

# Sample Paper Assistant Director (Electrical Engineering)

**ENGLISH**

**Complete the sentences by choosing the most appropriate word, from the given lettered choices (A to D) below each.**

1. Almost everyone has trouble \_\_\_\_\_ at one time or another.

- A. sleeping
- B. for sleeping
- C. sleep
- D. slept

2. Ali always seeks \_\_\_\_\_ wealth.

- A. from
- B. with
- C. to
- D. for

**Each question below consists of a related pair of words, followed by five lettered pairs of words. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.**

3. PAGE: BOOK::

- A. sailors: crew
- B. petal: flower
- C. leaf: stalk
- D. singers: chorus

4. MIGHT: RIGHT::

- A. honesty: policy
- B. cleanliness: godliness
- C. work: worship
- D. serve: wait

**Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.**

5. PARTICULAR:

- A. general
- B. widespread
- C. diffused
- D. common

6. URBAN:

- A. country-made
- B. pastoral
- C. provincial
- D. rural

**Choose the word most similar in meaning to the capitalized ones.**

**7. CHANGE:**

- A. alter
- B. church
- C. complete
- D. decide
- E. agree

**8. VIRTUE:**

- A. relationship
- B. marriage
- C. prosperity
- D. happiness
- E. goodness

**Read the passage to answer question 9-10**

In the late seventeenth century, a transformation began that would make coffee one of the most popular drinks in Europe. The coffeehouse-meeting place of bankers, dissidents, artists, merchants, poets, wits, and rogues was in some ways the cradle of modern Europe. Coffee would change, in less than a century, from the drink of a few princes and a few paupers to the chief social beverage of the rising middle class.

**9. The word "transformation" is closest in meaning to:**

- A. trend
- B. event
- C. change
- D. custom

**10. The word "rogues" refers to a type of:**

- A. beverage
- B. person
- C. book
- D. coffee

## ANALYTICAL REASONING

### Questions 11-14

An editor must choose five articles to be published in the upcoming issue of an arts review. The only articles available for publication are theater articles F, G, H and J, and dance articles K, L, M and O.

At least three of the five published articles must be dance articles.

If J is chosen, then M cannot be.

If F is chosen, then J must also be chosen.

11. If M is not chosen for the issue, which of the following must be chosen?

- A. F
- B. G
- C. H
- D. J
- E. K

12. How many acceptable groupings of articles include J?

- A. One
- B. Two
- C. Three
- D. Four
- E. five

13. The choice of which article makes only one group of articles acceptable?

- A. F
- B. G
- C. J
- D. L
- E. M

14. If G is chosen for the issue, which of the following must be true?

- A. J is not chosen
- B. Exactly three dance articles are chosen
- C. H is not chosen
- D. All four of the dance articles are chosen
- E. F is not chosen

### Questions 15-18

A new kind of lock is opened by pushing symbols in sequence on a keyboard. The sequence is called combination. All acceptable combinations must consist of exactly five symbols four letters and of single-digit number. Acceptable combinations must also conform to the following rules:

The number must be either the second or third symbol in the combination.

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The fourth and fifth symbols in the combination must not be the same.  
If the third symbol is a number, then the fifth must be either B or D.  
If the third symbol is a letter, then there must be no Fs or Gs in the combination.  
The first symbol must be a letter closer to the beginning of the alphabet than any other symbol in the combination.

15. Which of the following sequences of symbols is an acceptable combination?

- A. E, R, 2, X, B
- B. F, 6, T, T, Y
- C. B, W, 4, G, G
- D. C, 7, M, Q, D
- E. A, X, L, 3, P

16. Which of the following could possibly be the first symbol in an acceptable sequence?

- A. F
- B. 7
- C. Y
- D. 3
- E. E

17. A combination whose first symbol is B and whose fourth symbol is G could have which of the following as its second, third, and fifth symbols, respectively?

- A. J, 6, D
- B. A, 9, T
- C. 9, Z, X
- D. 3, H, G
- E. M, 4, S

18. The combination C, Q, 8, P, F can be made acceptable by doing which of the following?

- A. replacing the F with a B
- B. reversing the C and the P
- C. reversing the Q and the 8
- D. replacing the F with a D
- E. replacing the C with an A

traveler is to stay for more than seven days, however, a special visa is required.

19. If the statements above are true, which of the following must also be true?

- A. A traveler who is staying in the Republic for 14 days must have a special visa
- B. Many travelers who stay in the Republic do not need visas
- C. Some travelers who stay in the Republic for more than seven days do not have the appropriate visas
- D. Travelers who stay less than seven days in the Republic do not need visas
- E. Travelers who merely pass through the Republic while en route to other destinations do not need visas

Despite a steady stream of pessimistic forecasts, our economy continues to grow and prosper. Over the last 15 years the service sector of our economy has greatly expanded. Last year alone, 500,000 Pakistanis found employment in the service sector. In the face of evidence such as this, one cannot argue that our economy is wilting.

20. Which of the following, if true, would most seriously undermine the conclusion drawn above?

- A. Many Pakistanis who took jobs in the service sector last year were also offered jobs in other sectors of the economy
- B. Most of the job growth in the service sector can be attributed to people forced out of the declining manufacturing sector
- C. Pakistani society has developed many programs that greatly offset the consequences of a sluggish economy
- D. Forty years ago the Pakistani economy experienced a period of prosperity far greater than that of today
- E. The importance of the service sector in determining the well-being of the overall Pakistani economy has decreased somewhat in the past ten years

**QUANTITATIVE**

21.  $18 \div 0.04 = ?$

- A. 4.5
- B. 45
- C. 450
- D. 4,500
- E. 45,000

22. What is 0.1 percent expressed as a decimal?

- A. 0.001
- B. 0.01
- C. 0.1
- D. 1
- E. 10.0

23. Evaluate  $3a^2 - 2b$ , if  $a = -3$ , and  $b = -1$ .

- A. -29
- B. 29
- C. -25
- D. 25
- E. 83

24. A coat is on sale for Rs.120 after a discount of 20 percent. Find the original price.

- A. Rs.96
- B. Rs.144
- C. Rs.150
- D. Rs.180
- E. Rs.140

25.  $\sqrt{30}$  is closest to:

- A. 5
- B. 5.4
- C. 5.5
- D. 5.6
- E. 5.7

26. Bilal's weekly salary increased from Rs.175 to Rs.201.25. Find the percent of increase?

- A. 1.15 percent
- B. 1.5 percent
- C. 8.7 percent
- D. 87 percent
- E. 15 percent

27.  $(-4)^2 - 3(-4) =$

- A. -4
- B. 52
- C. -52
- D. 192
- E. 28

28. A boy takes 3 minutes to read a story of 315 words. How many minutes will it take him to read a story of 945 words at the same rate?

- A. 2
- B. 8
- C. 6
- D. 3
- E. 9

29. What percent of 25 is  $\sqrt{25}$  ?

- A. 20%
- B. 25%
- C.  $33\frac{1}{3}\%$
- D. 50%
- E. 75%

30.  $(2.3 \times 10^3) + (2.3 \times 10^2) + (2.3 \times 10) = ?$

- A. 255,300
- B. 25,530
- C. 2,553
- D. 255.3
- E. 25.53



**COMPUTERS**

31. What does the 'undo' option do in MS Word?

- A. Repeat your last action
- B. Change you text size
- C. Insert an image
- D. Delete the document

32. Which of the following are examples of functions in MS EXCEL?

- A. Sum
- B. Average
- C. Max
- D. Min
- E. All of the above

33. What is true about an animation into a slide?

- A. It makes slides more interactive
- B. Animations are available by default in every slide
- C. Using custom animation we can only delete the default animation
- D. All of the above

34. What is meant by ALU?

- A. Arranged Logic Unit
- B. Arithmetic Logic Unit
- C. Arithmetic Logarithmic Unit
- D. None of the above

**SUBJECT**

35. The phenomenon in which a changing current in coil induces an e.m.f. in itself is called:

- A. Self induction
- B. Mutual induction
- C. Electromagnetic induction
- D. Electrification

36. If a dielectric is placed in an electric field, the field strength will:

- A. become zero
- B. increase
- C. decrease
- D. remain the same

### Answer Keys

| Q #. | Right Choice |
|------|--------------|
| 1    | A            |
| 2    | D            |
| 3    | B            |
| 4    | D            |
| 5    | A            |
| 6    | D            |
| 7    | A            |
| 8    | E            |
| 9    | C            |
| 10   | B            |
| 11   | E            |
| 12   | C            |
| 13   | A            |
| 14   | E            |
| 15   | D            |
| 16   | E            |
| 17   | A            |
| 18   | D            |
| 19   | A            |
| 20   | B            |
| 21   | C            |
| 22   | A            |
| 23   | B            |
| 24   | C            |
| 25   | C            |
| 26   | E            |
| 27   | E            |
| 28   | E            |
| 29   | A            |
| 30   | C            |
| 31   | A            |
| 32   | E            |
| 33   | A            |
| 34   | B            |
| 35   | A            |
| 36   | C            |