

Admission Test 2015 – 2016

1. "তবুও থাকে না যৌবন- বেগ, জীবনের উল্লাসে/ চলেছে চন্দ্র-মঙ্গল গ্রহে স্বর্গে অসীম আকাশে" লাইনের রচয়িতা কে?
ক। সুকান্ত ভট্টাচার্য খ। শামসুর রাহমান গ। কাজী নজরুল ইসলাম ঘ। ফরফুক আহমেদ
2. "বাসমহল" কোন সমাস?
ক। কর্মধারায় খ। দ্বিগু গ। বহুব্রীহি ঘ। নিত্য সমাস
3. "প্রবার্য" বিপরীত শব্দ কোনটি?
ক। পুরাতন খ। স্নিগ্ধতা গ। আলোকিত ঘ। উষ্ণতা
4. "ঢাকা ঢাক গুর গুর" বাঙ্কারটির অর্থ?
ক। ঢাকা জোর বাজান খ। বিরক্তিকর আওয়াজ গ। লুকোচুরি ঘ। প্রচার
5. "মাঝে মাঝে মানব প্রেমের কথাও তারা বলে। কিন্তু তাতে নেশা ধরে না" কোন গল্পের অংশ?
ক। আহবান খ। মানব কল্যাণ গ। ভুলের মূল্য ঘ। জীবন বৃক্ষ

Mathematical aptitude and IQ

Read the following passage and select the most appropriate answer to the questions (6-10)

Coach Nelson is putting together a four-member handball team from right-handed players R, S and T and left-handed players L, M, N, and O. He must have two right handed players on the team, and all must be able to practice with each other.

S cannot practice with L

T cannot practice with N

M cannot practice with L or N

6. If both S and T are chosen for the team what other individuals must be with them?
a) M and O only b) M only c) L and O only d) L only
7. If L is on the team, what other individuals must also be on the team?
a) R and T b) R, T and O c) R, T, and N d) M, and O
8. If T were to become left-handed player, how many different team could be form?
a) 1 b) 2 c) 3 d) more than 3
9. If O is not on the team, which of the other players must be on the team?
a) M only b) R, T and N c) R and S d) R, S and M
10. How many different team can be formed without R?
a) 3 b) 2 c) 1 d) more than 3
11. 12 liters of water are poured into an aquarium of dimensions 50 cm length, 30 cm breadth, and 40 cm height, how high (in cm) will the rise? (1 liter = 1000 cm³)
a) 6 b) 40 c) 20 d) 8

We know, 1 litre = 1000cm³

⇒ 12 litres = 12 * 1000 = 12000cm³

Let call the height of the water is x

the breadth and length of the water will equal the aquarium

The volume of the water:

50 * 30 * x = 12000cm³

$$\Rightarrow x = 12000 / (50 * 30) = 8 \text{ cm}$$

Ans is D.

12. Half of the people on a bus get off at each stop after the first, and no one gets off after the first stop. If only one person gets off at number 7, how many people got on first stop?
 a) 64 b) 128 c) 32 d) 1

We can work backward to solve this problem. If only 1 person gets off at stop 7, there must be 2 people who get off at stop 6, 4 at stop 5, 8 at stop 4, 16 at stop 3 and 32 at stop 2. Notice that at stop 7, there must be 1 person left on the bus also, thus the total number of people who got on the bus at stop 1 is:

$$1 + 1 + 2 + 4 + 8 + 16 + 32 = 64$$

Ans is A

13. In a class of 78 students 41 were taking French, 22 are taking German, of the students taking French or German, 9 are taking both course. How many students are not taking either course?

- a) 5 b) 15 c) 24 d) 30

Total: 78

French total: 41

French and German: 9

$$41 - 9 = 32$$

German total: 22

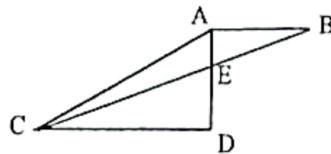
French and German: 9

$$22 - 9 = 13$$

$$\text{Students not taking either course} = 78 - 9 - 13 - 32 = 24.$$

Ans is C.

14. In the figure below $AD = 4$, $CD = 9$, and $DE = 3AE$. What is the area of the triangle AEC?



- a) 4.5 b) 13.5 c) 9 d) 18
15. A dress on sale in shop is marked at \$D. during the discounted sale its price is reduced by 15%, staffs are allowed a further 10% reduction on the discounted price, if a staff member buys the dress what will she have to pay in terms of D?
 a) 0.75D b) 0.76D c) 0.775D d) 0.765D

$$\text{Successive discounts} = -a - b + ab / 100$$

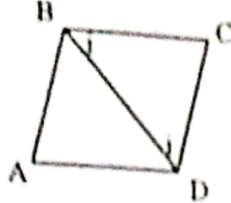
Putting the values,

$$\text{Total discount} = -15 - 10 + 150/100 = -25 + 1.5 = 23.5\% \text{ discount}$$

$$\text{Hence the final price of the dress} = D - 0.235D = 0.765D$$

Ans is D.

16. ABCD is a parallelogram. $BD = 2$. The angles of $\triangle BCD$ are all equal. What is the perimeter of the parallelogram?



- a) 12 b) 8 c) 9 d) $9\sqrt{3}$

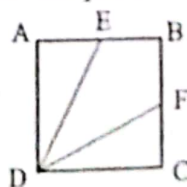
The angles of triangle BCD are all equal and $BD = 2$. So, $BC = BD = CD = BA = AD = 2$.
 The parallelogram has 4 equal sides.
 $BC = CD = BA = AD = 2$
 So The perimeter of the parallelogram will be $2 \cdot 4 = 8$.
 Ans is B

17. If a positive integer n , divided by 5 has a remainder 2, which of the following must be true?

- i) n is odd ii) $n + 1$ cannot be prime number iii) $(n+2)$ divided by 7 has remainder 2
 a) ii and iii b) i only c) i and ii d) none

A positive integer n , divided by 5 has a remainder 2 \rightarrow , so n could be 2, 7, 12, 17, 22, 27, ...
 I. n is odd. Not necessarily true, since n could be 2, so even.
 II. $n+1$ cannot be a prime number. Not necessarily true, since n could be 2, so $n+1=3$ =prime.
 III. $(n+2)$ divided by 7 has remainder 2. Not necessarily true, since n could be 2, so $n+2=4$ and 4 divided by 7 has remainder 4.
 Ans is D.

18. ABCD is a square of 3 side, E and F are the mid points of sides AB and BC respectively what is the area of quadrilateral EBFD?



- a) 2.25 b) 3 c) 4.5 d) 4

Area of Quadrilateral EBFD = Area of Square ABCD - (Area of $\triangle ADE$ + Area of $\triangle CDF$)
 Now, Area of $\triangle ADE$ = Area of $\triangle CDF$
 $= \frac{1}{2} \cdot \frac{3}{2} \cdot 3$
 $= \frac{9}{4}$
 $= 2.25$
 So, Required Answer is
 $3^2 - 2 \cdot 2.25$

$= 9 - 4.50$
 $= 4.50$
 Answer is C

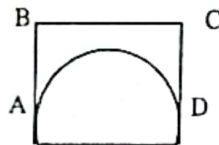
19. The price of a cycle is reduced by 25%. The new price is reduced by further 20%. The two reduction is equal to a single reduction is-
 a) 45% b) 35% c) 40% d) 30%

Let price be Tk 100
 then 1st reduction will give discounted price as Tk 75
 again 2nd reduction will yield Tk $75(1-20/100) = \text{Tk } 60$ (final price)
 so reduction from initial Tk 100 to final Tk 60 = Tk 40
 Ans is C

20. If $4x$ is 9 greater than the sum of x and $3y$ then x is how much greater than y ?
 a) 3 c) 6 c) 9 d) 15

Given: $4x = 9 + (x + 3y)$
 To find: $x - y = ?$
 $4x = 9 + (x + 3y)$
 $3x - 3y = 9$
 $x - y = 3$
 Ans is A

21. By how much 11% of 22.2 less than 10% of 24.4?
 a) -0.002 b) 0.003 c) -0.004 d) 0.002
22. Rectangle ABCD has a perimeter of 26. The half circle with diameter AD has an area of 8cm. what is the perimeter of the part of the figure is not shaded?



- a) $26 + 4\pi$ b) $18 + 4\pi$ c) $18 + 8\pi$ d) $14 + 4\pi$

Area of half circle = $\pi r^2/2$, where r is the radius.
 Equating, $8\pi = \pi r^2/2$, we get $r^2 = 16$ or $r = 4$.
 Thus the side of the rectangle (having half circle) is $4 * 2 = 8$. Let the other side be x .
 Then perimeter = $2(8 + x) = 26$, this gives $x = 5$
 Perimeter of part that is not shaded = $AB + BC + CD + \text{semi-circular arc}$
 Now, $AB = CD = 5$, $BC = 8$.
 Semi-circular arc = $2\pi r/2 = \pi r = \pi * 4 = 4\pi$
 Hence required perimeter = $5 + 5 + 8 + 4\pi = 18 + 4\pi$
 Thus answer is B

23. Courier charges for packages on a certain destination is 65 cents for the first 250 grams and 10 cents for each additional 100 grams or part thereof. What could be the weight in grams of a package that charge is \$1.55?
 a) 1155 b) 950 c) 1040 d) 1150

24. Aaron has 3 times as money as Josh. If Aaron gives Josh \$50, Josh will have 3 times as money as Aaron. How much money do they have together?
 a) 100 b) 150 c) 125 d) 200

Let Josh has x tk
 Aaron has $3x$ tk
 According to question,
 Aaron gives 50 tk,
 Money with Aaron = $3x - 50$
 Money with Josh = $x + 50$
 So, $x + 50 = 3(3x - 50)$
 $x + 50 = 9x - 150$
 $200 = 8x$
 $x = 25$
 So Aaron has $3x = 3 * 25 = 75$ tk
 Money together = $25 + 75 = 100$ tk
 Ans is A

25. Five years ago father's age seven times of his son's age their ages will be in the ratio of 5:2 present age
 a) F=50, S=20 b) F=40, S=10 c) F=35, S=10 d) F=50, S=15
26. A buzzer sounds every 15 minutes. If the buzzer sounded at 12:40. Which of the following could be a time at which the buzzer sounded?
 a) 4:05 b) 5:30 c) 6:45 d) 8:10

Alarm sounds every 15 mins
 12:40, 12:55, 01:10, 01:25, 01:40, 01:55
 answer will be with either of the min timings
 Ans is D

27. Two years ago average age of a family of 8 members was 18. After the addition of a boy today the average remains same. What is age of the baby?
 a) 1 year b) 2 years c) 3 years d) 4 years

According to the question,
 Average age of 8 members two years ago = 18 years
 Sum of age of 8 members two years ago = 144 years
 After the addition of a baby the average age of the family is same today.
 i.e, Average age of 9 members today = 18 years
 Sum of age of 9 member today = 162 years
 In these 2 years the age of 8 members is also increased
 Increase in the age of 8 members = $8 * 2 = 16$ years
 Sum of ages of 8 members today = $144 + 16 = 160$ years
 Age of child = $162 - 160 = 2$ years
 Ans is B

28. A shopkeeper gives a discount of 10% on the marked price of transistor but in the bargain makes profit of 10%. If the price of the transistor is Tk. 330, how much it costs?
 a) 300 b) 350 c) 360 d) 270
29. The average weight of 5 men is increased by 2 kg, when one of the man whose weight is 60 kg is replaced by a new man. The weight of the new man?
 a) 70 kg b) 60 kg c) 50 kg d) 80 kg

Average increase in weight = 2 kg
 So, total increase in weight = $(5 \times 2) = 10$ kg
 Since new man is responsible for the weight so his weight is $(60 + 10) = 70$ kg. (here 60 kg is the replaced man's weight)
 Ans is A

30. Due to 30% fall in price of television sets there is rise of 20% in the sales. How will income of the affected?
 a) 16% rise b) 15% rise c) 16% fall d) 15% fall
31. The population of a town was 54243 in 1975 and 49200 in 1984. If the rate of change per thousand remains unchanged, what was the population in 1989?
 a) 50108 b) 46857 c) 48249 d) 60000
32. A dog takes 4 leaps for every 5 leaps of here and 3 leaps of dog is equal 4 leaps of cat. Compare the speed of the here and the cat
 a) 20:19 b) 17:16 c) 18:19 d) 15:16

$C/D \div C/D = 5/4 \div 4/3$
 $= 5/4 \times 3/4$
 $= 15/16$
 Ans is D

33. A simple interest Tk. 800 becomes Tk. 920 in 3 years. If the rate of interest increased by 3% the total amount becomes
 a) Tk.992 b) Tk.990 c) Tk.192 c) Tk. 998
34. If the cost of a long distance phone call is C taka for first minute and $(2/3) C$ taka for each additional three minutes. What is the cost in taka of a ten minutes call?
 a) $5C/3$ b) $6C$ c) $3C$ d) $7C$

First min: C tk
 Next 9 mins: $(2/3)c \times 9 = 6C$ tk
 $C + 6C = 7C$
 Answer is D

35. There are twice as many girls as boys in class. If 30% of the girls and 45% of the boys already handed over their reports, what percent of the students have not yet done so?
 a) 25 b) 35 c) 65 d) 75

Boys= 100
 Then Girls= 200
 Total students = $100 + 200 = 300$.
 Handed over= $30\% \times 200 + 45\% \times 100$
 $= 60 + 45$
 $= 105$
 Didn't hand over = $300 - 105 = 195$

Percentage of students who didn't hand over:

$$x\% \text{ of } 300 = 195$$

$$x/100 * 300 = 195$$

$$3x = 195$$

$$x = 65$$

Ans is C

36. How many countries will participate in Rio-Olympic 2016?
a) 201 b) 205 c) 203 d) 206
37. Which of the following country is the largest flower exporting country in the world?
a) Switzerland b) China c) The Netherlands d) India
38. Which of the following is not a central bank?
a) state bank of India b) Federal Reserve System c) Bank of England d) Bangladesh Bank
39. Who is the present president of FBCCI?
a) Abdul Motalib Ahmed b) Mahbubul Alam
c) Md. Shaiful Islam d) Md. Helal Uddin
40. Who got the Nobel prize in Economics in 2015?
a) Servilana Alexievich b) Angus Deaton
c) William Campbell d) Tomas Lindahl
41. The first electronic computer in the world?
a) NIVAC b) EDVAC c) ENIAC d) IBM
42. Which country has given 'Bengali' language the status of the second state language?
a) Zambia c) Chad c) Ghana d) Sierra Leone
43. The headquarter of CIRDAP is in?
a) India b) Nepal c) Pakistan d) Bangladesh
44. The first private bank in Bangladesh?
a) Arab Bangladesh Bank b) IFIC Bank c) National Bank d) The City Bank
45. The author of the novel 'The sun also Rises' is-
a) H.G. Well b) G.B. Shaw c) Ernest Hemingway d) George Orwel
46. Turn into the indirect form of speech. The teacher said, "keep quiet, my dear boys"
a) the teacher asked the boys to keep quiet
b) The teacher affectionately told the boys to keep quiet
c) The teacher ordered the boys to keep quiet
d) The teacher affectionately asked the boys to keep quiet

Narration এ Direct to indirect speech এ change করার সময় Dear থাকলে affectionately বসে আর said থাকলে told বসে।

47. Select the pair that expresses the similar relationship to that in original pair.

REINFORCE:STRONGER

- a) Erode : weaker b) Abound : Lesser
c) Shrink : Greater d) Wilt : Higher

যেহেতু Reinforce মানে stronger হয়, তাই answer হবে A. কারণ Erode মানে ক্ষয় হতে হতে weaker হয়ে যাওয়া।

Dream's

48. Bangla meaning of word Flamboyance is-

- a) উৎসব b) নিষ্পাপ c) সমারোহ d) বিশেষ

49. Every day in the last week my aunt _____ a plate

- a) breaks b) was breaking c) has broken d) broke

Broke বসবে কারণ last week অতীতকে represent করে তাই simple past tense হবে।

50. P: Parents are annually obliged

Q: to which

R: one of the most fiendish tortures

S: is

T: to subject themselves

U: the school speech day

The proper sequence of the jumble parts (levelled P, Q, R, S, T, U) to produce the correct sentence should be:

- a) PQRSTU b) RQPTSU c) USRQPT d) RSUQPT

RSUQPT হল একমাত্র sequence যেটি একটি complete sentence হিসেবে ঠিক meaning provide করেছে।

51. You _____ a kind and generous uncle

- a) always have been b) have always been
c) have been always d) are always been

Auxiliary ও main verb এর মাঝে adverb of time বসে have been এর মাঝে always বসবে।

52. P: usually the local MP

Q: for the show

R: who takes the opportunity

S: honored guest

T: is

U: to blow his bag

The proper sequence of the jumble parts (levelled P, Q, R, S, T, U) to produce the correct sentence should be:

- a) SQTPRU b) SRUTPQ c) SRQTPU d) PTSRQU

SQTPRU হল একমাত্র sequence যেটি একটি complete sentence হিসেবে ঠিক meaning provide করেছে।

53. Select the pair that expresses the similar relationship to that in original pair.

WALK:LEGS

- a) Dress : Hem b) Cover : Book
c) Griend : Nose d) Chew : Mouth

We walk with the help of legs. Similarly, we chew with the help of mouth.

54. "Hamlet said that he would go home the following day" the direct form of the speech-

- a) Hamlet Said, "I shall go home tomorrow"
b) Hamlet Said, "I shall go home the next day"
c) Hamlet Said, "I will go home the next day"
d) Hamlet Said, "I will go home tomorrow"

Indirect to direct narration হলে would থাকলে shall বসবে এবং the following day থাকলে

tomorrow হবে।

55. Select the correctly spelled word
 a) enthausiastic b) enthuciastic c) enthosuactic d) enthusiastic
56. The word 'AUGUST' means
 a) common b) ridiculous c) dignified d) petty

August মানে respected and dignified.

57. Point out the correct sentence
 a. Our neighbors are going to holiday
 b. Our neighbors are going on holiday
 c. Our neighbors are going for holiday
 d. Our neighbors are going in holiday

Going এর পর to বসে।

58. Opposite word of 'COMMENDABLE'
 a) deserving b) regrettable c) deplorable d) creditable
59. Opposite word of 'CLANDESTINE'
 a) overt b) covered c) intractable d) covert

Clandestine মানে গোপনা আর overt মানে প্রকাশ্য। So they are opposite.

60. The college teacher is popular among his students. The underlined word is-
 a) noun b) adverb c) adjective d) verb

এই বাক্যে college হল adjective.

61. Which of the following sentence is correct?

- a) he had been hanged for murder
 b) he was hanged for murder
 c) he was been hanged for murder
 d) he was hanged of murder

62. The meaning of 'ELUCIDATE' is-

- a) extreme b) confuse c) perplex d) clarify

Elucidate মানে হল স্পষ্ট করা।

63. Which of the following sentence is correct?

- a) A Akbar is not born in every age
 b) The Akbar is not born in every age
 c) An Akbar is not born in every age
 d) An Akbar is not born in a every age

64. Identify the error. The fascinating TV (i) special (ii) shows how (iii) quick the hungry tiger (iv) can devour her prey

- a) i b) ii c) iii d) iv

65. Find out the alternative which will replace the question mark:
 FLOW::RIVER::STAGNANT

- a) rain b) pool c) stream d) canal

66. "The teacher made the student go outside of the class" correct the passive form of this sentence:
 a) the student was turned out of the class by the teacher
 b) the student was made outside of the class by the teacher
 c) the student made to go outside of the class by the teacher
 d) none of these
67. Just now he _____ his lunch but he says he will see you who has finished.
 a) is having b) having c) has had d) had
68. The intellectual can no longer be said to live _____ the merge society
 a) against b) inside c) beyond d) before
69. "Do it or I shall fine you" complex form of this sentence is-
 a) by doing it you can avoid fine
 b) if you don't do it I will fine you
 c) unless you do it, I will fine you
 d) I shall fine you because you don't do it
70. Milton _____ one of the greatest poets that _____ ever lived.
 a) were, have b) was, has c) were, has d) was, have
71. He is going towards the station. The underlined word is-
 a) preposition b) conjunction c) adverb d) adjective
72. "in spite of my annoyance I kept quiet" compound form of the sentence
 a) I was annoyed still I kept quiet
 b) I was annoyed and I kept quiet
 c) Though I was annoyed, I kept quiet
 d) I was annoyed as well as I kept quiet

conjunction দিয়ে বাক্য যুক্ত করলে তা compound sentence হয়।

73. Identify the error: (i) Even though some posses the flexibly change their opinions, most people (ii) vary in (iii) his or her willingness to listen (iv) reason
 a) i b) ii c) iii d) iv
74. "It is supposed that you know" the active form of the sentence
 a) it should be known to you
 b) people believe that you know
 c) you should know it
 d) you are supposed to be know
75. Opposite word of 'ASSERT' is-
 a) affirm b) declare c) insist d) deny

Assert মানে জাহির করা আর deny মানে অস্বীকার করা। So they are opposite.

| | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. B | 2. A | 3. B | 4. C | 5. D | 6. A | 7. B | 8. C | 9. A | 10. C |
| 11. D | 12. A | 13. C | 14. A | 15. D | 16. B | 17. D | 18. C | 19. C | 20. A |
| 21. A | 22. B | 23. D | 24. A | 25. B | 26. D | 27. B | 28. D | 29. A | 30. C |
| 31. B | 32. D | 33. A | 34. D | 35. C | 36. D | 37. C | 38. A | 39. A | 40. B |
| 41. C | 42. D | 43. D | 44. A | 45. C | 46. B | 47. A | 48. C | 49. D | 50. D |
| 51. B | 52. A | 53. D | 54. A | 55. D | 56. C | 57. C | 58. C | 59. A | 60. C |
| 61. B | 62. D | 63. C | 64. C | 65. B | 66. D | 67. C | 68. C | 69. C | 70. D |
| 71. A | 72. B | 73. B | 74. B | 75. D | 76. | 77. | 78. | 79. | 80. |