1. Twenty percent of all energy consumed in the country is consumed by home appliances. If appliances that are twice as energy-efficient as those currently available are manufactured, this figure will eventually be reduced to about ten percent.

The argument above requires which of the following assumptions?

(a) Home-appliance usage would not increase along with the energy efficiency of the appliances.
(b) It would not be expensive to manufacture home appliances that are energy-efficient.
(c) Home-appliance manufacturers now have the technology to produce appliances that are twice as energy-efficient as those currently available.
(d) The cost of energy to the consumer would rise with increases in the energy efficiency of home appliances.

(e) None of these

Direction (2-6): Study the following information carefully and answer the questions which follow—

In a certain code language, some statements are coded as follow:

'give solution for problem' is coded as '*N8 %M7 @E4'
'pure fruit sell plants' is coded as '@T5 %E4 *L4' *D6 @Y7 %T3'
'spa guards picked flake' is coded as ' %D6 @S6 #E5 *A3'.

2. Which of the following will be the code for 'fruit picked teach game'?

(a) @T5 %D5 #H4 *E4
(b) @T5 %D6 @H5 *E4
(c) @T5 #H4 *E4 %D6
(d) @T5 #H5 *E4 %D6
(e) @T5 #H4 *E4 %D6

3. What will be the code for 'ghostly'?

(a) #Y6
(b) @Y7
(c) %D7
(d) *E4
(e) %D6

4. Which of the following will be the code for 'pure water spa tune'?

(a) *A3 %E4 @R5 *E4
(b) @R5 *E3 %A4 #E4
(c) %A4 #E4 @R4 *E4
(d) %E4 @R4 #E4 *A3
(e) *A3 %E4 @R5 #E4

5. If 'solution farm grain seem' is coded as '*N8 %M4 @N5 #M4'. Then what is code for 'plants mean grain seem'?

(a) #S6 *S5 %M4 #N5
(b) %A4 #E4 @R4 *E4
(c) @N5 #S6 *S5 %M4
(d) *S5 %M4 #N5 @S6
(e) None of these

6. What will be the code for 'problem good'?

(a) #Y6 #D4
(b) %M7 @D4
(c) @M7 %D4
(d) %S7 @D4
(e) @D4 %D6

Direction (7-11): Read the given information carefully and answer the given questions.

Twelve friends are sitting in two parallel rows containing six people each in such a way that there is equal distance between adjacent persons. In row 1 A, B, C, D, E and F are seated and all of them are facing north and in row 2 P, Q, R, S, T and U, are seated and are facing south, but not necessarily in the same order.

There are four persons sits to the right of R. R's daughter is immediate neighbour of the one, who faces R. There are one person sits between R's son and R's daughter. Q is married to F. R's son-in-law sits third to the left of the one, who faces the person, who is immediate left of A's brother. Two persons sit between S and T. R's brother sits second to the right of R's sister. S does not sit one of the extreme ends. A is brother-in-law of B. A's father sits second to the right of A's brother. E is married to S. only one person sits between A's brother and R's mother. R's son-in-law does not sit one of the extreme ends. A's sister-in-law faces S. A's sister-in-law sits third to the left of R's daughter. P faces E, who sits one of the extreme left end. B sits third to the right of E. Q sits immediate right of the person, who faces R's wife. R's mother sits third to the left of the one, who faces the one, who sits immediate right of R's son-in-law. R's brother-in-law sits fourth to the left of R's wife. C sits diagonally opposite to the one, who is immediate right of U. A is son-in-law of D.

7. Who sits immediate left of the one, who is sister-in-law of A?

(a) B
(b) C's brother
(c) Q's brother
(d) E's brother-in-law
(e) Q

8. Who is grandmother of B?

(a) T
(b) D's mother-in-law
(c) Person sits one of the extreme left end.
(d) E's mother-in-law
(e) All are true
9. Who sits second to the left of the one, who faces the person, who sits second to the left of P?
(a) R’s brother  (b) Q  
(c) None are true  (d) A  
(e) S’s husband

10. Who is the niece of P?
(a) B  (b) T’s son  (c) Q’s wife 
(d) Q’s sister-in-law  (e) Q

11. If P related to A’s sister-in-law in the same way as Q related to R’s daughter. Which of the following is U related to, following the same pattern?
(a) R’s brother  (b) C’s brother  (c) U  
(d) A  (e) None of these

Direction (12-13): Each question consists of some conclusion followed by five statements. Consider the given conclusion to be true even if they seem to be at variance with commonly known facts. Read the conclusions and then decide from which statement, the conclusion can be possible.

12. **Conclusion:** No toxic is injection.  
Some injection are glucose.  

**Statement:**
(a) All toxic are tablet  
No tablet is glucose  
Some glucose are medicine  
All medicine are injection  
(b) Some toxic are tablet  
All tablet are injection  
Some injection are glucose  
All glucose are medicine  
(c) All tablet are toxic  
No injection is toxic  
Some glucose are injection  
All glucose are medicine.  
(d) Some injection are toxic  
All injection are tablet  
Some toxic are glucose  
All glucose are medicine  
(e) Some medicine are toxic  
Some toxic are injection  
Some injection are tablet  
All tablet are glucose

13. **Conclusion:** Some clock are watch.  
Some wheel are buses.

**Statement:**
(a) All watch are clocks  
Some clocks are tyres  
Some tyres are wheels  
Some wheels are buses  
(b) Some watch are wheel  
All wheel are tyre  
Some tyre are buses  
All buses are clock  
(c) Some buses are tyre  
Some tyre are clock  
All clock are watch  
Some watch are wheel  
(d) All tyre are buses  
Some buses are wheel  
Some wheel are clock  
No clock is watch  
(e) Some buses are watch  
Some watch are tyre  
Some tyre are clock  
Some clock are wheel

14. **Statement:** By asking five prominent hospitals in the national capital to deposit nearly Rs. 600 crore to compensate for their failure to treat poor patients, the Delhi government has drawn attention to the social obligation of healthcare providers in the corporate sector as well as the need for timely enforcement of applicable regulations. According to the Delhi government, trusts and registered societies to which public land was allotted to establish hospitals were required to earmark a percentage of their medical facilities and services for indigent patients.

**Assumptions:**
I. This strengthens the case for private hospitals to dedicate a part of their services to those who cannot afford treatment.  
II. Social responsibility of hospitals must be monitored and central government should ensure compliance by the corporate hospitals.  
III. There is a great need for the government to monitor and enforce “health services” so that the poor who cannot afford modern health facilities that are extremely costly- are able to be benefited.

(a) All are implicit  
(b) Only III is implicit  
(c) Only I and III are implicit  
(d) Only I and II are implicit  
(e) None is implicit

15. The ancient Nubians inhabited an area in which typhus occurs, yet surprisingly few of their skeletons show the usual evidence of this disease. The skeletons do show deposits of tetracycline, an antibiotic produced by a bacterium common in Nubian soil. This bacterium can flourish on the dried grain used for making two staples of Nubian diet, beer and bread. Thus, tetracycline in their food probably explains the low incidence of typhus among ancient Nubians.

Which of the following is an assumption can be drawn from the passage?
I. Infectious diseases other than typhus to which the ancient Nubians were exposed are unaffected by tetracycline.  
II. Tetracycline is not rendered ineffective as an antibiotic by exposure to the process involved in making bread and beer.
III. Typhus cannot be transmitted by ingesting bread or beer contaminated with the infectious agents of this disease.

IV. Bread and beer were the only items in the diet of the ancients Nubians which could have contained tetracycline.

V. Typhus is generally fatal.
(a) Only II follows
(b) Only III & V follow
(c) Only III follows
(d) Only II, III, IV and V follow
(e) None of these

6. It is not often that professional footballers retire from internationals at the peak of their game. When the 29-year-old Lionel Messi, widely reckoned to be the most skilled footballer today, announced after the 2016 Copa America Final against Chile that he would not wear the Argentinian shirt again, he took everyone by surprise. It is not clear if he has made the retirement call in the heat of the moment. It came after Messi failed, yet again, to win a major title with the Argentinian team; he also missed a crucial penalty in the shootout against Chile after efficient but goal-less play in regulation and extra time. In fact, Messi’s overall international record with Argentina has been good, if not spectacular. With him, the team has reached the finals of four important tournaments: the World Cup in 2014 and the Copa America in 2007, 2015 and 2016. According to the given question, you have to decide which of the statement is/are strong on the basis of the given passage:-

After defeating in Copa America Final, Should Messi continues his international career for two years more?

I. Yes, because it is the only way he can prove himself to the world as a challenging person.

II. No, It is his personal decision to play no more for Argentina and as a player he gave a lot of contribution to his nation. So we should respect his decision.

III. No, because Messi’s record as a player of Barcelona is quite better than as a player of Argentina. So he should focus on one side rather than playing for both of them.

(a) Only II & III are strong
(b) Only I & III are strong
(c) Only II is strong
(d) Only III is strong
(e) None is strong

Direction (17-21): Read the given information carefully and answer the given questions.

Ten people G, H, I, J, K, L, W, X, Y and Z live in a building with four floors. Each floor has 3 flats - flat 1, flat 2, and flat 3 in the same order from left to right. Ground floor is numbered floor 1 and top most floor is floor 4. Each flat is built in such a way that Flat 1 of floor 2 is just above Flat 1 of floor 1 and so on. The two flats in which no one lives are on even numbered floor and in even numbered flat. G does not live on even numbered floor and even numbered flat. W lives in the flat just above H. The flat between K and X is vacant and K lives in one of the flat above X. L lives in an odd numbered flat which is in the left of X. Z and Y lives on the same floor and no one else is living with them on that floor. G lives on a floor and flat just above W’s floor and flat. I live on one of the floor on which one flat is vacant. Z and I both lives in the flat which is numbered 1.

17. Who is living just above X?
(a) K
(b) G
(c) J
(d) Z
(e) No one

18. Which of the following statement is true about G?
(a) G lives on an even numbered flat
(b) K is the immediate neighbour of G
(c) G lives on a floor on which one flat is vacant
(d) None is true
(e) G and W lives on the same floor

19. Which of the following lives on the ground floor?
(a) G
(b) I
(c) L
(d) W
(e) Both (a) & (c)

20. Which of the following does not belong to a certain group?
(a) J
(b) L
(c) W
(d) H
(e) Y

21. Who is living in flat 1 on floor 4?
(a) Z
(b) Y
(c) No one
(d) G
(e) W

Directions (22-24): Each question consists of four statements followed by five conclusions. Consider the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions does not logically follow from the given statements using all statements together and mark that conclusion as your answer.

22. Statements: All chairs are table
Some table are Books
All Books are Pen.
No Pen is a Copy.

Conclusions: (a) Some table are not copy.
(b) All table being Pen is a possibility.
(c) At least some Copy are Pen.
(d) All Books are not copy.
(e) Some pen are books

23. Statements: Some pencils are kites.
Some kites are desks.
All desks are cup.
All cup are tea.

Conclusions: (a) All tea are cup is a possibility.
(b) Some cup are definitely pencils
(c) Some tea are desks.
(d) Some cup are kites.
24. **Statements:**
   - Some boards are paper.
   - All clips are papers.
   - All lanes are roads.

**Conclusions:**
- (a) Some roads can be boards
- (b) Some lanes are papers
- (c) Some boards are clips
- (d) All roads are clips
- (e) Some roads are paper

**Direction (25-29):** Read the given information carefully and answer the given questions.

J, K, L, M, S, T, U and V are eight employees of an organization and they will attend a meeting in the four months (March, June, October & November). The meeting held in each month on 13th and 22nd date. Only two meetings held in a month. No person can attend the meeting after L. M attends the meeting in the month which has less than 31 days. Only two meetings held in a month. No person can attend the meeting after L. M attends the meeting in the month which has less than 31 days. S and U attends meeting after M on date 22nd of different months, while J & K attends before M and K attends after J in the same month. V does not attend the meeting in the month in which either S attends or L attends.

25. How many people attends meeting between S and L?
   - (a) 1
   - (b) 2
   - (c) 3

26. Four of the following follow a same pattern find the one which does not follow?
   - (a) J – March
   - (b) S – March
   - (c) U – October
   - (d) U – 22
   - (e) T – November

27. Who attends meeting in November?
   - (a) T, L
   - (b) M, T
   - (c) S, T
   - (d) S, U
   - (e) None of these

28. Who attends meeting immediately after M?
   - (a) U
   - (b) S
   - (c) V
   - (d) T
   - (e) L

29. S attends meeting in the month of?
   - (a) June
   - (b) October
   - (c) November
   - (d) March
   - (e) None of these

30. Targeted Delivery of Government subsidies and benefits to ensure that they reach the poor and the deserving. What would be the cause of above government budget?
   - (a) Some portion is still untouched from new subsidies and other scheme.
   - (b) Some urban sector can get subsidy scheme profit.
   - (c) DBT ensures related information about the poor people for subsidies.
   - (d) The transparency and clearance will be increased.
   - (e) None of these
Solutions

1. (a); This argument is based on the assumption that if the appliances become more efficient, then more homes would not be tempted to increase their utility/consumption in the household.

Direction (2-6):
2. (d); @T5 #H5 *E4 %D6
3. (b); @Y7
4. (e); *A3 %E4 @R5 #E4
5. (c); @N5 #S6 *S5 %M4
6. (b); %M7 @D4

Direction (7-11):
7. (c);

8. (e);

9. (e);

10. (d);
11. (b);

Direction (12-13):
12. (c);

13. (a);

14. (c): Such strict actions of Delhi government made private hospitals to serve their services to poor people. So I is implicit. But nothing is mentioned about central government in the statement II also it is a course of action, So, II is not implicit.

According to statement Delhi Govt. wanted to provide medical facilities for indigent patients. So we can assume that there is need for the govt. to monitor and enforce health services to the needy person.

15. (a): Statement II is a valid assumption as tetracycline is produced by a bacterium which is found in Nubian soil and the bacterium can develop on the grain which is used in making bread & beer. So tetracycline is formed through the process of making of bread & beer. Statement I is not valid because nothing is said in the passage about the disease other than typhus. Statement III is also not valid because Typhus is a disease and the statement talks about the contamination of a disease by another disease which is wrong in the context of this passage. Statement IV & V is invalid as No information is given in the passage that bread & beer were their only items in the diet and also about Typhus is fatal.

16. (c): Only II is strong argument because it clearly explains the freedom which is given to a person to take decisions about his life. So it gives a valid reason. Argument I is a weak statement because of the ‘only’ word used in the statement. Messi can prove himself by all other ways also. Argument III is also a weak Statement because there is a comparison between the position of Messi as a player of Argentina and the position of Messi as a player of Barcelona club.

Direction (17-21):
17. (e);

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Directions (22-24):
22. (c);

23. (b);

24. (d);

Direction (25-29):
25. (c);

26. (b);
27. (a);

28. (b);

29. (a);
30. (a); Govt. promulgate about subsidies and benefits to give benefit to untouched portion of our Population.