



Admission Tech

**North South University
(NSU)**

**Question bank Summer
2019**



Section 1: English

30 questions, 20 Minutes

Find the odd one out:

01. A. Shirt B. Pant C. Shoe D. Comb E. Belt
02. A. Desktop B. Laptop C. Mobile D. Tab E. Watch
03. A. Bangladeshi B. Indian C. English D. Pakistani E. America
04. A. Postman B. Doctor C. Hospital D. Secretary E. Nurse
05. A. German B. Russia C. England D. Scotland E. France
06. A. Aunt B. Sister C. Mother D. Uncle E. Niece
07. A. Shoe B. Skirt C. Shirt D. Suit E. Comb
08. A. Thursday B. Friday C. Sunday D. Holiday E. Monday
09. A. Pen B. Paper C. Pencil D. Book E. Man
10. A. Army B. Navy C. Air force D. Commando E. Nightguard

Find the Misspelt word:

11. A. Absence B. Accomodate C. Acceptable D. Acquire E. Polythene
12. A. Concede B. Amateur C. Committed D. Address E. calendar
13. A. Carribean B. Chief C. Thief D. Deceive E. Embarrass
14. A. Foriegn B. Fluorescent C. Harass D. Exceed E. Height
15. A. Friend B. Hierarchy C. Equipment D. Catagory E. cemetery
16. A. Exceed B. Leisure C. imediately D. loose E. necessary
17. A. Orginal B. Memento C. Lose D. Medieval E. Omission
18. A. Perceive B. Maintenance C. plagerize D. Possession E. professor
19. A. Principle B. Principal C. Publically D. Privelege E. Queue
20. A. Professor B. Quarantine C. Readable D. Relevent E. Seize





Choose the best option:

21. Our organization was impacted _____ by the passing of Evelyn Cohansey, one of the town's wealthiest residents.
A. Heavy B. Heavily C. Large D. A lot E. None
22. The scientists _____ bacteria in the lab.
A. Have B. Harvest C. Have hervest D. Have hervested E. None
23. I hoped that doling out the money for the test preparation course would prove to be a _____ to me on test day.
A. Benefit B. Beneficial C. Beneficiary D. Beneficially E. None
24. Without the bullet train, it would not be _____ to travel to Beijing from Tianjin in one hour.
A. Impossible B. Possible C. Plausible D. Allowed E. None
25. There was no way to avoid the _____ so we put on our life vests and hoped that the boat would not capsize.
A. At sea B. At shore C. At storm D. Storm E. None
26. China no longer has old-fashioned, _____ cities. Everything is becoming more progressive, Western, and modern
A. Bored B. Boring C. Horrific D. Terrible E. None
27. Rex and Rose Mary end up living in an overcrowded, run down _____
A. Palace B. Mansion C. Hotel D. Motel E. None
28. It was _____ outside in the hot and humid sun.
A. Tired B. Tiring C. Peace D. Peaceful E. None
29. The ballet dancer pirouetted _____ across the stage during the performance of Swan Lake.
A. Beautify B. Beautiful C. Beautifully D. Beautification E. None
30. One of the many _____ of eating foods without artificial ingredients is an improved complexion.
A. Benefits B. Beneficial C. Beneficiary D. Beneficially E. None

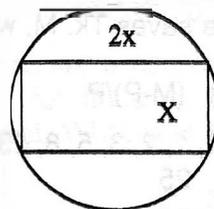
Section 2: Mathematics

01. A man purchased equal number of bananas at two different rates- one at the rate of 8 taka per dozen and the other at the rate of 10 taka per dozen. After that, he sold those bananas at an average rate of 11 taka per dozen and thus made a profit of 100 taka. How many dozens of banana did he purchase altogether?
A. 60 B. 50 C. 55 D. 45 E. 40
02. The longest side of an isosceles right triangle measures 16m. What is the perimeter of the triangle?
A. $32+2\sqrt{2}$ B. $32+16\sqrt{2}$ C. $16+16\sqrt{2}$ D. $32+2\sqrt{2}$ E. $48\sqrt{2}$
03. Of the 400 students in a business school, 30% were women and of these $\frac{1}{5}$ th became entrepreneurs. If the number of men who became entrepreneurs was twice the number of women entrepreneurs, how many men became entrepreneurs?
A. 24 B. 48 C. 120 D. 280 E. None
04. If a, b and c are 3 consecutive integers in that order, which of the following has the lowest value?
A. $(a+b)/c$ B. $(b+c)/a$ C. $(a+b)/b$ D. $(c+b)/a$ E. None





05. In a regular pentagon ABCDE, what is angle BCE?
A. 72 B. 108 C. 54 D. 36 E. 180
06. The ratio of labor cost and materials cost for making a radio is 2:7. If the cost price is 90% of the selling price which is Tk. X, what is the labor cost per radio?
A. 0.1x B. 0.2x C. 0.3x D. 0.4x E. 0.5x
07. A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 320 km of the tour is:
A. 75.2 B. 71.1 C. 70 D. 75 E. 80
08. A can do a work in 15 days and B in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is:
A. 7/15 B. 8/15 C. 4/15 D. 7/20 E. 4/5
09. If y% of x is 29. Then x =?
A. 2900 B. 29x/y C. 29y/x D. 29xy E. None
10. The average age of a man and his son is 20. After 10 years, their age will be in the ratio 2:1. What was the age of the man and his son 5 years ago respectively?
A. 15,5 B. 25,15 C. 25,5 D. 15,10 E. None
11. 40% of students in a class are smart. The rest are stupid. Half the students play sports and half don't. If 20% of the students are smart and play sports, what percent of the students are stupid and don't play sports?
A. 30 B. 40 C. 50 D. 60 E. None
12. Adnan pays 50% of a bill, Shafiq pays 40% of the remaining and the rest Tk. 120 is paid by Raiyan. How much did Adnan Shafiq Raiyan pay together?
A. 280 B. 350 C. 400 D. 450 E. None
13. If a men can do a work in b days. How many days will it take (a+c) men to do the same work?
A. $Ab/(a+c)$ B. $(a+c)/ab$ C. A-c D. $(ab+cb)a$ E. None
14. An isosceles triangle is inscribed in a semi-circle. What is the ratio of the area of the semi-circle to the triangle?
A. π B. $\pi/2$ C. $\pi/4$ D. $\frac{1}{2}$ E. None
15. Rokon, Saim and Nafisa had ate at MCAfe. Nafisa's meal cost 50% more than Saim's meal and Rokon's meal cost $\frac{5}{6}$ th as much as Nafisa's meal. If Saim paid Tk. 1000 for his meal, what was their total lunch bill?
A. 2800 B. 3000 C. 3500 D. 3750 E. None
16. Which of the following could not be the lengths of the sides of a right angled triangle?
A. 3:4:5 B. 6:8:10 C. 5:12:13 D. 7:9:11 E. 9:40:41
17. In the figure above area of the inscribed rectangle is 32. The circumference of the circle is:



- A. 20π B. $4\pi\sqrt{5}$ C. $4\pi\sqrt{3}$ D. $2\pi\sqrt{5}$ E. $2\pi\sqrt{3}$
18. If 12 men can reap 120 acres of land in 36 days, how many acres of land can 54 men reap in 54 days?
A. 810 B. 900 C. 720 D. 600 E. 650





19. Last year 7000 students took the admission test were the ratio of girls to boys was 6:4. Only 2% of the boys met the cut-off marks. The number of such boys was:
A. 2800 B. 84 C. 4200 D. 140 E. 56
20. There are 209 doctors and nurses in a hospital. If the ratio of the doctors to the nurses is 11: 8, then how many nurses are there in the hospital?
A. 121 B. 95 C. 105 D. 76 E. 88
21. 32% students from a class dropped out. 3% of them went abroad. If 60% of them are in probation and the remaining 12 are not in probation, how many students from the class are in probation?
A. 90 B. 120 C. 144 D. 210 E. f
22. Rabib has x more marbles than Rafi has. Together they have y marbles. Which of the following represents the number of marbles that Rafi has?
A. $(y-x)/2$ B. $Y-x/2$ C. $y/2-x$ D. $2y-x$ E. None
23. Tonny buys boiled eggs at Tk. 20 a dozen. And sells them at Tk. 2 per piece. What is her profit margin?
F. 10% G. 12% H. 20% I. 25% J. None
24. Rabib obtained 72, 75, 74, 81 and 86 marks in subjects. What is his average obtained marks?
A. 77.6 B. 77.2 C. 74.8 D. 76 E. None
25. If a 60 ml of water contains 20% of chlorine, how much water must be added in order to create a 12.5% chlorine solution?
A. 60 B. 40 C. 30 D. 36 E. 50
26. The perimeter of a rectangle is equal to 280 meters. The ratio of its length to its width is 5:2. Find the area of the rectangle.
A. 6000 B. 16000 C. 4000 D. 2000 E. 5000
27. If the area of a circle is 49π , what is the perimeter of one quadrant of the circle?
A. 14 B. 14π C. $14\pi+14$ D. $7\pi/2+14$ E. $7\pi/2$
28. X CDs can be purchased for Tk. y . How many CDs can be purchased with Tk. Z
A. Xz/y B. Xyz C. y/xz D. $(x+z)/y$ E. None
29. Of the 80 houses in a development, 50 have a two-car garage, 40 have an in-the-ground swimming pool, and 35 have both a two-car garage and an in-the-ground swimming pool. How many houses in the development have neither a two-car garage nor an in-the-ground swimming pool?
A. 10 B. 15 C. 20 D. 25 E. 30
30. If 5 years ago, Jamil was half as old as he is now, how old will he be in x years?
A. $X+10$ B. $X+5$ C. $X+2$ D. $X-5$ E. $2x$
31. If a man's weekly salary is Tk. P and he saves Tk. M , what fraction of his weekly salary does he spend?
A. M/P B. $(P-M)/P$ C. $(M-P)/P$ D. $(M-P)/M$ E. $(P-M)/M$
32. What is the ninth term of the sequence 1, 1, 2, 3, 5, 8, 13, 21, ...
A. 34 B. 63 C. 25 D. 28 E. None
33. What is the wrong number in the following series?
A. 1 B. 23 C. 144 D. 64 E. 49
34. If $X^4=81$ and $Y^2=49$, then maximum possible value for $Y-X$ is
A. 21 B. 10 C. 4 D. -4 E. -10





35. To find the diameter of a circle whose circumference is 30 inches
- A. Multiply 30 by π B. Divide 30 by 2π C. Divide 15 by 2π
D. Divide 30 by π E. Multiply 30 by $\pi/2$
36. Sami invested a certain sum of money in a simple interest bond whose value grew to Tk 300 at the end of 3 years and to Tk. 400 at the end of another 5 years. What was the rate of interest in which he invested his sum?
- A. 12% B. 12.5% C. 6.6% D. 8.33% E. None
37. The electric company charge: Tk 0.3 per KWH. Rahim used 2800 KWH in April, 3200 KWH in May, and 3600 KWH in June. What was his average costs of electricity in taka for the 3 months?
- A. 72 B. 960 C. 48 D. 144 E. None
38. What percent of 50 is 15?
- A. 30 B. 35 C. 70 D. 300 E. $1000/3$
39. Which of the following is equal to 85 percent of 160?
- A. 1.88 B. 13.6 C. 136 D. 188 E. 13600
40. Out of a total of 1,000 employees at a certain corporation, 52 percent are female and 40 percent of these females work in research. If 60 percent of the total number of employees work in research, how many male employees do NOT work in research?
- A. 520 B. 480 C. 392 D. 208 E. 88
41. If each photocopy of a manuscript costs 4 cents per page, what is the cost, in cents, to reproduce x copies of an x -page manuscript?
- A. $4x$ B. $16x$ C. x^2 D. $4x^2$ E. $16x^2$
42. Of a group of people surveyed in a political poll, 60 percent said that they would vote for candidate R . Of those who said they would vote for R . 90 percent actually voted for R . and of those who did not say that they would vote for R . 5 percent actually voted for R . What percent of the group voted for R ?
- A. 56 B. 59 C. 62 D. 65 E. 74
43. In 1970 there were 8,902 women stockbrokers in the United States. By 1978 the number had increased to 19,947. Approximately what was the percent increase?
- A. 45. B. 125 C. 145 D. 150 E. 225
44. In Township K each property is taxed at 8 percent of its assessed value. If the assessed value of a property in Township K is increased from \$20,000 to \$24,000, by how much will the property tax increase?
- A. 32 B. 50 C. 320 D. 400 E. 500
45. One night 18 percent of the female officers on a police force were on duty. If 180 officers were on duty that night and half of these were female officers, how many female officers were on the police force?
- A. 90 B. 180 C. 270 D. 500 E. 1000
46. Out of their annual net income, a couple spent 25 percent for food, 13.5 percent for entertainment, 20 percent for housing, 8 percent for car expenses, 15 percent for clothing, and saved the rest. What was the ratio of the amount saved to the amount spent for entertainment?
- A. $19/27$ B. $6/5$ C. $37/27$ D. $19/9$ E. $7/3$
47. Approximately 90 percent of the volume of a certain cube that is floating in a tank of water is beneath the surface. If 6.4 cubic centimeters of the cube is above the surface of the water, what is the approximate length, in centimeters, of an edge of the cube?
- A. 10 B. 8 C. 6 D. 4 E. 2





48. Water consists of hydrogen and oxygen, and the approximate ratio, by mass, of hydrogen to oxygen is 2: 16. Approximately how many grams of oxygen are there in 144 grams of water?
A. 16 B. 72 C. 112 D. 128 E. 142
49. Diana bought a stereo for \$530, which was the retail price plus a 6 percent sales tax. How much money could she have saved if she had bought the stereo at the same retail price in a neighboring state where she would have paid a sales tax of 5 percent?
A. 1.00 B. 2.65 C. 4.30 D. 5.00 E. 5.30
50. The present ratio of students to teachers at a certain school is 30 to 1. If the student enrollment were to increase by 50 students and the number of teachers were to increase by 5, the ratio of students to teachers would then be 25 to 1. What is the present number of teachers?
A. 5 B. 8 C. 10 D. 12 E. 15

Section 3- Reading

Answer the following questions based on the passage:

Persuasion is the art of convincing someone to agree with your point of view. According to the ancient Greek philosopher Aristotle, there are three basic tools of persuasion: ethos, pathos, and logos. Ethos is a speaker's way of convincing the audience that she is a credible source. An audience will consider a speaker credible if she seems trustworthy, reliable, and sincere. This can be done in many ways. For example, a speaker can develop ethos by explaining how much experience or education she has in the field. After all, you would be more likely to listen to advice about how to take care of your teeth from a dentist than a firefighter. A speaker can also create ethos by convincing the audience that she is a good person who has their best interests at heart. If an audience cannot trust you, you will not be able to persuade them. Pathos is a speaker's way of connecting with an audience's emotions. For example, a speaker who is trying to convince an audience to vote for him might say that he alone can save the country from a terrible war. These words are intended to fill the audience with fear, thus making them want to vote for him. Similarly, a charity organization that helps animals might show an audience pictures of injured dogs and cats. These images are intended to fill the viewers with pity. If the audience feels bad for the animals, they will be more likely to donate money. Logos is the use of facts, information, statistics, or other evidence to make your argument more convincing. An audience will be more likely to believe you if you have data to back up your claims. For example, a commercial for soap might tell you that laboratory tests have shown that their soap kills all 7,000,000 of the bacteria living on your hands right now. This piece of information might make you more likely to buy their brand of soap. Presenting this evidence is much more convincing than simply saying "our soap is the best!" Use of logos can also increase a speaker's ethos; the more facts a speaker includes in his argument, the more likely you are to think that he is educated and trustworthy. Although ethos, pathos, and logos all have their strengths, they are often most effective when they are used together. Indeed, most speakers use a combination of ethos, pathos, and logos to persuade their audiences. The next time you listen to a speech, watch a commercial, or listen to a friend try to convince you to lend him some money, be on the lookout for these ancient Greek tools of persuasion.





01. As used in paragraph 2, what is the best antonym for credible?
A. Unintelligent B. Boring C. Dishonest D. Amazing E. None
02. Amy is trying to convince her mother to buy her a pair of \$200 shoes. She says: "Mom, the shoes I have are really old and ugly. If I don't get these new shoes, everyone at school is going to laugh at me. I will be so embarrassed that I will want to die." What form of persuasion is Amy using here?
A. Pathos B. Ethos C. Logos D. All E. None
03. According to the passage, logos can build ethos because
A. an audience is more easily convinced by facts and information than simple appeals to emotions like pity or fear
B. an audience is more likely to trust a speaker who uses evidence to support his argument
C. a speaker who overuses pathos might make an audience too emotional; audiences who are too frightened or too sad are unlikely to be persuaded
D. a speaker can use misleading or false information to make his argument seem more convincing
E. None of the above.
04. Gareth is running for mayor. He tells his audience: "Under our current mayor, there have been 15,000 new cases of unemployment. If he stays in office, who knows how many more people will lose their jobs? The number could go up even higher. When I was the CEO of Magnatech, I helped to create over 1,000 new jobs. I can do the same thing for this city if you vote for me." Which form of persuasion is Gareth using here?
I. pathos II. logos III. ethos
A. I only B. I and II C. II and III D. I, II, and III E. None
05. According to the passage, the most effective tool of persuasion is
A. ethos, because you cannot persuade an audience that does not trust you
B. logos, because it can also be used to build ethos
C. a combination of ethos, pathos, and logos
D. pathos, because human beings are most easily persuaded by emotion
E. None of the above.

Answer the following questions based on the passage:

The worst days of any summer are the rainy ones. We spend all year looking forward to nice weather and long, hot days. All of winter, with its dreary gray days and bitter cold, we dream of those endless days at the beach, laying on the sand and soaking in the bright and burning sun. And then, summer comes, and it rains. As a child, I would wake up to rainy summer days and come close to crying. It wasn't fair. We suffered through months of school and miserable weather for those scant ten weeks of freedom and balmy weather. Any day that I could not spend at the beach or playing ball with my friends seemed like a punishment for something I didn't even do. On those rainy summer days, I had nothing fun to do and could only sit inside, staring out at the rain like a Dickensian orphan. I was an only child, so there was no one else to play with. My father worked from home, so I was not truly alone, but he could not actively play with me since he was technically at work. It was those days that I would resign myself to whatever was on television or any books that I could find lying





around. I'd crawl through the day and pray each night that the rain would not be there the next day. As an adult, though, my opinion of summer rain has changed. When you have to work every day, summer is not as eagerly anticipated. Mostly, the days run together, bleeding into each other so that they no longer seem like separate entities and instead feel like continuations of the same long day. Everything seems monotonous and dull, and an ennui or listlessness kicks in. Such a mindset makes you cheer for anything new or different. I spend the winter dreaming of summer and the summer dreaming of winter. When summer comes, I complain about how hot it is. And then I look forward to the rain, because the rain brings with it a cold front, which offers a reprieve—admittedly one that is all too short—from the torture of 100° and humid days. Rainy days are still the worst days of the summer, but summer rain today means positively beautiful—and considerably cooler—weather tomorrow.

06. The passage makes use of language that is
- A. Metaphorical
 - B. Rhetorical
 - C. Formal
 - D. Ambiguous
 - E. None
07. According to the passage, summer is different for adults because
- A. rain brings with it cold temperatures for the following days
 - B. the weather is much warmer than it is for children
 - C. they do not get a long time off from work for the season
 - D. they better know how to occupy their downtime
 - E. None of the above.
08. According to the passage, which of the following is a true statement about the narrator as a child?
- A. He or she was often bored on summer days.
 - B. He or she preferred cooler weather.
 - C. He or she liked staying indoors.
 - D. He or she had no siblings.
 - E. None of the above.
09. Compared to how he or she was as a child, the narrator as an adult is
- A. more realistic
 - B. less excitable
 - C. more idealistic
 - D. less calm
 - E. None of the above.
10. As used in the final paragraph, the word reprieve most nearly means
- A. a permanent conclusion
 - B. a short continuation
 - C. a higher level of pain
 - D. a temporary break
 - E. None of the above.

Section 4: Essay





Answer Key

English

01. D	02. E	03. E	04. C	05. A
06. D	07. E	08. D	09. E	10. D
11. B	12. B	13. A	14. A	15. D
16. C	17. A	18. C	19. D	20. D
21. B	22. B	23. A	24. B	25. D
26. B	27. D	28. B	29. C	30. A

Maths

01. B	02. C	03. B	04. A	05. D
06. B	07. B	08. B	09. E	10. C
11. A	12. C	13. A	14. C	15. D
16. D	17. B	18. A	19. E	20. E
21. C	22. A	23. C	24. A	25. D
26. C	27. D	28. A	29. D	30. B
31. B	32. A	33. B	34. B	35. D
36. D	37. B	38. A	39. C	40. E
41. D	42. A	43. B	44. C	45. D
46. C	47. D	48. D	49. D	50. E

Reading

01. C	02. B	03. B	04. D	05. C
06. A	07. A	08. D	09. A	10. D

Solution

English:

- (D) Rest are clothing
- (E) Rest are communication devices
- (E) Rest are nationalities
- (C) Rest are professions
- (A) Rest are countries
- (D) Rest are female
- (E) Rest are clothing
- (D) Rest are names of days in a week
- (E) Rest are used for writing
- (D) Rest are military personnel
- (B) Accommodate
- (B) Amateur
- (A) Caribbean
- (A) Foreign
- (D) Category
- (C) Immediately
- (A) Original
- (C) Plagiarize

