Section-1 English Language and Communication (30 Questions, 30 Marks)

Part-1: Reading Comprehension

Directions: Read the passage carefully and answer Questions 1 through 5 in light of it.

Physically we are heading towards a resource tension society. Natural resources are being depleted in many cases that may eventually cause supply constraint. On the other hand, increase in population will keep on pushing the demand for resources upward. We may face a serious crisis situation at the end of the next century unless we take definite steps in this regard. Two-pronged measures may be found effective. Rationalization of uses, minimization of wastage, re-uses may significantly reduce the demand for resources. On the other hand, measures in slowing down the depletion process, such as reforestation, recycling, etc. may ease up the supply constraint. Also, method or process improvement aiming at reducing the use of materials may lessen the pressure on demand. Technological breakthrough may help in finding newer sources of raw materials, or at least better use of existing materials which should eventually reduce the tension. But to solve the problem such as this we need participation and involvement of all the nations, both "haves" and "have-nots" in terms of resources. Such commitment may not come forth through a political process. But, if the social order follows the so-called market economy, market mechanism may have strong mileage in ensuring such commitment. Globalization process, which is already in work, may bring the players together and make global partners understand what they should do in solving this huge problem.

- 1. What is the author's main concern in this passage?
 - A. To solve resources constraint problem
 - B. To describe the technological changes
 - C. To describe globalization process
 - D. To explain the free market mechanism
 - E. Both (A) and (C)

2. The word 'crisis' in line 4 is closest in meaning to-

- A. Chaos
- B. Emergency
- C. Shortage
- D. Crazy
- E. None of these

- 3. The word 'such' in sentence 10 refers to-
 - A. Technological breakthrough
 - B. Resource constraints
 - C. Consideration of 'have' and 'have-nots'
 - D. Globalization process
 - E. Participation and involvement of all the nations
- 4. Which is not suggested in this passage as a measure to reduce the demand for resources?
 - A. Wastage minimization
 - B. Rationalization of resources
 - C. Recycling
 - D. Reuses
 - E. Method or process improvement
- 5. What can ensure the commitment of the nations to solve the resource tension situations?
 - A. Globalization
 - B. Multilateral agreement
 - C. Market mechanism
 - D. Socialistic social order
 - E. Both (A) and (C)

Part II: Synonyms

In questions 6 through 10, indicate from the given choices, which has the similar meaning of the word in **CAPITAL**.

6. RAMIFICATION

- A. Precision
- B. Cognizance
- C. Consequences
- D. Legality
- E. Report
- 7. PERTURB
 - A. Pretend
 - B. Agitate
 - C Arrive
 - D. Tutor
 - E. Deregulate
- 8. UPROAR
 - A. Simplified.
 - B. Doubled.
 - C. Tuneful.

D. Hubbub.

E. Fiscal.

9. CACOPHONY

- A. Logical.
- B. Fantastic.
- C. Wizened.
- D. Discord.
- E. Acrobatic.

10. PUERILE

- A. Remarkable
- B. Bogus
- C. Childish
- D. Resourceful
- E. Sluggish

Part III: Antonyms

In questions 11 through 15, indicate from the given choices, which one has an opposite meaning of the word in **CAPITAL**.

11. DEARTH

- A. Timid.
- B. Winding.
- C. Rush.
- D. Abundance.
- E. Rare.

12. DOCILE

- A. Complex
- B. Unruly
- C. Optimistic
- D. Fatuous
- E. Hopeful

13. SANGUINE

- A. Lazy
- B. Pessimistic.
- C. Rage.
- D. Fearless.
- E. Humiliate.

14. NEOPHYTE

- A. Pusillanimous
- B. Calm
- C. Cursory
- D. Complex
- E. Expert

15. OMINOUS

- A. Abundant
- B. Wasteful
- C. Adept
- D. Formidable
- E. Favorable

Part IV: Analogy Test

Directions: Carefully notice the relationship between the words in CAPITAL letters in each question numbered 16 through 20. Choose from answers the pair whose relationship most resembles with it.

16. OUTSKIRTS: TOWN

- A. State: Banker
- B. Baton: Conductor
- C. Library: Lecturer
- D. Margin: Page
- E. Quarry: Stone

17. FRAGILE: BREAK

- A. Vital: Destroy
- B. Flexible: Bend
- C. Hostile: Invite
- D. Vivid: Grow
- E. None of these

18. QUARRY: MARBEL

- A. Liquid: Liter
- B. Bushel: Corn
- C. Weight: Scale
- D. Fame: Television
- E. Forest: Tree

19. FIND: SEARCH

- A. Win: Fight
- B. Weed: Gardener
- C. Recipe: Chef
- D. Medicine: Patient
- E. Compass: Expenditure

20. SAND: DUNE

- A. Shower: Deluge
- B. Tree: Forest
- C. Rock: Bolder
- D. Clamor: Tumult
- E. Twig: Log

Part V: Sentence Correction

Direction: The questions numbered 21 through 30 consist of number of sentences, in each of which some part or the whole is underlined. Each sentence is followed by five alternative versions of the underlined portion. Select an alternative you consider both most correct and most effective according to the requirements of standard written English. Answer 'A' is the same as the original version; if you think the original version is the best, select answer 'A'. In considering the answer choices, be attentive to matters of grammar, diction, and syntax, as well as clarity, precision, and fluency. Do not select an answer, which alters the meaning of original sentence.

21. With the exception of <u>Faruk and I, everyone in the class finished</u> the assignment before the bell rang.

- A. Faruk and I, everyone in the class finished
- B. Faruk and Me, everyone in the class finished
- C. Faruk and I, everyone in the class had finished
- D. Faruk and I everyone in the class had finished
- E. Faruk and I everyone in the class finished

22. Although a surge in retail sales <u>have raised hopes that there is a recovery finally</u> under way, many economists say that without a large amount of spending the recovery might not last.

- A. have raised hopes that there is a recovery finally
- B. raised hopes for there being a recovery finally
- C. had raised hopes for a recovery finally being
- D. has raised hopes that a recovery is finally
- E. raised hopes for a recovery finally

23. Using it wisely, leisure promotes health, efficiency and happiness.

- A. Using it wisely
- B. If it is used wisely
- C. Having used it wisely
- D. Because of its wise use
- E. Because of usefulness.

24. Despite their avoid opposition to the strike, no one <u>from among the dozens of nonunion workers</u> were willing to cross the picket line.

- A. from among the dozens of nonunion workers were willing
- B. of the dozens of nonunion workers were willing
- C. was willing from among the dozens of nonunion workers
- D. from among the dozens of nonunion workers was willing
- E. from the dozens of nonunion workers were willing

25. Many middle class individuals find that they cannot obtain good medical attention, <u>despite they</u> <u>need it badly</u>.

- A. despite they need it badly.
- B. despite they badly need it.
- C. in spite of they need it badly.
- D. however much they need it.
- E. therefore, they need it badly.

26. If he were to win the medal, I for one would be disturbed.

- A. he were to win the medal
- B. he was to win the medal
- C. he is the winner of the medal
- D. he wins the medal
- E. if the event that he wins the medal
- 27. The reason <u>I came late to class today is because</u> the bus broke down.
 - A. I came late to class today is because
 - B. Why I came late to class today is because
 - C. I was late to class today is because
 - D. I came late to class today is that
 - E. That I was late to class today is because

28. Anyone interested in the use of computers can learn much <u>if you have access to</u> the ORACLE Computer Center.

- A. if you have access to
- B. if he has access to
- C. by access to
- D. if access is available to
- E. from access to

29. A fire in an enclosed space burns with the aid of reflected radiation that preheats the fuel, making ignition much easier and <u>flames spreading</u> more quickly.

- A. flames spreading
- B. flame spreads
- C. flames are caused to spread
- **D.** causing flames to spread
- E. causing spreading of the flames

30. <u>Men's interest in developing a cure for cancer have promoted</u> the rapid advances in the field of genetic engineering.

A. Men's interest in developing a cure for cancer have promoted

B. Men's interest for developing a cure for cancer have promoted

C. That man is interested in developing a cure for cancer have promoted

D. Men's interest in developing a cure for cancer has promoted

E. Interest in developing a cure for cancer have promoted

<u>Section-2</u> <u>Mathematics</u> (40 MCQs, 40 Marks)

31. Today is Asif's 12th birthday and his father's 40th birthday. How many years from today will Asif's father be twice as old as Asif at that time?

A. 12B. 16C. 18

D. 24

E. None

32. Sharif ran a 2 miles race at an average speed of 8 miles per hour. If Saiful ran the same race at an average speed of 6 miles per hour, how many minutes longer than Sharif did Saiful take to complete the race?

A. 15 B. 10 C. 8 D. 5 E. None of the above

33. Three workers can do a job in 12 days. Two of the workers work twice as fast as the third. How long would it take one of the faster workers to do the job alone?

A. 30 B. 35 C. 40 D. 42 E. None

34. A rectangular area of 16 meters by 12 meters is surrounded by a road 3 meters wide. The area of the road is:

A. 78B. 132C. 204D. 216E. None

35. x, y & z are consecutive integers. If 0 < x < y < z and (x + y + z) is an odd integer, which of the following could be the value of z?

A. 2 B. 3 C. 4 D. 5 E. None

36. A train covers the distance x between two cities in y hours, arriving 2 hours late. What rate would permit the train to arrive on schedule?

A. (x/y) - 2 B. x/ (y - 2) C. xy - 2 D. x/ (y+ 2) E. None

37. In the figure AD = DB = CD. If $\angle ABD = 25^{\circ}$, $\angle ACD = ?$

A. 50° B. 65° C. 70° D. 75° E. None C D B

38. Mr. Alif invests Tk 2400 in the Brac Bank at 5%. How much additional money must he invest at 8% so that the total annual income will be equal to 6% of his entire investment?

A. Tk 1200 B. Tk 3000 C. Tk 1000 D. Tk 3600 E. Tk 2400

39. At a special sale, 5 tickets can be purchased for the price of 3 tickets. If 5 tickets are purchased at this sale, the amount saved will be what percent of the original price of the 5 tickets?

A. 20%
B. 33 1/3%
C. 40%
D. 60%
E. 66 2/3%

40. Suppose you begin reading a book on page h and end on page k. if you read each page completely and the pages are numbered and read consecutively, then how many pages have you read.

- A. h+k
- B. h-k
- C. k-h+2
- D. k-h-1
- E. **k-h+1**

41. A store usually sells certain item at a 40% profit. In one week, the store has a sale during which the item is 20% less than the usual price. During the sale what is the percent profit the store makes on the item?

- A. 6%
- B. 8%
- C. 11%
- D. 12%
- E. 14%

42. If one root of the equation $2x^2 + x - k = 0$ is 6, what is the value of k?

- A. 90
- B. 42
- C. 18
- D. 10
- E. -10

43. Taxi service charge an initial fee of Tk 22.50 at the beginning of a trip and an additional charge of Tk 3.50 for 2/5 of a mile traveled. What is the total charge for a trip of 3.6 miles?

- A. Tk 31.50
- B. Tk 44.50
- C. Tk 45.00
- D. Tk 48.00
- E. Tk 54.00

44. If a 10% deposit has been paid toward the purchase of a certain product is Tk 110, how much more remains to be paid?

- A. 880
- B. 990
- C. 1000
- D. 1010
- E. 1110

45. The quantity of goods produced in firm is given by the equation $x^2+5x=6$, where x is number of units produced in thousand units. If you solve this equation, what is the rational level of production?

- A. 6000
- B. 4000
- C. 5000
- D. 1000
- E. 2000

46. If there are 5 routes for traveling between two places A and B, how many option are there for a person to travel from A to B and return back?

- A. 5
- B. 10
- C. 9
- D. 25
- E. 20

47. What number should come next of the series: 201, 202, 204, 207, -----?

- A. 205
- B. 208
- C. 210
- D. 211
- E. 213

48. A student has an average of 86 in three examinations. What grade must he/she receive on his/her next test to raise his/her average to 88?

- A. 94
- B. 90
- C. 92
- D. 100
- E. 96

49. The sum of an odd and an even number is:

- A. Sometimes an odd number
- B. Always an odd number
- C. Always a prime number
- D. Always divisible by 2
- E. Always divisible by 3, 5, or 7

50. If p is the smallest of 3 consecutive integers p, q, & r, what is the sum of q & r expressed in terms of p?

A. 3p + 3 B. 3p + 1 C. 2p + 3 D. 2p + 1 E. 2p

51. If x is equal to 2 more than the product of 4 and z, y is equal to 2 less than the product of 3 and z, then how much 3x is greater than 4y?

A. 2 B. -2 C. 12 D. 5 E. 14

- 52. In a group of 9 children, there are twice as many girls as boys, and twice as many right-handed people as there are left-handed people. If one third of the boys are left handed, how many girls are right-handed?
 - A. 1
 - B. 3
 - C. 4
 - D. 5
 - E. 6

Use the table below for the question 53 to 54

Students at Juvenile High School		
	7 th Grade	8 th Grade
Girls	90	80
Boys	85	75

- 53. What is the ratio of seventh grade girls to the total number of girls?
 - F. 9:17
 - G. 8:9
 - H. 18:17
 - I. 9:8
 - J. 17:9

54. Find the ratio of eight grade girls to the total number of student?

- F. 8:33 G. 8:9
- H. 18:17
- I. 9:8
- J. 17:9

55. BC equals one half of AB. The area of right triangle ABC equals 64 square feet. Find hypotenus AC to the nearest foot.



56. The perimeter of ABCD = 24. The area outside the circle but within ABCD is:



57. A train is moving at a speed of 132 km/h. If the length of the train is 110 meters, how long will it take to cross a railway platform 165 meter long?

A. 10

B. 5C. 7.5

- D. 15
- D. 13 E. 20

58. What is the smallest number of apple that can be distributed equally (without cutting any apple) among 6, 10, 14 or 18 boys?

A. 1206
B.315
C. 360
D. 630
E. 780

59. Shuma receives 10% raise each year for three consecutive years. What was her salary after three raises if her salary was Tk. 10000 per month?

A. 13105 B. 13310 C.14520 D.14109 E. 15221

60. If there are 5 routes for traveling between two places A and B, how many option are there for a person to travel from A to B and return back?

A. 5 B. 10 C. 9

D. 25 E. 20 61. The purchase price of an article is Tk 80. In order to include 20% of the cost for overhead and to provide Tk. 20 net profit, the mark up should be:

A. 16%
B. 21%
C. 25%
D. 35%
E. 45%

62. Dana borrows 5500 pounds annually for her college education. If Dana gives her parents 3% of that amount back each month, how much will she still owe her parents after four years of college?

A. 12,430.
B. 13,640.
C. 14,000.
D. 14,080.
E. 15,020.

63. If a and c are both odd numbers, which of the following numbers must be n even number?

A. a + c B. ac C. ac + 2 D. a + c + 1 E. 2a + c

64. In a shipment of 150 machine parts 10% were defective and in another shipment of 100 machine parts 5% were defective. For the two shipments combined, what percent of the machine parts were defective?

A. 7.5%B. 8%C. 8.5%D. 9%E. 10%

65. Jason washes 3 plates after each and every diner. After how many dinners will Jason wash the 26th plate?

A. 10 B. 9 C. 8 D. 7 E. 6 66. If x% of 40 is y, then 10x is equal to:

- A. 4y B. 10y
- C. 25y
- D. 100y
- E. 400y
- 67. Machine A produces 100 parts twice as fast as machine B does. Machine B produces 100 parts in 40 minutes. If each machine produces parts at a constant rate, how many parts does machine A produce in 6 minutes?
 - A. 30 B. 25 C. 20 D. 15
 - E. 7.5

68. What is the rate of discount if a product costing Tk 500 is sold for Tk 470? A. 0.05

B. 0.06C. 0.03D. 0.04E. 0.30

69. In a survey of people owing cars or TVs it was revealed that 6% of those surveyed owned a car and 48% of those surveyed owned a TV. If 5% owned both a car and a TV, what per cent of them owned a car, or a TV or both?

A. 42% B. 54% C. 50% D. 49% E. 53%

70. The population of a town increases by 15% annually. If its population was 8000 in 1995, what will it be in 1997?

- A. 9200
- B. 10400
- C. 9600
- D. 10850
- E. 10580

<u>Section-3</u> <u>General Aptitude</u> (10 MCQs and 2 Analytical Writing Questions, 30 Marks)

Part 1: Data Sufficiency:

Directions: Each of the following problems numbered 71 through 75, has a question and two statements which are labeled as "(1)" and "(2)". Use the data given at "(1)" and "(2)" together with the other available information (such as the number of hours in a day, the definition of clockwise, mathematical facts etc.) to decide whether the statements are sufficient to answer the question. Then fill in the space at your OMR sheet—

- A. If you can get the answer from "(1)" ALONE but not from "(2)" alone
- B. If you can get the answer from "(2)" ALONE but not from "(1)" alone
- C. If you can get the answer from **BOTH "(1)" and "(2)" TOGETHER**, but not from "(1)" alone or "(2)" alone
- D. If EITHER statement "(1)" ALONE or statement "(2)" ALONE suffices
- E. If you **CANNOT** get the answer from statement "(1)" and "(2)" **TOGETHER** and need even more data
- 71. What is the average price of three different DVD's? (C)
 - (1) The first DVD costs 125 dollars.
 - (2) The sum of the prices of the second and the third DVD's is 300 dollars.
- 72. What percent of 20 is Y? (D)
 - (1) 50 percent of Y is 5.
 - (2) Y percent of 200 is 20.
- 73. Did it take Reese more than 24 minutes to bake the carrot cake? (E)
 - (1) Reese spends more than 1260 seconds on the cake.
 - (2) Reese spends less than 1560 seconds on the cake.
- 74. Did Sammy drive more than 21 kilometers last night? (B)
 - (1) Sammy drove more than 20,000 meters last night.
 - (2) Sammy drove less than 20,500 meters last night.

75. One person won the lottery this week, what is the probability that it was a woman over the age of 40? **(E)**

- (1) 55% of all the lottery participants are male.
- (2) 60% of all the lottery participants are over the age of 40.

Part-II: Critical Reasoning:

Directions: For the following questions, numbered 76 through 80, choose the best answer among the listed alternatives:

76. Professor George told his class that the method of student evaluation of teachers is not a valid measure of teaching quality. Students should fill out questionnaires at the end of the semester when courses have been completed.

Which of the following, if true, provides support for Professor George's proposal?

- A. Professor George received low ratings from his students.
- B. Students filled out the questionnaires after the midterm exam.
- C. Students are interested in teacher evaluation.
- D. Teachers are not obligated to use the survey results.
- E. Student evaluation of teachers is voluntary.
- 77. Ira is taller than Sam.

Elliot is taller than Harold.

Harold is shorter than Gene.

Sam & Gene are of the same height.

If the above statement is true, which of the following conditions must also be true?

- A. Elliot is taller than Gene.
- B. Elliot is taller than Ira.
- C. Sam is shorter than Elliot.
- D. Ira is taller than Harold.
- E. Sam is shorter than Harold.

78. Most antidepressant drugs cause weight gain. While dieting can help reduce the amount of weight gained while taking such antidepressants, some weight gain is unlikely to be preventable. The information above most strongly supports which one of the following?

A. A physician should not prescribe any antidepressant drug for a patient if that patient is overweight

B. People who are trying to lose weight should not ask their doctors for an antidepressant Drug.

C. At least some patients taking antidepressant drugs gain weight as a result of taking time.

D. The weight gain experienced by patients taking antidepressant drugs should be attributed to lack of dieting.

E. All patients taking antidepressant drugs should diet to maintain their weight

79. A law requiring companies to offer employees unpaid time off to care for their children will harm the economic competitiveness of our nation's businesses. Companies must be free to set their own employment policies without mandated parental-leave regulations.

Which of the following, if true, would most seriously weaken the conclusion of the argument above?

A. A parental-leave law will serve to strengthen the family as a social institution in this country.

B. Many businesses in this country already offer employees some form of parental leave.

C. Some of the countries with the most economically competitive businesses have strong parental-leave regulations.

D. Only companies with one hundred or more employees would be subject to the proposed parental-leave law.

E. In most polls, a majority of citizens say they favor passage of a parental-leave law.

80. If A, then B.

- If B, then C.
- If C, then D.
- If all of the statements above are true, which of the following must also be true?
 - A. If D, then A.
 - B. If not B, then not C.
 - **C.** If not D, then not A.
 - D. If D, then E.
 - E. If not A, then not D.

Part-III: Analytical Writing (2 Questions, 20 Marks)

Direction: Answer questions 81 and 82 in the given space provided after each question. You have to accommodate within the given space and **no extra paper would be given.**

81. Analysis of an Issue

Direction: In this question, you need to analyze the issue presented and explain your views on it. There is no correct answer. Instead, you should consider various perspectives as you develop your own position on the given issue.

"Some people think that women need to be in home. They should not take part in any kind of outside activities. But many opine that women should take part not only in household activities but also in other spheres."

Discuss on the concerned view and give your own opinion. Support your opinions / views with reasons and / or examples from your own experience, observation or reading.

82. Analysis of an argument.

Direction: In this question, you are asked to write your opinion on the argument presented below

"By creating more number of ENTREPRENEURS we can reduce our UNEMPLOYMENT."

Do you agree with this statement? Give your arguments and draw a valid conclusion based on your argument.