B, C and D only  
(D) C, D and E only

20.) Match List I with List II.

List I

Elements of Communication

A. Source

B. Receiver

C. Message

D. Channel

List II

Characteristic feature

I. Means used to convey the message

II. Set of verbal and nonverbal cues from a source

III. A person who interprets the message

IV. A person or an event which provides verbal/non-verbal cues.

Choose the correct answer from the options given below:

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

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

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

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

21.) If the selling price is doubled, the profit triples. What would be the profit percentage?

(A) 25%

(B) 50%

(C) 100%

(D) 125%

22.) Mohan buys a second hand television at a cost of Rs. 7,500 and spends Rs. 500 on its repair. Later on he sells it at a cost of Rs. 9,000. How much profit he gets in this process?

(A) 7.5%

(B) 12.5%

(C) 20%

(D) 25%

23.) The cost price of 10 items is same as the selling price of N items. If the profit is 25%, then the value of N is?

(A) 8%

(B) 16%

(C) 20%

(D) 25%

24.) The average age of A, B and C is 25 years. If the average age of A and B is 22 and that of B and C is

23. Then what is the age of B?

(A) 15 years

(B) 20 years

(C) 25 years

(D) 30 years

25.) In a cricket match, in the first 20 overs run rate was 4.5. What should be the run rate in the remaining 30 overs to meet a target of 325?

(A) 6.24

(B) 7.83

- (C) 5.94
- (D) 8.21

26.) Which of the following statements is true regarding two contrary propositions?

- (A) They can both be true
- (B) The truth of one entails the falsity of the other
- (C) They cannot both be false
- (D) The falsity of one entails the truth of the other

27.) Given below are two statements:

Statement I: An informal fallacy is one that may be identified through mere inspection of the form or structure of an argument.

Statement II: Formal fallacy is one that can be detected only through analysis of the content of the argument.

In the light of the above statements, Choose the most appropriate answer from the options given below:

- (A) Both Statement I and Statement II are correct
- (B) Both Statement I and Statement II are incorrect
- (C) Statement I is correct but Statement II is incorrect
- (D) Statement I is incorrect but Statement II is correct

28.) Which of the following statements about blogs in network communication is True?

- (A) The content of a blog can be edited by anyone.
- (B) A blog is a synchronous communication system that allows people to chat in real-time.
- (C) A blog consists of posts in reverse chronological order.
- (D) A blog is a history of web pages that you have visited, maintained by an ISP.

29.) Identify the correct order of the following INTEL processors in the increasing order of speed.

- A. 80486
- B. 8085
- C. Dual Core
- D. Pentium-III

Choose the correct answer from the options given below:

- (A) A, B, C, D
- (B) B, A, D, C
- (C) A, B, D, C
- (D) A, C, D, B

30.) Given below are two statements:

Statement I: Bus, Ring, Star, and Mesh are types of network protocols.

Statement II: A short-range radio communication standard that transmits data over short distances up to approximately 30 feet is known as Bluetooth.

In the light of the above statements, Choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true
- (B) Both Statement I and Statement II are false
- (C) Statement I is true but Statement II is false
- (D) Statement I is false but Statement II is true

31.) Which of the following group of statements in the context of Information Technology (IT) is correct?

- A. Mouse, Keyboard, and Plotter are all input devices.
- B. Unix, Windows, and Linux are all operating systems.
- C. Register, Cache Memory, and Hard Disk are all memory modules.

- D. Monitor, Printer, and Scanner are all output devices.  
Choose the correct answer from the options given below:  
(A) A and B only  
(B) A and D only  
(C) C and D only  
(D) B and C only

32.) Match List I with List II

List I

(Computer Terms)

A. Processor

B. RAM

C. Hard Disk

D. Compiler

List II

(Description)

I. Part that runs executable programs

II. Part that stores files permanently

III. Part that stores instructions and data temporarily for use

IV. Part that translates source program to executable program

Choose the correct answer from the options given below:

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

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

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

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

- 33.) A coal fired thermal power plant has an efficiency of 35%. The electricity from the power plant is used entirely for lighting purposes with average efficiency of 20%. What is the overall efficiency of conversion from coal to lighting?  
(A) 15%  
(B) 55%  
(C) 70%  
(D) 7%

- 34.) As per Sustainable Development Goal 3, one of the targets is to reduce under-5 mortality per 1000 live births to at least as low as  
(A) 50  
(B) 40  
(C) 25  
(D) 15

- 35.) In a polluted urban area, which of the following constituents of photochemical smog has the least concentration (parts per billion by volume)?  
(A) CO Carbon monoxide  
(B) Nitrogen dioxide  
(C) Hydrocarbons (without methane)  
(D) Ozone

- 36.) For drinking and irrigation purposes, the availability of suitable water out of earth's total water supplies is about less than  
(A) 1%



- (B) 5%
- (C) 6%
- (D) 10%

37.) The Indian council of Social Science Research was established for:

- A. strengthening different disciplines
- B. promoting researches in social science
- C. enhancing quality of social science as a discipline
- D. providing a platform for discussion on social scientists' concerns
- E. supporting seminars and conferences organized by Universities

Choose the correct answer from the options given below:

- (A) A and C only
- (B) B and C only
- (C) A and B only
- (D) B and D only

38.) The first regulatory body in higher education in India was set up under the rubric of :

- (A) UGC
- (B) MCI
- (C) BCI
- (D) AICTE

39.) Who among the following was the Chairman of University Education Commission (1948)?

- (A) Dr. D.S. Kothari
- (B) Maulana Abul Kalam Azad
- (C) Dr. Zakir Hussain
- (D) Dr. S. Radhakrishnan

40.) For maintenance of standards of teaching examination and research and coordination of University Education which of the following section of UGC act should be referred to?

- (A) Section 28
- (B) Section 25
- (C) Section 15
- (D) Section 12

41.) The NEP 2020 prioritises the increase in the GER in preschool to secondary level by 100% by the year

- (A) 2025
- (B) 2030
- (C) 2035
- (D) 2040

42.) Which fallacy is committed in the argument — “Sound is a quality because it is visible”?

- (A) Asryāsiddha
- (B) Vyāpyatvāsiddha
- (C) Svarupāsiddha
- (D) Sādhyāsiddha

43.) Which kind of inference is illustrated when one argues that sound must be a quality because it cannot be a substance or an activity or a relation and so on?

- (A) Sesāvata

- (B) Purvāvata
- (C) Sāmānyaodrsta
- (D) Both Purvāvata and Sāmānyatodrsta

44.) Under which of the following conditions an inference may be categorized as Kevalanvayl?

- (A) When it is based on middle term which is only positively related to the major term
- (B) When it is based on middle term which is only negatively related to the major term
- (C) When it is based on middle term which is both positively and negatively related to the major term
- (D) When middle term and major term have the relationship of identity (tādātmaya) between them

45.) Tidal range (R) is a critical factor in determining whether an estuary would be useful for tidal power generation as energy (E) available per tidal cycle depends on scales with R as according to the following relation:

- (A)  $E \propto R$
- (B)  $E \propto R^{3/2}$
- (C)  $E \propto R^2$
- (D)  $E \propto R^3$

46.) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the collaborative process, which may or may not have occurred as intended. Providing 15 or 20 minutes at the beginning of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

What is the main determinant of time allocation in cooperative learning?

- (A) Time devoted to group work
- (B) Time devoted to all groups
- (C) Time devoted to presentation of reports
- (D) Complexity and the number of tasks involved

47.) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group

reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the collaborative process, which may or may not have occurred as intended. Providing 15 or 20 minutes at the beginning of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

What can disrupt group work?

- (A) Difficulty of task
- (B) A whole class discussion
- (C) Discussions which involve emotions
- (D) Arguments on various points

48.) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the collaborative process, which may or may not have occurred as intended. Providing 15 or 20 minutes at the beginning of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

A major chunk of time in cooperative learning is devoted to which of the following?

- (A) Individual group presentation
- (B) Whole class discussion
- (C) Individual group work
- (D) Debriefing

49.) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to

devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the collaborative process, which may or may not have occurred as intended. Providing 15 or 20 minutes at the beginning of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

The members of cooperative learning team should be given enough time to

- (A) reflect
- (B) discuss
- (C) ask questions
- (D) present new ideas

50.) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the collaborative process, which may or may not have occurred as intended. Providing 15 or 20 minutes at the beginning of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

The most appropriate caption for the passage will be:

- (A) Guidelines for cooperative learning
- (B) Procedure for cooperative learning
- (C) Precaution in the conduct of cooperative learning
- (D) Limitations of cooperative learning