Mathematical Puzzle

Questions 01 – 03 :

Answer the questions based on the following information :

Four sisters–Subarna, Tara, Uma and Vibha are playing a game such that the loser doubles the money of each of the other players from her share. They played four games and each sister lost one game in alphabetical order. At the end of fourth game, each sister had Tk. 32.

01. Who started with the lowest amount?

(A) Subarna (B) Tara (C) Uma (D) Vibha (E) None of these

02. Who started with the highest amount?

(A) Subarna (B) Tara (C) Uma (D) Vibha (E) None of these

03. What was the amount with Uma at the end of the second round?

(A) Tk.36 (B) Tk.72 (C) Tk.16 (D) Tk. 20 (E) None of these

Sequence Puzzle

Questions 04 – 07:

All padlocks manufactured by the Guaranteed Combination Lock Company have a combination that consists of four elements one-digit number, a two-digit number, and two letters of the alphabet.

Each combination conforms to the following rules:

(1) The one-digit number is the first element in the combination.

(2) The two letters of the alphabet are not adjacent elements in the combination.

(3) The two-digit number consists of two different numerals.

(4) The two-digit number has no numerals in common with the one-digit number.

04. Which of the following is a sequence of elements that conforms to the rules?

(A) 6-73-D-M (B) 2-X-37-G (C) 39-H-Y-6 (D) H-24-K-4 (E) 9-B-89-B

05. Which of the following must always be true of a combination?

(A) The second element is a two-digit number.

(B) The third element is a letter of the alphabet.

(C) The third element is a one-digit number.

(D) The fourth element is a two-digit number.

(E) The fourth element is a letter of the alphabet.

06. Which of the following CANNOT be the first element of a combination that has K-53-J as its second, third, and fourth elements?

(A) 5 (B) 6 (C) 7 (D) 8 (E) 9

07. The sequence of elements 9-K-M-29 violates which of the rules given?

(A) Rule 2 only (B) Rule 3 only (C) Rule 2 and rule 4 only

(D) Rule 3 and rule 4 only (E) Rule 2, rule 3, and rule 4

Questions 08 – 12:

Answer the questions on the basis of the information given below.

Two male singers, Paul and Sam; two female singers, Rita and Mita; two male comedians, Topu and Wahed; and two female comedians, Kate and Lira, are the eight entertainers who are to perform at the National Theater on a certain night. Each entertainer is to perform alone and only once that night. The entertainers may perform in any order that conforms to the following restrictions:

The performances by singers and the performance by comedians must alternate throughout the evening. The first performance that evening must be by a female entertainer, and the second performance by a male entertainer.

The final performance must be by a male singer.

08. Which of the following persons could be the first of the entertainers to perform?

(A) Paul (B) Rita (C) Lira (D) Mita (E) None of these

09. If Rita is to perform fourth, which of the following persons must perform sixth?

(A) Wahed (B) Sam (C) Lira (D) Mita (E) None of these

10. If Lira is to perform seventh, which of the following persons must perform first?

(A) Kate (B) Rita (C) Sam (D) Topu (E) None of these

11. If Paul is to perform eighth, which of the following persons must perform second?

(A) Wahed (B) Sam (C) Topu (D) Mita (E) None of these

12. If Kate is to perform third, Mita fourth and Wahed fifth, which of the following persons must perform sixth?

(A) Paul (B) Rita (C) Sam (D) Lira (E) None of these

Questions 13 – 16 :

Answer the question on the basis of the information given below :

Six animals-K, I, M, S, T, U-must each be scheduled for examination by a veterinarian. The animals are to be examined one at a time in six consecutive time slots on the same day according to the following conditions.

- ✓ M can not examined immediately before or immediately after S
- ✓ L must be examined immediately before U
- ✓ K must be examined fourth

13. Which of the following is an acceptable examination schedule for the animals, in order from first to last?

(A) L,T,S, K, M, U (B) L,U, T, K, S, M (C) M,T, S, L,U,K (D) S,T,M,K, L,U (E)T,M,S,K,L,U

14. If L is examined in the second slot, then which of the following must be true?

(A) K is examined at some time before S (B) M is examined at some time before T

(C) T is examined at some time after K (D) M is examined sixth

(E) S is examined first

15. S can be examined in any of the following times slots except –

(A) first (B) Second (C) Third (D) Fifth (E) Sixth

16. If L is examined first, T must be examined-

(A) Immediately before K (B) Immediately before S

(C) At some time before M (D) At some time after S (E) At some time after K

Map Puzzle

Questions 17 – 19 :

Answer the questions on the basis of the information given below :

A map representing countries R, S, W, X, Y, and Z is to be drawn. Adjacent countries cannot be the same color on the map. The only countries adjacent to each other are as follows:

- R, S, X, and Y are each adjacent to W.
- X is adjacent to Y.
- R and S are each adjacent to Z.

17. Which of the following is a pair of countries that must be different in color from each other?

(A) R and X (B) S and X (C) S and Z (D) X and Z (E) None of these

18. If X is the same color as Z, then it must be true that

(A) R is the same color as Y (B) S is the same color as X

(C) X is the same color as Y (D) W is a different color from any other country

(E) None of these

19. Which of the following is a pair of countries that can be the same color as each other?

(A) R and S (B) S and W (C) W and X (D) W and Y (E) None of these

Linking Puzzle

Questions 20 – 22 :

Study the following information carefully and answer the questions:

A loop bus has exactly six stops on its route. The bus first stops at stop one and then at stops two, three, four, five and six in that order. After leaving stop six, the bus returns to stop one and continues around the loop again. The stops are at six buildings that are, in alphabetical order, Garfield, Harrison, Johnson, Kennedy, Lincoln, and Madison.

Lincoln is stop three.

Harrison is stop six.

Kennedy is the stop immediately before Madison.

Johnson is the stop immediately before Garfield.

20. If Johnson is stop four, which of the following must be the stop immediately before Lincoln?

(A) Kennedy (B) Madison (C) Johnson (D) Garfield (E) Harrison

21. If Garfield is stop two, which of the following must be the stop immediately before Harrison?

(A) Johnson (B) Garfield (C) Lincoln (D) Kennedy (E) Madison

22. If a passenger gets on the bus at Kennedy, rides past one of the stops, and gets off at Lincoln, which of the following must be true?

(A) Kennedy is stop one. (B) Madison is stop three

(C) Lincoln is stop four. (D) Johnson is stop five. (E) Garfield is stop six.

Round Table Concept/Circular Puzzle

Questions 23 – 27 :

Answer the questions on the basis of the information given below :

Six arms negotiators – M, O, P, R, S, and T – are to be seated at a round table to discuss disarmament. There are exactly six chairs around the table. Each negotiator sits facing the center of the table and is directly opposite a negotiator across the table. The seating arrangement is subject to the following restrictions:

T cannot sit next to P.
S cannot sit next to M.
R must sit next to M.

23. If R sits next to S on S's right side; who must sit next to R on R's right side?

(A) M (B) O (C) P (D) S (E) T

24. Which of the following is an acceptable sequence of negotiators around the table?

(A) M, S, R, T, P, O (B) M, S, T, P, R, O (C) T, O, P, S, M, R
(D) T, R, M, P, S, O (E) T, S, R, M, O, P

25. If M sits next to P, which of the following is a complete and accurate list of those who can sit next to P on P's other side?

(A) O (B) O, S (C) O, S, R (D) R, S, T (E) O, R, S, T

26. If T sits next to M and S sits next to R, which of the other negotiators must sit next to S?

(A) M (B) O (C) P (D) R (E) T

27. If T sits directly across the table from O, who must sit on either side of P?

(A) M and O (B) M and S (C) O and R (D) O and S (E) R and T

Group Puzzle

Questions 28 – 32 :

Two maps are being designed. One will show subway lines: the other will show bus routes. There are three subway lines and four bus routes, and each line or route must be represented on the maps by a color used to represent it only. The colors available to the designer of the maps are blue, green, orange, purple, red, tan and yellow. Any assignment of colors to lines and routes is acceptable provided the following conditions are met: Blue cannot be used on the same map as purple. Orange cannot be used on the same map as red, nor on the same map as yellow.

28. If blue is used on the subway map, which of the following must be true?

(A) Orange is used on the subway map. (B) Yellow is used on the subway map.
(C) Purple is used on the bus map. (D) Green is used on the bus map.
(E) Red is used on the bus map.

29. If red is used on the bus map, which of the following colors must be used on the subway map?

(A) Blue (B) Orange (C) Purple (D) Tan (E) Yellow

30. If yellow and purple are used on the subway map, the third color used on that map must be?

(A) Blue (B) Green (C) Orange (D) Red (E) Tan

31. If red and blue are used on the bus map, which of the following could be the other two colors used on that map?

(A) Green and Purple (B) Green and tan (C) Green and yellow (D) Orange and tan (E) Purple and Yellow

32. If green is not used on the same map as blue, nor on the same map as yellow, which of the following must be true?

(A) Blue is used on the subway map. (B) Blue is used on the bus map.
(C) Green is used on the same map as red. (D) Purple is used on the same map as orange.
(E) Tan is used on the same map as red.

Mixed Puzzle

Questions 33 – 38 :

The consumer complaint department of a firm employs exactly six people who answer letters: G, H, I, J, K, and L. Every complaint letter received by the department is classified as either red or blue. The following procedures for answering the letters are used :

Red letters are given first to G or H. Blue letters are given first to any one of the following G, J, or I.

If a letter raises a problem that cannot be resolved by the person to whom it is given, it must be forwarded until it reaches someone who can resolve the problem and answer the letter. A letter must be forwarded as follows:

By G to I if the letter is red, but to J if the letter is blue;
By H to either G or I;
By I to J if the letter is red, but to K if the letter is blue;
By J to either I or K whether the letter is red or blue;
By K to L whether the letter is red or blue; L answers every letter given to him.

33. Any of the following can be true EXCEPT :

(A) G forwards a red letter to I. (B) H forwards a red letter to G.
(C) H forwards a red letter to I. (D) I forward a red letter to K.
(E) J forwards a red letter to I.

34. A blue letter could reach L via which of the following sequences of people?

(A) G to H to K (B) G to I to J (C) G to J to K (D) I to H to J (E) I to G to J to K

35. Any letter that reaches L must have been previously given to

(A) G (B) H (C) I (D) J (E) K

36. Which of the following could be given to each of the six members of the consumer complaint department in turn?

(A) A red letter that is first given to H (B) A red letter that is first given to G
(C) A blue letter that is first given to G (D) A blue letter that is first given to I
(E) A blue letter that is first given to J

37. Any letter that reaches L must have been given to a minimum of how many members of the consumer complaint department before reaching L?

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

38. If a member of the consumer complaint department is given a letter that he or she had previously given to some other member of the department, the person who is given the letter a second time could be :

(A) G (B) H (C) J (D) K (E) L

Questions 1 – 4 :

Answer the question on the basis of the information given below. **[Social Islami Bank; 2011]**

Six products- U, V, W, X, Y, and Z- are to be placed in the display window of a vending machine with six compartments, numbered 1 through 6 from left to right. The products must be placed in the window, one product in each compai Linent, according to the following conditions:

- U cannot be immediately to the left or immediately to the right of V.
- W must be immediately to the left of X.
- Z cannot be in compartment 6.

1. Which of the following products CANNOT be placed in compartment 1?

(A) U (B) V (C) W (D) X (E) Z

2. If X is placed in compartment 3, W must be placed in compartment

(A) 1 (B) 2 (C) 4 (D) 5 (E) 6

3. If U is placed in compartment 5, which of the following products must be placed in compartment 6?

(A) V (B) W (C) x (D) Y (E) z

4. If Z is placed in compartment 3, immediately to the right of X, which of the following products must be placed in compartment 5?

(A) U (B) V (C) W (D) x (E) Y

Questions 1 – 4 এর সমাধান:

প্রশ্নানুযায়ী ছয়টি ভিন্ন ভিন্ন **product U, V, W, X, Y** এবং **Z** বিক্রির জন্য ছয়টি ভিন্ন ভিন্ন *Compartment* -এ (১-৬ নম্বরযুক্ত) রেখে *display window* -তে সাজাতে হবে। **product**-গুলো একটি *compartment* -এ একটি করে থাকবে এবং *Compartment* -এর *numbering* $(1-6)$ করা হয়েছে বাম থেকে ডান দিকে।

নিম্নের শর্তগুলো এক্ষেত্রে প্রযোজ্য হবে–

1. U কে V এর ঠিক বামে বা ঠিক ডানে রাখা যাবে না।
2. **W** কে X এর ঠিক বামে রাখতে হবে।
3. **Z** কে *compartment* 6 এ রাখা যাবে না। $Z \neq 6$

1. কোন *product* টিকে *compartment* 1 এ রাখা যাবে না?

এখন ২নং শর্তানুযায়ী w কে x এর বামে থাকতেই হবে। তাই x কে 1 নং এ রাখা যাবে না, সেক্ষেত্রে x এর বামে রাখার মত কোন জায়গা খালি থাকবে না। তাহলে, x কে *compartment* -1 এ রাখা যাবে না। উত্তর **(D).**

2. (B)

3. প্রশ্নে জানতে চাওয়া হয়েছে U কে যদি *compartment* -5 এ রাখা হয় তাহলে *compartment* -6 এ কোন *product* টিকে রাখতে হবে। শর্তগুলো লক্ষ্য করলে দেখা যাবে,

1 এবং 3 নং শর্তানুযায়ী U ও Z কে *compartment* -6 এ রাখা যাবে না।

আবার X এর ঠিক বামে W থাকবে তাই X ও W এর কোনটিই *compartment* -6 এ রাখা যাবে না।

$\therefore$ Y কে *compartment* -6 এ রাখা যাবে। উত্তর : **(D).**

4. প্রশ্নে বলা হয়েছে, যদি Z কে *compartment* **-3** এ রাখা হয়, যা X -এর ঠিক ডানে হবে (অর্থাৎ ***x*** *Compartment* -2 এ থাকবে)। তাহলে compartment -5 এ কোন *product* টিকে রাখতে হবে। *compartment* গুলো *number* অনুযায়ী সাজালে পাই,

$\frac{1}{W}$ $\frac{2}{X}$ $\frac{3}{\_}$ $\frac{4}{U/Z}$ $\frac{5}{Y}$ $\frac{6}{v/u}$

diagram হতে দেখা যাচ্ছে Z-কে *compartment* -3 এ এবং x-কে *compartment* -2 এ বসালে 2-নং শর্তানুযায়ী w -কে *compartment* -1-এ বসাতে হবে।

অবশিষ্ট তিনটি compartment $(4,5$ এ দুইটির যে কোন একটি বসালে অপরটি 4 বা 6 নং-এ বসাতে হবে।

তাহলে ১-নং শর্ত লঙ্ঘন হবে।

তাহলে Y কে এই দুইটির (U এবং V) মাঝে রাখতে হবে। অর্থাৎ Y কে *compartment* -5 এ বসাতে হবে। উত্তর: **(C).**

Questions 5 – 8: Answer the question on the basis of the information given below : [Standard Bank; 2010]
Six animals-K, I, M, S, T, U-must each be scheduled for examination by a veterinarian. The animals are to be examined one at a time in six consecutive time slots on the same day according to the following conditions.

- ✓ M can not examined immediately before or immediately after S
- ✓ L must be examined immediately before U
- ✓ K must be examined fourth

5. Which of the following is an acceptable examination schedule for the animals, in order from first to last?
(A) L,T,S, K, M, U (B) L,U, T, K, S, M (C) M,T, S, L,U,K (D) S,T,M,K, L,U (E)T,M,S,K,L,U

6. If L is examined in the second slot, then which of the following must be true?
(A) K is examined at some time before S (B) M is examined at some time before T
(C) T is examined at some time after K (D) M is examined sixth
(E) S is examined first

7. S can be examined in any of the following times slots except –
(A) first (B) Second (C) Third (D) Fifth (E) Sixth

8. If L is examined first, T must be examined-
(A) Immediately before K (B) Immediately before S
(C) At some time before M (D) At some time after S (E) At some time after K

Questions 5 – 8 এর সমাধান:

5. **(d)** প্রশ্ন হল, প্রথম থেকে শেষ পর্যন্ত্ব ক্রমানুসারে কোনটি ***animal***-দের জন্য একটি গ্রহণযোগ্য ***examination schedule*** তা বের করতে হবে। এবার প্রশ্নের উপরে দেয়া ***condition***-এ গিয়ে সবচেয়ে সহজটি পড়া যাক। যেমন- **K**-কে অবশ্যই 4^{th}-এ ***examine*** করতে হবে। **answer**-এ গিয়ে **(c)**-তে দেখা যায় **K** আছে 5^{th}-এ, কাজেই **(c) answer** হবে না। এই শর্ত দিয়ে আর কোন **answer** বাদ দেয়া যাচ্ছে না বলে এবার আরেকটি শর্ত পড়া যাক। **L**-কে পরীক্ষা করতে হবে **U**-এর ঠিক আগে মানে **LU** পাশাপাশি। **(a)**-তে এই শর্ত মানা হয়নি বলে এটি বাদ। আরেকটি শর্তটি হল- **M**-কে **S**-এর ঠিক পূর্বে বা পরে পরীক্ষা করা যাবে না মানে **MS** পাশাপাশি থাকবে না।
(b) ও **(c)**-তে **MS** পাশাপাশি এলে এগুলো বাদ। ∴ **Answer হল (D)।**

6. **(c)** যদি **L**-কে ***second slot***-এ রাখা হয় তাহলে কোন্‌টি ***must be true*** হবে?
12 34 56

L U K

শর্তানুসারে U আসবে 3-নং slot-এ; M বা S-এর যে কোনটিকে 1-নং এ আসতে হবে কারণ তা না হলে তারা 5 ও 6-এ পাশাপাশি হয়ে যাবে না শর্ত লংঘন করবে এবার। answer দেখা যাক ঃ

S, M ও T-এর *slot fixed* না বলে (a), (b) ও (d) *must be true* নয় (*can be rue*)। T, 1-নং এ আসবে না, T আসবে 5 বা 6-নং এ অর্থাৎ, T অবশ্যই K-এর পর বসবে। ∴ Answer হল (C)।

7. (b) অর্থাৎ, S-কে নীচের কোন্ slot-এ *examine* করা যায় একটি slot ছাড়া, সেটি কোন্‌টি?

K-এর পূর্বে LU হলে তা 1, 2 বা 2, 3-এ হতে পারে, তখন S আসতে পারে 1 বা 3-এ ; K-এর পরে LU বসলে M চলে আসবে K-এর পূর্বে। MS যেহেতু পাশাপাশি আসবে না তাই S-কে 2nd-এ বসানো যাবে না। দেখা যাচ্ছে কোন ভাবেই S 2nd slot-এ বসছে না। ∴ Answer (B)।

8. (e) যদি L-কে first slot-এ *examine* করা যায় তাহলে T-কে অবশ্যই (*must*) কোন slot-এ করতে হবে?

12 34 56
L U K

এখানে 3-নং এ M বা S বসাতে হবে। তারমানে T-কে বসাতে হবে অবশ্যই K-এর পর 5 বা 6-তে। ∴ Answer হল (A)।

Questions 9-12:

Answer the questions on the basis of the information given below. [Standard Bank; PO; 2011]

Seven dignitaries-F, G, H, I, N, O, and P are to be seated together at a diplomatic ceremony. They will be seated in a row of seven chairs, numbered from 1 to 7, from front to back. Any seating is acceptable as long as all seven dignitaries are seated, one in each chair, and the seating conforms to the following rules:

* F must sit in the chair immediately behind Q's chair.
* G cannot sit in the chair immediately in front of N's chair, and G cannot sit in the chair immediately behind N's chair.
* There must be exactly two chairs between the chairs of H and P.
* There must be at least one chair between the chairs of I and P.
* N must sit in chair 3.

9. **Which of the following sitting arrangements, from chair 1 through chair 7, conforms to the rules?**

(A) F, I, N, P, G, O, H (B) G, P, N, I, H, O, F (C) I, G, N, P, O, F, H (D) I, H, N, P, O, F, G (E) O, F, H, N, I, P, G

10. **If F sits in chair 6 and H sits in chair 7, which of the following dignitaries must sit in chair 2?**

(A) G (B) I (C) N (D) O (E) P

11. **If the seating arrangement from chair 1 through chair 7, is G, I, N, H, O, F, P, which of the following pairs of dignitaries can exchange seats without violating the rules?**

(A) F and G (B) G and H (C) G and I (D) H and P (E) I and P

12. **If O sits in chair 1 and H sits in chair 7, then the number of chairs between F's chair and I's chair must be –**

(A) Zero (B) One (C) Two (D) Three (E) Four

Questions 9 – 12 এর সমাধান:

পরীক্ষার হলে যেভাবে আগাতে হবে হুবহু সেই টেকনিকেই নীচের ব্যাখ্যা লেখা হল। এই টেকনিকের নাম হল **Exam approach**। **Analytical puzzle**-টির প্রথম 8/10 লাইন না পড়েই সরাসরি প্রথম প্রশ্নটি পড়া যাক।

9. **Answer choice** গুলো বিবেচনা করে দেখা যাক ঃ

(A) ভুল, কারণ **Condition (i)** অনুযায়ী **F, O** এর পিছনে বসবে।

(B) একমাত্র সঠিক **arrangement** সবগুলো **condition** পূরণ হয়েছে।

(D) ভুল, Condition (iii) অনুযায়ী H ও P এর মধ্যে কমপক্ষে দুটি chair থাকবে।

(C) ভুল, Condition (iv) অনুযায়ী I ও P এর মধ্যে কমপক্ষে 1 টি chair থাকবে।

(E) ভুল, কারণ IP পাশাপাশি বসতে পারবে না। ∴ Answer হল (B)

10. প্রদত্ত শর্ত অনুযায়ী sequence - টি হবে

1	2	3	4	5	6	7

ব্যাখ্যা ঃ বলা হয়েছে- F বসবে 6 নম্বর chair এ ∴ H বসবে 7- এ; তাহলে P বসবে দুই ঘর বাদ দিয়ে মানে 4 এ, N এর পাশে G বসবে না, সুতরাং G বসবে 1 নম্বরে। ∴ Answer হল (B).

11. Answer choice গুলো বিবেচনা করলে;

(A) Condition (i) অনুযায়ী F, O এর ঠিক পিছনে থাকবে। ∴ সম্ভব নয়।

(B) Condition (iii) অনুযায়ী H ও P এর মাঝে দুটি chair থাকবে। ∴ সম্ভব নয়।

(C) Condition (ii) অনুযায়ী G ও N পরপর দুটি chair-এ বসবে না। ∴ সম্ভব নয়।

(E) Condition (iii) এবং (iii) অনুযায়ী এটাও সম্ভব নয়।

∴ উত্তর: (d), কারণ শর্ত হচ্ছে H এবং P এর মাঝখানে ঠিক (exactly) দুটি chair থাকতে হবে।

সুতরাং H এবং P কে যদি interchange করা হয়, তাহলে কোন সমস্যা হবে না।

12. প্রদত্ত শর্ত অনুযায়ী:

0 যদি বসে 1 নম্বর chair এ শর্ত অনুযাযী F
বসবে 2 নম্বরে; 3 নম্বরে মূল condition অনুযায়ী
বসবে N ; এবং H

এখানে Condition (v) অনুযায়ী N ৩নং চেয়ারে বসবে।

Condition (iii) অনুযায়ী F বসবে 4th chair, Condition (ii) অনুযায়ী G is in 5th chair;

∴ F এবং I বসবে 2nd অথবা 6th চেয়ারে।

∴ F ও I এর চেয়ারে মধ্যে gap থাকবে 3 টি। উত্তর: (D).

Questions 13 to 15 :

Answer the questions on the basis of the information given below. [Basic Bank, Assistant Manager, 2013]

Six films (Quest to Hope, Rats, Sam, Terror, Victory, and Wellfleet) are scheduled to be screened at a film festival. No more than two films may be screened during one day, but all of the films will be screened exactly once during the festival to be held on Wednesday through Sunday. The screening schedule adheres to these parameters:

The producers of Terror will not allow it to be screened any time prior to the screening of Victory.
Rats and Sam are to be screened the same day.
Quest to Hope and Wellfleet are both black-and-white films and should not be screened the same day.

13. If Quest to Hope, Rats, and Terror are scheduled for Wednesday, Thursday, and Friday, respectively, and if the schedule conforms to the parameters, then it must be true that –

(A) Victory is screened on Wednesday
(B) Victory is not screened on Friday
(C) Wellfleet is screened on Friday
(D) Wellfleet is screened on Wednesday

(E) Victory is not screened on Saturday

14. If Victory and Terror are screened on the same day, which of the following must be true about the film festival schedule if it conforms to its parameters?

(A) Quest to Hope and Wellfleet will be screened on the same day.
(B) Victory cannot be screened on Sunday.
(C) Sam and Rats will not be screened on the same day.
(D) Exactly one day of the schedule will not have any film screening.
(E) Each day of the schedule will have at least one film screening.

15. All of the following conform to the parameters of the schedule EXCEPT –

(A) Sam and Wellfleet are both screened on Friday
(B) Wellfleet and Terror are both screened on Thursday
(C) Victory and Wellfleet are both screened on Saturday
(D) Quest to Hope is not screened on Friday
(E) Rats is not screened on Saturday

Questions 16 – 19 : [NCC Bank- 2011]

The members of the public service commission and the members of the rent control commission are to be selected from exactly six qualified candidates. The six candidates are U, V, W, X, Y, and Z. The following rules apply:

Each commission must have exactly three members.
The two commissions must have at least one member in common.
U cannot be on a commission with X.
If X is selected for a commission, Y must also be selected for that commission.

16. If the members of the Public Service Commission are selected first, which of the following could be those selected?

(A) U, V and X (B) U, X and Z (C) V, W and X (D) V, X and Y (E) W, X and Z

17. If the members of the Public Service Commission are V,W, and Z, and if the Rent Control Commission is to have as many members in common with the public service commission as the rules allow, the Rent Control Commission must consist of

(A) U, V and W (B) V, W and Z (C) V, X and Z (D) W, Y and Z (E) X, Y and Z

18. If U, V, and W make up the Public Service Commission, and W, Y and Z make up the Rent Control Commission, which of these commission members could yield his or her place on a commission to X without necessitating any other membership changes?

(A) U (B) V (C) W (D) Y (E) Z

19. If U and X are each selected for a commission, and only Z is selected for both the commissions, which of the following must be true?

(A) V is selected for the same commission as W.
(B) W is selected for the same commission as Y.
(C) W is selected for the same commission as X.
(D) U is selected for a different commission than Y.
(E) X is selected for a different commission than Y.

Question 20 – 25 :

Answer the questions based on the following information [Rajshahi Krishi Unnoin Bank; SO; 2014]

A farmer has three fields. 1, 2 and 3, and is deciding which crops to plant. The crops are F, G, H, I & J.
F will grow only in fields 1 and 3, but in order for F to grow it must be fertilized with X.
G will grow in fields 1, 2, and 3, but in order for G to grow, fertilizer X must not be used.
H will grow in fields 1, 2, and 3 but in order for H to grow in field 3 it must be fertilized with Y.
will grow only in fields 2 and 3, but in order for I to grow in field 2 it must be sprayed with pesticide Z, and in order for I to grow in field 3, it must not be sprayed with Z.
Jwill grow only in field 2, but in order for J to grow, H must not be planted in the same field. All crops are planted and harvested at the same time. More than one crop may be planted in a field.

20. It is possible to grow which of the following pairs of crops together in field 1?
I. F and G II. G and H III. F and H IV. H and J
(A) I and II only (B) I and III only (C) II and III only (D) I, II, and III only (E) None of these

21. It is possible for which of the following groups of crops to grow together in field 2?
A. F, G, and H (B) F, H, and I (C) G, H, and J (D) G, I, and J (E) None of these

22. Which of the following is a complete and accurate listing of all crops that will grow alone in field 2 if the only pesticide or fertilizer used is Y?
(A) F, I (B) F and H (C) G and H (D) C, H, and J (E) None of these

23. Which of the following pairs of crops will grow together in field 3 if no other crops are planted in the field and no fertilizers or pesticides are applied?
(A) F and H (B) F and I (C) G and H (D) G and I (E) None of these

24. What is the maximum number of different crops that can be planted together in field 3?
(A) 1 (B) 2 (C) 3 (D) 4 (E) None of these

25. Which of the following is a complete and accurate list of the crops that will grow alone in field 2 if X i s the only pesticide or fertilizer applied?
(A) H, J (B) I, G (C) I, H (D) I, J (E) None of these

<u>Questions 26 – 28:</u>
Seven soccer players are to be honored at a banquet. The players will be seated along one side of a rectangular table.

Allen and Barry have to leave the party early and so must be seated at the extreme right end of the table, which is closest to the exit.
Clay will receive a plaque and so must be in the center chair to facilitate the presentation.
Dewey and Early, who were bitter rivals for the position of goalie during the season, dislike one another and should be seated as far apart as possible.
Forrest and Gates are best friends and want to sit together.

26. Which of the following players may not be seated at either end of the table?
(A) Dewey (B) Early (C) Barry (D) Gates (E) Allen

27. Which of the following pairs of players may not be seated together?
(A) Gates and Early (B) Clay and Early (C) Forrest and Allen (D) Barry and Early (E) Forrest and Dewey

28. If neither Forrest nor Early is seated next to Clay, how many different seating arrangements are possible?

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

Questions 29 – 32:

Read the following information carefully and answer the questions given below it.

In a car exhibition, seven cars of different companies viz. Cadillac, Ambassador, Fiat, Maruti, Mercedes, Bedford, and Fargo were displayed in a row, facing east such that:

i. Cadillac car was to the immediate right of Fargo.
ii. Fargo was fourth to the right of Fiat.
iii. Maruti car was beween Ambassador and Bedford.
iv. Fiat, which was third to the left of Ambassador car, was at one of the ends.

29. Which of the following was the correct position of the Mercedes?

(A) Immediate right of Cadillac (B) Immediate left of Bedford
(C) Between Bedford and Fargo (D) Second to the right of Maruti (E) None of these

30. Which of the following is definitely true?

(A) Fargo car is between Ambassador and Fiat. (B) Fargo is to the immediate right of Cadillac.
(C) Cadillac car is to the immediate left of Mercedes. (D) Maruti is fourth to the right of Mercedes.
(E) None of these

31. Which cars are on the immediate either sides of the Cadillac car?

(A) Ambassador and Maruti (B) Maruti and Fiat (C) Fiat and Mercedes
(D) Ambassador and Fargo (E) None of these

32. Which of the following groups of cars is to the right of the Ambassador car?

(A) Cadillac, Fargo & Maruti (B) Maruti, Bedford & Fiat
(C) Mercedes, Cadillac & Fargo (D) Bedford, Cadillac & Fargo (E) None of these

Questions 33 – 36 :

Each of six automated tasks, numbered 1 through 6, takes one full hour to complete. No time elapses between the completion of any of the six tasks and the beginning of another task. The group of six tasks must be completed in the shortest possible time period, subject only to the following restrictions:

Tasks 1 and 2 must both be completed before any of the other tasks can be begun.

Task 3 must be completed before task 4 can be begun.

At any one time, no more than one task can be performed, except that tasks 4 and 5 can be performed concurrently.

33. which of the following tasks could be the second task performed?

(A) 2 (B) 3 (C) 4 (D) 5 (E) 6

34. The shortest possible time period in which the group of six tasks can be completed is

(A) two hours (B) three hours (C) four hours (D) five hours (E) six hours

35. Which of the following CANNOT be true of any acceptable ordering of tasks?

(A) Task 1 is performed before task 2.
(B) Task 3 is performed before task 6.
(C) Task 4 is performed before task 6.
(D) Task 5 is performed before task 3.
(E) Task 6 is performed before task 3.

36. If task 6 is performed as early in the order of tasks as is permissible, then task 6 is performed

(A) first (B) second (C) third (D) fourth (E) fifth

Questions 37 – 42 :

Exactly nine books must be arranged from first (leftmost) to ninth (rightmost) on a shelf. Of the nine books, four are leather-bound books, three are clothbound books, and the remaining two are paperback books.

The four leather-bound books must be next to each other, and the two paperback books must be next to each other.

The three clothbound books do not have to be placed next to each other.

37. If the sixth book is a leather-bound book and the eighth book is a clothbound book, which of the following must be a paperback book?

(A) The first (B) The second (C) The third (D) The fourth (E) The ninth

38. The clothbound books must be next to each other if a paperback book is in which of the following positions?

(A) The first (B) The third (C) The fifth (D) The seventh (E) The ninth

39. If the second book is a clothbound book and the third book is a paperback book, which of the following can be a clothbound book?

(A) The fourth (B) The sixth (C) The seventh (D) The eighth (E) The ninth

40. If no clothbound book is next to another clothbound book, any of the following could be paperback books EXCEPT the

(A) second (B) third (C) fifth (D) seventh (E) eighth

41. If the first and seventh books have the same kind of binding, which of the following must be a leather-bound book?

(A) The first (B) The second (C) The fourth (D) The sixth (E) The eighth

42. If a clothbound book is in the fifth position and a leather-bound book is in the ninth position, which of the following pairs of books must have different kinds of binding?

(A) The first and the second
(B) The second and the third
(C) The second and the fourth
(D) The third and the fourth
(E) The third and the fifth

Questions 43 – 45 :

Read the following information and answer the questions : [Basic Bank Cash- 2013]

In a large factory there are exactly seven supervisors of operations - F, G, H, J, K, M and N. These supervisors communicate with each other in two ways: through a message circuit and by two-way radio. Messages can be sent in only one direction along the message circuit from F to G, from G to J, from J to M, from M to N, and from N o F. Message can be sent in either direction by two-way radio between G and H, between H and N, and between J and K.

No other routes of communications are available for sending messages among the seven supervisors. Messages that cannot be sent directly to the intended supervisor are sent through one or more intermediaries, who pass the messages along a possible route. Any supervisor, but only a supervisor, can be an intermediary.

43. A message from the first to the second supervisor in which of the following pairs can be sent using exactly one intermediary?

(A) F to M (B) H to F (C) J to G (D) K to H (E) None of these

44. Sending a message from the first to the second supervisor in which of the following pairs requires using both the message circuit and the two-way radio?

(A) F to M (B) H to N (C) J to H (D) K to J (E) None of these

45. Sending a message from the first to the second supervisor in which of the following pairs requires a minimum of two intermediaries?

(A) F to K (B) G to N (C) H to J (D) J to K (E) None of these

Questions 46 – 48 :

Study the following information carefully and answer the questions :

A loop bus has exactly six stops on its route. The bus first stops at stop one and then at stops two, three, four, five and six in that order. After leaving stop six, the bus returns to stop one and continues around the loop again. The stops are at six buildings that are, in alphabetical order, Garfield, Harrison, Johnson, Kennedy, Lincoln, and Madison.

Lincoln is stop three.

Harrison is stop six.

Kennedy is the stop immediately before Madison.

Johnson is the stop immediately before Garfield.

46. If Johnson is stop four, which of the following must be the stop immediately before Lincoln?

(A) Kennedy (B) Madison (C) Johnson (D) Garfield (E) Harrison

47. If Garfield is stop two, which of the following must be the stop immediately before Harrison?

(A) Johnson (B) Garfield (C) Lincoln (D) Kennedy (E) Madison

48. If a passenger gets on the bus at Kennedy, rides past one of the stops, and gets off at Lincoln, which of the following must be true?

(A) Kennedy is stop one. (B) Madison is stop three

(C) Lincoln is stop four. (D) Johnson is stop five. (E) Garfield is stop six.

Questions 49 – 51 :

Answer the questions on the basis of the information given below :

[Standard Bank (TAO)- 2016,BB; Officer; 2015]

A map representing countries R, S, W, X, Y, and Z is to be drawn. Adjacent countries cannot be the same color on the map. The only countries adjacent to each other are as follows:

- R, S, X, and Y are each adjacent to W.
- X is adjacent to Y.
- R and S are each adjacent to Z.

49. Which of the following is a pair of countries that must be different in color from each other?

(A) R and X (B) S and X (C) S and Z (D) X and Z (E) None of these

50. If X is the same color as Z, then it must be true that

(A) R is the same color as Y (B) S is the same color as X
(C) X is the same color as Y (D) W is a different color from any other country
(E) None of these

51. Which of the following is a pair of countries that can be the same color as each other?

(A) R and S (B) S and W (C) W and X (D) W and Y (E) None of these

Questions 52 – 55 : [Exim Bank; IT; 2015; DBBL;PO; 2015]

Two circular dials of exactly the same size are mounted on a wall side by side in such a way that their perimeters touch at one point. Dial 1, which is on the left, spins clockwise around its center, and dial 2, which is on the right, spins counterclockwise around its center. (Assume that there is no friction at the point of contact between the dials.) Each dial is marked on its perimeter at three points that are at equal distances around the perimeter from each other. Going clockwise on each dial the points marked on dial 1 are N, O, and P, and the points marked on dial 2 are X, Y, and Z.

52. If points O and Z are just meeting at the point of contact between the dials, and if dial 1 spins at the same speed as dial 2, what is the smallest number of revolutions of each dial that will bring O and Z together again?

(A) 1 (B) 2 (C) 3 (D) 4 (E) None of these

53. If points N and Y are just meeting at the point of contact between the dials, and if dial 1 spins at same speed as did 2, which of the following pairs of points will also meet in the course of the next full revolution of the dials?

(A) N and Z (B) O and X (C) O and Z (D) P and X (E) None of these

54. If points P and X are just meeting at the point of contact between the dials, and if dial 2 spins at exactly double the speed of dial 1, which of the following pairs of points will be the next pair to meet at the point of contact?

(A) N and Y (B) N and Z (C) O and X (D) O and Z (E) None of these

55. If points P and Y are just meeting at the point of contact between the dials, and if dial 1 spins at exactly three times the speed of dial 2, which of the following pairs of points will be the next pair to meet at the point of contact?

(A) N and X (B) N and Z (C) O and Y (D) P and Z (E) None of these

Questions 56 – 61 :

At a conference, exactly seven speakers – Quamrul, Ramisa, Samia, Tariq, Umana, Vikash and Wasiq – are to speak. In the schedule for the conference, there are seven time slots available for speakers and the time slots are numbered consecutively 1 through 7. Exactly one speaker must be assigned to each time slot according to the following conditions:

- **Quamrul must speak immediately before or immediately after Tariq speaks.**
- **Tariq must speak sometime before Ramisa speaks.**
- **Samia must speak in either time slot 1 or time slot 7.**
- **Vikash must speak in time slot 4.**

56. If Ramisa speaks immediately before Vikash speaks, which of the following could be true ?

(A) Quamrul speaks in time slot 5.
(B) Samia speaks in time slot 1.
(C) Tariq speaks in time slot 3.
(D) Umana speaks in time slot 2.
(E) Wasiq speaks in time slot 6.

57. If Wasiq speaks in time slot 7, any of the following pairs of speakers could speak in time slots immediately adjacent to each other EXCEPT?

(A) Quamrul and Ramisa
(B) Ramisa and Umana
(C) Samia and Quamrul
(D) Samia and Tariq
(E) Vikash and Umana

58. If Ramisa speaks sometime before Samia speaks, which of the following must be true?

(A) Quamrul speaks sometime before Umana speaks.
(B) Ramisa speaks sometime before Vikash speaks.
(C) Tariq speaks sometime before Vikash speaks.
(D) Umana speaks sometime before Ramisa speaks.
(E) Wasiq speaks sometime before Quamrul speaks.

59. If Umana is to speak in time slot 2, there will be a total of how many scheduling possibilities from which to select the schedule of speakers?

(A) One (B) Two (C) Three (D) Four (E) Six

60. If Samia speaks in time slot 7, which of the following must be true?

(A) Ramisa speaks sometime after Vikash speaks.
(B) Vikash speaks sometime after Ramisa speaks.
(C) Quamrul speaks in time slot 2.
(D) Tariq speaks sometime before Vikash speaks.
(E) None of these.

61. Inclusion of which conditions will result in only one legal arrangement?

(A) Wasiq speaks in time slot 7 and Umana speaks in time slot 5.
(B) Wasiq speaks in time slot 1 and Umana speaks in time slot 6.
(C) Samia speaks in time slot 1 and Umana speaks in time slot 6.
(D) Wasiq speaks in time slot 7 and Umana speaks in time slot 5.

Questions 62 – 66 :

A shop owner is preparing gift boxes of candy. Each box will contain exactly two kinds of hard candy to be selected from F, G, and H, and exactly three kinds of soft candy to be selected from P, Q, R, S, and T, with the following restrictions:

G cannot be in the same gift box as T.

P cannot be in the same gift box as S.
Q cannot be in the same gift box as T.

62. If G is included in a gift box, which of the following is a kind of candy that must also be included?
(A) F (B) H (C) P (D) Q (E) S

63. If H is not included in a particular gift box, any of the following kinds of candies can be included EXCEPT
(A) P (B) Q (C) R (D) S (E) T

64. Which of the following kinds of candies must be included in each of the gift boxes?
(A) F (B) G (C) H (D) P (E) R

65. If T is included in a gift box, the box must also include which of the following kinds of candy?
(A) F and G (B) F and H (C) G and H (D) P and R (E) R and S

66. In a gift box that contains an acceptable assortment of candies, which of the following substitutions will always result in another acceptable assortment?
(A) P for S (B) Q for R (C) S for R (D) T for P (E) T for Q

Questions 67 – 69 :

The Chairman of a board of directors in a company has appointed 9 of the directors, Mr. Jaki, Mr. Karim, Mr. Liton, Mr. Monir, Mr. Nannu, Mr. Ovi, Mr. Pappu, Mr. Qader and Mr. Roni on 3 lines of businesses - Housing, Food and Telecommunication. The criteria for the construction of these business lines are given below.

Mr. Qader can work only in Telecom Sector	Mr. Liton and Mr. Monir must work in the same line
Mr. Jaki and Mr. Karim can not work in the same line	Mr. Nannu and Mr. Roni can not work in the same line
Mr. Ovi must work in the same line as Mr. Karim or Mr. Qader or both of them	
Each line consists of exactly three directors	No director can be in more than one line

67. Which of the following can be a combination for the Housing business?
(A) Mr. Jaki, Mr. Karim, Mr. Nannu (B) Mr. Jaki, Mr. Monir, Mr. Pappu
(C) Mr. Liton, Mr. Nannu, Mr. Qader (D) Mr. Karim, Mr. Ovi, Mr. Roni (E) None of these

68. If Mr. Ovi is in Food business and Mr. Liton works in the same line as Mr. Qader then which Director from the following must be in Housing business?
I. Mr. Jaki II. Mr. Pappu III. Mr. Roni
(A) I (B) III (C) I & II (D) I, II & III (E) None of these

69. Any Director from the following could work in the same line as Mr. Liton EXCEPT
(A) MR. Jaki (B) Mr. Karim (C) Mr. Ovi (D) Mr. Pappu (E) None of these

Questions 70 – 72 :

The five staff members of the customer service department of a retail store – Paul, Quentin, Rachel, Stella, and Ted – are passing around a single copy of a letter of complaint because no one wants to take responsibility for answering it or for discarding it. When a staff member receives the letter, he or she sends it on the morning of the next workday (Monday through Friday) to another staff member, who receives it on the same day that it is sent.

Paul always sends the letter to Ted.

Ted always sends the letter of Stella.
Stella sends the letter to no one but Quentin or Rachel.
Quentin sends the letter to no one but Paul or Rachel.
Rachel sends the letter to no one but Paul or Ted.

70. If Rachel receives the letter on a Monday, which of the following staff members are certain to receive it before Friday?

(A) Both Paul and Quentin (B) Both Paul and Stella (C) Both Paul and Ted
(D) Both Quentin and Stella (E) Both Stella and Ted

71. Which of the following lists all those staff members, and only those staff members, who are included in the shortest possible repeating sequence of letters senders?

(A) Rachel, Stella, Ted (B) Quentin, Rachel, Stella (C) Stella, Ted
(D) Quentin, Ted (E) Rachel

72. If the letter comes to Rachel a second time and she sends it on, which of the following is the complete and accurate list of Rachel's fellow staff members who might never subsequently receive the letter?

(A) Paul (B) Quentin (C) Stella (D) Paul, Quentin (E) Paul, Stella

Questions 73 – 77 :

Answer the questions on the basis of the information given below :

Six arms negotiators – M, O, P, R, S, and T – are to be seated at a round table to discuss disarmament. There are exactly six chairs around the table. Each negotiator sits facing the center of the table and is directly opposite a negotiator across the table. The seating arrangement is subject to the following restrictions:

T cannot sit next to P.
S cannot sit next to M.
R must sit next to M.

73. If R sits next to S on S's right side; who must sit next to R on R's right side?

(A) M (B) O (C) P (D) S (E) T

74. Which of the following is an acceptable sequence of negotiators around the table?

(A) M, S, R, T, P, O (B) M, S, T, P, R, O (C) T, O, P, S, M, R
(D) T, R, M, P, S, O (E) T, S, R, M, O, P

75. If M sits next to P, which of the following is a complete and accurate list of those who can sit next to P on P's other side?

(A) O (B) O, S (C) O, S, R (D) R, S, T (E) O, R, S, T

76. If T sits next to M and S sits next to R, which of the other negotiators must sit next to S?

(A) M (B) O (C) P (D) R (E) T

77. If T sits directly across the table from O, who must sit on either side of P?

(A) M and O (B) M and S (C) O and R (D) O and S (E) R and T

Questions 78 – 80 :

Answer the questions based on the following information :

Four sisters–Subarna, Tara, Uma and Vibha are playing a game such that the loser doubles the money of each of the other players from her share. They played four games and each sister lost one game in alphabetical order. At the end of fourth game, each sister had Tk. 32.

78. Who started with the lowest amount?

(A) Subarna (B) Tara (C) Uma (D) Vibha (E) None of these

79. Who started with the highest amount?

(A) Subarna (B) Tara (C) Uma (D) Vibha (E) None of these

80. What was the amount with Uma at the end of the second round?

(A) Tk.36 (B) Tk.72 (C) Tk.16 (D) Tk. 20 (E) None of these

Questions 81 – 84 :

A communications system has exactly four message exchanges, which are called nodes: W, X, Y and Z. Messages travel from one node directly to another node only as follows :

From W to X, but not vice versa
From W to Y, but not vice versa
From W to Z, and vice versa
From X to Y, and vice versa
From X to Z, but not vice versa
From Z to Y, but not vice versa
A single direct path going in one direction from node to another is called a leg.

81. If a message is to travel form Y to X over as few legs as possible, it must travel in which of the followings ways?

(A) Directly form Y to X (B) Via W but no other node
(C) Via Z but no other node (D) Via W and Z, in that order
(E) Via Z and W, in that order

82. Which of the following is a complete and accurate list of nodes to which a message can be sent along exactly one leg from Z?

(A) W (B) Y (C) W, Y (D) X, Y (E) W, X, Y

83. Which of the following sequences of legs is a path over which a message could travel from X back to X?

(A) From X to W, form W to X
(B) From X to Y, form Y to W, from X to W, form W to Z, from Z to X
(C) From X to Y, form Y to Z, from Z to W, form W to X
(D) From X to Z, form Z to W, from W to Y, form Y to X
(E) From X to Z, form Z to Y, from Y to W, form W to X

84. If all of the legs in the system are equal in length, and if messages always travel along the shortest possible path, then the longest path any message travels in the system is the path from

(A) X to W (B) Y to W (C) Y to Z (D) Z to W (E) Z to X

Questions 85 to 87 :

Read the following information and answer the questions : [Basic Bank Cash- 2013]

In a large factory there are exactly seven supervisors of operations - F, G, H, J, K, M and N. These supervisors communicate with each other in two ways: through a message circuit and by two-way radio. Messages can be sent in only one direction along the message circuit from F to G, from G to J, from J to M, from M to N, and from N o F. Message can be sent in either direction by two-way radio between G and H, between H and N, and between J and K. No other routes of communications are available for sending messages among the seven supervisors. Messages that cannot be sent directly to the intended supervisor are sent through one or more intermediaries, who pass the messages along a possible route. Any supervisor, but only a supervisor, can be an intermediary.

85. A message from the first to the second supervisor in which of the following pairs can be sent using exactly one intermediary?

(A) F to M (B) H to F (C) J to G (D) K to H (E) None of these

86. Sending a message from the first to the second supervisor in which of the following pairs requires using both the message circuit and the two-way radio?

(A) F to M (B) H to N (C) J to H (D) K to J (E) None of these

87. **Sending a message from the first to the second supervisor in which of the following pairs requires a minimum of two intermediaries?**
(A) F to K (B) G to N (C) H to J (D) J to K (E) None of these

Student's Practice | Questions Bank : 2017

Islami Bank Bangladesh Ltd. (Probationary) Aprill-2017 (Written)

A coach wishes to pick four bowlers for his team from pool of four pacers-F.G,H and I and for Spinners-R,S,T, and U. The selection of the bowlers is subject to the following conditions:

* The coach must pick exactly two pacers and two spinners.
* Either F or G must be selected, but F and G both cannot be selected.
* If R is selected, H must also be selected.
* If T is selected, G cannot be selected

Based on the above, answer the following questions : (01 – 05)

01. If R is selected, which of the bowlers CANNOT be selected?
(A) FGTU (B) GITU (C) RTGH (D) FGTR (E) None of these

02. If neither S nor U is selected, which two pacers must be selected?
(A) FT (B) FG (C) GT (D) FH (E) None of these

03. If G is selected, which two bowlers CANNOT be selected?
(A) FT (B) FG (C) GT (D) FH (E) None of these

04. If G, I and S are selected for the team, who must be the fourth bowlers selected?
(A) F (B) G (C) T (D) U (E) None of these

05. If T is selected and U is not selected for the team, how many different combinations of bowlers will be available for the coach to choose from?
(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

01- B	02- D	03- A	04- D	05- B

Dutch Bangla Bank Ltd. (Probationary Officer) August-2017

Six patients-K, L, M, S, T, U-must each be scheduled for examination by a doctor The patients are to be examined one at a time in six consecutive time slots on the same day according to following conditions: (6 – 12)

* M cannot be examined immediately before or immediately after S.
* L must be examined immediately before U.
* K must be examined fourth.

06. Which of the following is an acceptable examination schedule for the patients, in order from first examined to last examined.
(a) L, T, S, K, M, U (b) L, U, T, K, S, M (c) M, T, S, L, U, K (d) S, T, M, K, L, U

07. If L is examined second, which of the following must be true?
(a) K is examined at some time before S. (b) M is examined at some time before S.
(c) T is examined at some time after K. (d) M is examined sixth.

08. S can be examined in any of the following time slots EXCEPT

(a) 1st (b) 2nd (c) 3rd (d) 5th

09. If L is examined first, T must be examined

(a) immediately before K (b) at some time before M
(c) immediately before S (d) at some time after K

10. If S is examined sixth, which of the following is a complete and accurate list of the time slots any one of which could be the time slot in which M is examined?

(a) 1st (b) 1st, 2nd (c) 1st, 3rd (d) 1st, 2nd, 3rd

11. If U is examined at some time before M is examined, L can be examined

(a) Immediately after S (b) immediately before T
(c) immediately after T (d) at some time after M

12. If both M and T are examined at some time after K is examined, S must b examined

(a) 1st (b) 2nd (c) 3rd (d) 1st or 3rd

06- D	07- C	08- B	09- D	10- C	11-	12- D

Jumna Bank Ltd. (Management Trainee Officer) : October 2017

The manager of a Cineplex is going to schedule six movies - M, N, P Q, R and S-during the course of one week. He will schedule on movie on each day from Monday through Saturday. The manager must schedule the movies according to the following conditions: (13 – 16)

- M must be scheduled earlier in the week than R.
- P must be scheduled on Tuesday.
- Q must be scheduled on the day immediately.
- Before or Immediately after the day on which N is scheduled.

13. If N is to b scheduled on Thursday, the earliest day on which R can be scheduled is

(a) Monday (b) Wednesday (c) Thursday (d) Friday

14. Is S is to be scheduled on Friday, M must be scheduled on-

(a) Monday (b) Wednesday (c) Thursday (d) Friday

15. If Q is to be scheduled on Friday, M must be scheduled on

(a) Monday (b) Wednesday (c) Thursday (d) Friday

16. Which of the following moves can be scheduled on Monday?

(a) N (b) Q (c) R (d) S

13- B	14- A	15- D	16- D

Al-Arafah Islami Bank Ltd. (Management Trainee Officer) : 2017

The mixing vat in a factory receives liquid ingredients through six separate valves-labeled R,S,T,U,Y and Z-each of which has exactly two settings: Open and closed, The mixing vat operator must ensure that each valve is open or closed according to the following conditions: (17 – 20)

i) If 'T' is open, both, 'S' and 'Z' must be closed.
ii) 'R' and 'Z' can not both be closed at the same time.
iii) If 'Y' is closed, 'Z' must also be closed.
iv) 'S' and 'U' can not both be open at the same time.

17. If z is open, which of the following must be true?

(a) S is open (b) T is open (c) U is open (d) Y is open

18. If R is closed and U is open, which of the following must be true?

(a) S is open (b) T is open (c) T is closed (d) Y is closed

19. If the maximum number of valves that can be closed it the same time are closed, which of the following must be true?

a) R is open b) S is open c) T is open d) Z is open

20. Which of the following, If given to the mixing Vat operator as an instruction, would not determine the setting of any other valve?

a) S must be open b) T must be open c) U must be open d) S must be closed

17- d	**18- c**	**19- a**	**20- d**

IFIC Bank Ltd. (MTO) : 2017

From amongst six boys A, B, C, D, E and F and five girls P, Q, R, S and T, a team of six is to be selected under the following conditions.

> A & D have to be together
> S & T have to be together
> D cannot go with?
> C & Q have to be together
> B cannot be teamed with E
> B & R have to be together

21. If there be five boys in the team, the long girl members is.

(a) P (b) Q (c) R (d) S

22. If including P, the team has three girls, the members are?

(a) BCFQR (b) ADEST (c) ADBST (d) BFRST

23. If the team including C consists of four boys, the members of the team other than C are-

(a) ADEPQ (b) ABDQR (c) DEFAQ (d) BEFRQ

24. If four members including E have to be boys, the members other than E are

(a) ABCQR (b) ACDFQ (c) BCFQR (d) ADFST

21- b	**22- a**	**23- b**	**24- d**

UCBL (PO) : 16 June 2017

In an office there are exactly seven employees-N, P, Q, R, S, T and U. An employee can pass along any memoranda written by that employee can pass along any memoranda received from others, but only according to specific rules: "Memoranda can be passed in either direction between P and Q, In either direction between R and U, and in either 'direction between S and T." "Memoranda can be passed from N to S, from Q to R, from S to P. from U to N, and from U to Q". (25 – 30)

25. Which of the seven employees can pass memoranda directly to the greatest number of employees?
(a) N (b) Q (c) R (d) U

26. A memorandum from Q that eventually reaches T must have been passed to all of the following employees EXCEPT –
(a) N (b) P (c) R (d) S

27. If R is, absent from the office for a day, it is still possible for a memorandum to be passed on that day all the way along a route from –
a) N to Q b) P to S c) P to U d) Q to S

28. If S is absent from the office for a day, which of the following employees CANNOT receive any memoranda from any other employee on the day?
a) N b) P c) Q d) T

29. A memorandum can travel along two alternative routes that have no employees in common except the writer and the final recipient if the writer and the final recipient, respectively, are –
a) P and R b) U and P c) P and T d) S and U

30. If a memorandum written by P is to reach S, and is to be passed to no more employees than necessary, it must be passed to a total of how many employees other than P and S?
a) 1 b) 2 c) 3 d) 4

25- d	26- b	27- a	28- d	29- b	30- d

Social Islami Bank Ltd. (PO) : 2017

Each of six page-P, Q, R, S, T and U- is placed in a different on of seven holes numbered consecutively I through 7 from left to right. The holes are evenly spaced and arranged in a straight line. The placement of the pegs is subject only to given conditions. "The distance sprinting P from Q must be the same as the distance separating R from S", T must be in a hole immediately adjacent to the hole that U is in." "The left most hole cannot be the hole that is left empty. (31 – 34)

31. If U, P and R are in holes 5,6 and respectively, which of the following must be true?
a) S is in hole 1 b) S is in hole 2 c) Q is in hole 2 d) Q is in hole 3

32. If P and R are in holes 1 and 3, respectively, the empty hole must be either-
a) 2 or 4 b) 2 or 6 c) 4 or 5 d) 5 or 7

33. If P and Q are in holes 2 and 3, respectively, the empty hole must be either-
a) R is in hole 3 b) R is in hole 5 c) U is in hole 1 d) None of these

34. Of the following, which is a hole that could be the empty hole?
a) 1 b) 2 c) 4 d) 6

31- b	32- d	33- a	34- a

Bank Asia Ltd (MTO) : Sept, 2017

Six products-U, V, W, X, Y and Z are to be placed in the display window of a vending machine with six compartments, numbered 1 through 6 from left to right. The products must be placed in the window, one

product in each compartment, according to the given conditions. U cannot be immediately to the left or immediately to the right of V.W must be immediately to the left X, z cannot be in compartment 6. (35 – 38)

35. Which of the following product cannot be placed in compartment 1?

a) U b) V c) W d) X

36. If X is placed in compartment 3, W must be placed in compartment-

a) 1 b) 2 c) 4 d) 5

37. If U is placed in compartment 5, which of the following products must be placed in compartment 6?

a) V b) W c) X d) Y

38. If Z is placed in compartment 3, immediately to the right of X, which of the following products must be placed in compartment 5?

a) U b) V c) W d) Y

35- d	**36- b**	**37- d**	**38- a**

Modhumoti Bank : 21.04.2017

When they hold a meeting seven company executives-C, U, V, W, X, Y and Z- sit at a rectangular table. There executives sit along one side of the table, and three sit along the other side, each directly opposite one of the other three. The seventh sits at the head of the table. There is no seat at the foot of the table. U always sits in one of the two seats farthest for the head of the table. Y and V always sit next to each there. V never sits next to Z. If Z does not sit at the head of the table, W sits there. (39 – 42)

39. If W sits directly opposite T, X must sit next to which of the following executives?

a) T b) U c) V d) Z

40. If T sits directly opposite Z and next top V, which executive must sit directly opposite U?

a) V b) W c) X d) Y

41. If Z sits directly opposite X, which executive must sit next to U?

a) T b) V c) W d) Y

42. If T and U sit immediately on either side of X, the executive sitting directly opposite X mast be there-

a) W or V b) W or Z c) Y or V d) Y or Z

39- a	**40- d**	**41- a**	**42- b**

ONE BANK LTD. (Special cadre Officers) : 2017

The mixing vat in a factory receives liquid ingredients through six separate value-labeled R, S, T, U, Y and Z- each of which has exactly two setting: open and closed. The mixing vat operator must ensure that each valve is set open or closed according to the following conditions: If T is open, both S and Z must be closed, R

and Z cannot both be closed at the same time: If Y is closed Z, must also be closed, S and U cannot both b open at the same time. (43 – 46)

43. If Z is open, which of the following must be true?

a) S is open b) T is open c) U is open d) Y is open

44. If R is closed and U is open, which of the following must be true?

a) S is open b) T is open c) T is closed d) Y is open

45. If the maximum number of valves that can be closed at the same time are closed, which of the following must be true?

a) R is open b) S is open c) T is open d) Z is open

46. Which of the following, if given to the mixing vat operator as an instruction, would not determine the setting of any other valve?

a) S must be open b) T must be open c) U must be open d) S must be closed

43- d	**44- c**	**45- a**	**46- a**

Bangladesh Bank (AD) : 24.02.2017 (Written)

Anik, Rafi, Rahib and Zarif are students of a school. Three of them stay far from school and one near to it. Two study in class IV one in class V and one in class VI .they study Bengali, Mathematics, Social science and Science . One is good at four subjects while another is weak in all four subjects. Anik stays far from school and is good at Mathematics only while Rafi is weak in Mathematics only and stays close to school. Neither of this two nor Rahib studies in class VI. One who is good at all four subjects studies in class V.

I. Name of the boy who is good at all four subjects
II. Name of the boy who is weak in all four subjects
III. Which two boys are good in Bengali
IV. Which two boys are good at Mathematics