

Admission Test 2014 – 2015

1. 'নিরানব্বইয়ের ধাক্কা' বাগধারাটির অর্থ?
ক) তীরে পৌছার ঝঙ্কি খ) মুর্ষ অবস্থা গ) আসন্ন বিপদ ঘ) সঞ্চয়ের প্রবৃত্তি
2. 'সেতার' শব্দের অর্থ কি?
ক) আলোকরশ্মি খ) তারকা গ) বাদ্যযন্ত্র ঘ) চাঁদ
3. 'বিরানব্বই' কোন সমাস
ক) দ্বিগু খ) নিত্য গ) সংখ্যাবাচক বহুব্রীহি ঘ) অলুক দ্বন্দ
4. 'একটি ফটোগ্রাফ' কবিতাটি কার?
ক) সৈয়দ আলী আহসান খ) ফররুখ আহমেদ গ) জীবানানন্দ দাস ঘ) শামশুর রাহমান
5. বাক্যে সেমিকোলন (;) থাকলে কতক্ষণ থাকতে হয়?
ক) ১ সেকেন্ড খ) ১ বলতে যে সময় লাগে গ) ২ সেকেন্ড ঘ) ১ বলার দ্বিগুন সময়
6. The meaning of 'SUMPTUOUS' is:
a) luxurious b) delirious c) perilous d) warlike

Sumptuous মানে ঐশ্বর্যবান।

7. The meaning of 'FLARE' is-
a) judicial b) temper c) blaze d) style

Flare মানে শিখা/জ্বলন্ত

8. The bangla meaning of word 'AMICABLE' is-
a) শত্রুতাপূর্ণ b) বন্ধুত্বপূর্ণ c) বিসাদৃশ d) বাচাল

Amicable মানে friendly.

9. Identify the error: Superior to all (i) other woods (ii) for shipbuilding, teak is (ii) also used for (iv) furniture, flooring and other general construction
a) i b) ii c) iii d) iv

Parallel structure wise furniture, floor and other general construction হবে।

10. I read an advertisement that said

P: posh, air-conditioned

Q: gentleman of taste

R: are available for

S: fully furnished room

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

- a) PQRS b) PSRQ c) PSQR d) SRPQ
11. If you ____ live anywhere, which country would you choose?
a) will b) would c) could d) may

Sentence এর meaning হিসেবে could হবে।

Dream's

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

AFTER:BEFORE

- a) first : second b) contemporary : historic c) present : past d) successor : predecessor

পরেঃ আগে

অনুগামীঃ অগ্রগামী

13. It has been established that

P: Einstein was

Q: although a great scientist

R: weak in arithmetic

S: right from his school days

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

- a) SRPQ b) QPSR c) RQSP d) QPRS

14. I wish I ____ leave my boring job and travel the world, instead of working here

- a) could b) would c) should d) have

15. Can you put your arm ____ the window and open the door

- a) into b) through c) in d) to

appropriate preposition হিসেবে put through বসে।

16. He won't pass his exam unless he ____ much harder

- a) will study b) study c) studies d) may study

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

GRAVITY:PULL

- a) north : pole b) iron : metal c) magnetism : attraction d) dust : desert

অভিকর্ষঃ টান

চুম্বক ঃ আকর্ষণ

18. "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

19. Identify the error: Dimness of light (i) will not harm eyes (ii) any more than (iii) taking a photograph in (iv) dimly light harm the camera

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

dimly হবে না, dim হবে।

20. Turn into indirect form of speech

'The best surgeon in the town, did Papia's operation'

- a) the town's best surgeon had done Papia's operation
b) Papia's operation had been done by town's best surgeon

- c) the town best surgeon has had done Papia's operation
 d) Papia had her operation done by the best surgeon in the town
 narration এ simple past কে past perfect tense এ পরিবর্তন করতে হয়।

21. Opposite of 'REPUDIATE' is-

- a) argue b) soften c) slender d) admit

Repudiate মানে প্রত্যাখ্যান। admit মানে স্বীকার করা।

22. Turn into the indirect speech

"Why don't we go to the cinema?" said Ataur

- a) Ataur proposed that they would go to cinema
 b) why don't they go to cinema was asked by Ataur
 c) Ataur asked them to go to cinema
 d) it was proposed by Ataur that they would go to cinema

23. Identify the error:

Weather is the transitory expression of (i) climate that (ii) can change (iii) great from day to day (iv) or season to season

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

great এর পরিবর্তে greatly হবে।

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

EARTH:PLANET

- a) may : month b) Asia : continent c) moon : satellite d) Sunday : week

পৃথিবীঃ গ্রহ

চাঁদঃ উপগ্রহ

25. The meaning of 'AUSPICIOUS' is-

- a) deceitful b) foreboding c) dangerous d) favorable

Auspicious মানে অনুকূল

26. 'Life is a tale told by an idiot' the underlined word is

- a) preposition b) adverb c) adjective d) noun

27. Which of the following sentence is correct?

- a) not less than fifty men were present
 b) not less than fifty men was present
 c) not fewer than fifty men were present
 d) not were than fifty men was present

28. Opposite of 'AUSTERE'

- a) light b) lavish c) unfavorable d) devout

Austere মানে কঠোর, তাই বিপরীত বোঝাতে Light হবে।

29. 'Health is Wealth' Complex for of the sentence

- a) wealth and health are the same
 b) people who are healthy are also wealthy
 c) health is a good wealth
 d) it is health which is wealth

30. 'Take care of your health' The passive form of the sentence
- let your health taken care of
 - let your health be taken care of
 - health is taken care of by you
 - take care of health by you

Imperative sentence এর passive narration করতে let ব্যবহার করতে হয়।

31. 'Can you tell me the time of his arrival?' Complex form the sentence
- Can you tell me what times is of his arrival?
 - Can you tell me what is the time of his arrival?
 - Can you tell me what time will he arrive?
 - Can you tell me what is the time he will arrive?
32. 'The rich look down upon the poor' the underlined word is-
- preposition
 - adverb
 - adjective
 - noun
33. Which of the following sentence is incorrect?
- the news is widely circulated
 - the circumstance are bad
 - he has obtained full mark
 - the boat is made of wood
34. "Why wasn't the matter brought to my notice?" the active form of the sentence?
- why didn't you bring the matter to my notice?
 - why you didn't bring the matter to my notice?
 - why don't you bring the matter to my notice?
 - why is the matter not brought to my notice?
35. "It is certain that he will come" simple form of the sentence
- he will certainly come
 - he will come certainly
 - his coming is more than certain
 - there is certainly he is coming
36. At the rate of f feet per second, how many feet does a pedestrian travel in m minutes?
- sm/f
 - fm/s
 - $60 f/ms$
 - $60 fm/s$
37. If $t > 1$ and t increases, which of the following decreases?
- $t-2$
 - $t^2 - 4$
 - $2t-1$
 - $1/t^2$
38. What percentage of the number from 1 to 80 have squares that end in digit 9?
- 10
 - 20
 - 25
 - 12
39. The product of three consecutive odd integers is 3. What is the largest of the integer
- 3
 - 1
 - 3
 - 1
40. In a certain office, $1/3$ of the workers are women, $1/2$ of the women are married, $1/3$ of the married women have children. $1/4$ of the men are married and $2/3$ of the married men have children, what part of the workers is without children?
- $7/18$
 - $4/9$
 - $11/18$
 - $11/24$

Fraction of female workers: $1/3$

Fraction of married female workers: $1/2 \times 1/3 = 1/6$

Fraction of married female workers with children: $1/3 \times 1/6 = 1/18$

Fraction of male workers = $1 - \text{fraction of female workers} = 1 - 1/3 = 2/3$

Fraction of married male workers: $3/4 \times 2/3 = 1/2$

Fraction of married male workers with children: $\frac{2}{3} \times \frac{1}{2} = \frac{1}{3}$
 Fraction of all married workers with children: $\frac{1}{18} + \frac{1}{3} = \frac{7}{18}$

41. 39 persons can repair a road in 12 days, working 5 hours a day. In how many day 30 persons, working 6 hours a day, complete the work?
 a) 10 b) 13 c) 14 d) 11

Let the required number of days be x.
 Less persons, More days (Indirect Proportion)
 More working hours per day, Less days (Indirect Proportion)
 Persons 30:39 Working hours/day 6:5 :: 12:x
 $\Rightarrow 30 * 6 * x = 39 * 5 * 12$
 $\Rightarrow x = 13$

42. Of 60 students, 30 are happy, 10 are sad and 20 are neither happy nor sad. There are 20 boys and 40 girls. If there are 6 happy boys and 4 sad girls, how many boys are neither happy nor sad?
 a) 8 b) 12 c) 4 d) 24

Use a double-set matrix to solve this problem. First, fill in the numbers given in the problem: of 60 children, 30 are happy, 10 are sad, and 20 are neither happy nor sad; 20 are boys and 40 are girls. You also know there are 6 happy boys and 4 sad girls. Therefore, by subtraction, there are 6 sad boys and there are 8 boys who are neither happy nor sad.

	Happy	Sad	Neither	Total
Boys	6	6	8	20
Girls		4		40
Total	30	10	20	60

Answer is A

43. If $n \neq 0$, which of the following must be greater than n?
 i) $2n$ ii) n^2 iii) $2-n$
 a) i b) ii c) ii & iii d) none

$n \neq 0 \Rightarrow n = \text{negative or } n = \text{positive}$
 if $n = \text{negative}$:
 $2n < n$ ($n = -1$ then $2n = -2 \Rightarrow -2 < -1$)
 $n^2 > n$ ($n = -1$ then $n^2 = 1 \Rightarrow n^2 > n$)
 $2 - n > n$ ($n = -1$ then $2 - (-1) = 2 + 1 = 3 \Rightarrow 2 - n > n$)
 but if $n = \text{positive}$:
 $n^2 > n$ ($n = 2$ then $n^2 = 4 \Rightarrow n^2 > n$) \Rightarrow II
 $2 - n < n$ ($n = 2$ then $2 - 2 = 0$)
 \Rightarrow only II
 Answer is B

44. A chair was sold at a loss of 10%. If it was sold at Tk. 84 more, there would have been a gain of 4%. For how much was the chair sold?
 a) 340 b) 540 c) 740 d) 624

Dream's

45. The sum of degrees of the interior angles of polygon of 13 sides?
 a) 1890° b) 1980° c) 2160° d) 1710°

46. A man earns N dollars a month and spends S dollars a month on rent. If he spends $\frac{3}{8}$ of the remainder on food, how much, in dollars, is left over for other expenses?
 a) $\frac{5}{8}(N-S)$ b) $\frac{5}{8}(N+S)$ c) $\frac{3}{8}(N-S)$ d) $\frac{5}{8}(S-N)$

Income = N
 Rent = S
 Remaining = N - S
 Food = $\frac{3}{8}$ of remaining
 = $\frac{3}{8}(N-S)$
 Now, remaining = $N - S - \frac{3}{8}(N-S)$
 = $(N-S)(1 - \frac{3}{8})$
 = $(N-S) * \frac{5}{8}$
 = $\frac{5}{8}(N-S)$
 Ans is A

47. Of 30 integers, 12 are in set A, 22 are in set B, and 7 are in both set A & B. how many of the integers are NEITHER in set A or B
 a) 3 b) 1 c) 4 d) 0

$n(A) = 12$; $n(B) = 22$ & $n(AB) = 7$
 $n(A \cup B) = n(A) + n(B) - n(AB)$
 Or, $n(A \cup B) = 12 + 22 - 7$
 Or, $n(A \cup B) = 27$
 So, Integers that are in NEITHER set A nor set B is $30 - 27 = 3$
 Answer must be A

48. 5.133 is multiplied by 10^{-6} is equal to-
 a) 0.0005133 b) 0.000005133 c) 0.00005133 d) 0.000005133
49. If Ruby walks to work at a rate of 2 miles per hour but she walks home by the same route at a rate of 3 miles per hour, what is Rudy's average walking rate for the round trip?
 a) 2.5 miles b) 2.25 miles c) 2.4 miles d) 2.1 miles

We want a distance that works well with the two speeds (2 mph and 3 mph)
 Let's say the distance from home to work = 6 miles
 Time TO work = distance/speed = $6/2 = 3$ hours
 Time FROM work = distance/speed = $6/3 = 2$ hours
 TOTAL time = $3 + 2 = 5$ hours
 TOTAL distance = $6+6 = 12$ miles
 Average speed = total distance/total time
 = $12/5$ miles per hour
 = 2.4 miles per hour
 Ans is C

50. How many gallons of the solution that is 75% antifreeze must be mixed with 4 gallons of a 30% solution to achieve a 60% antifreeze?
 a) 2 gal. b) 8 gal. c) 4 gal. d) 3.2 gal.

Let x be the amount of 75% antifreeze
 $75\%(x)+30\% (4\text{gallons}) = 60\%(x+4)$
 $0.75x + 0.3(4) = 0.6(x+4)$
 $0.75x + 1.2 = 0.6x + 2.4$
 $0.75x - 0.6x = 2.4 - 1.2$
 $0.15x = 1.2$
 $x = 1.2 / 0.15$
 $x = 8$ gallons of 75% solution
 Ans is B

51. Ten times 40% of a number is equal to 4 less than the product of 6 times the number, what is the number?
 a) 102 b) 24 c) 4 d) 2

$10 * 0.4x = 6x - 4$
 $4x = 6x - 4$
 $4 = 6x - 4x$
 $2x = 4$
 $x = 2$
 Ans is D

52. An eight-inch by ten-inch photo is surrounded by a mat that is one-inch-wide in each side. What is the area of the mat?
 a) 99 in² b) 19 in² c) 80 in² d) 40 in²
53. Cheri is $n+3$ years old. Raina is 6 years younger than Cheri and 2 years older than Jisan. What is the sum of ages of all three?
 a) $3n+11$ b) $3n-5$ c) $3n-4$ d) $3n+5$

Cheri = $(n+3) = n+3$
 Raina = $(n+3)-6 = n-3$
 Jisan = $\{(n+3)-6\}-2 = n+3-6-2 = n+3-8 = n-5$
 Total = $n+3+n-3+n-5$
 $= 3n-5$
 Ans is B

54. If $x > 1$ and $\frac{\sqrt{x}}{x^8} = x^m$, what is the value of m ?
 a) $-2/1$ b) -3 c) $-5/2$ d) $-3/2$
55. If y is $k\%$ of x , what % of x is k^3y ?
 a) k^2+y b) k^2 c) y^3 d) k^4
56. Simplify the radical completely $\sqrt{64x^5y^8}$
 a) $8x^2y^4\sqrt{x}$ b) $8x^4y^8\sqrt{x}$ c) $64x^2y^4$ d) $8x^5y^8$
57. If $\int x = 5(x-3)^2$ and $g(x) = 5(x+1)^2$ then the x value that makes $f(x)=g(x)$ is:
 a) 20 b) -3 c) 3 d) 1
58. If P and Q are positive integers, which CANNOT be the greatest common divisor of P & Q ?
 a) $P+Q$ b) PQ c) P d) Q

Dream's

59. Seats for mathematics, physics and biology in a school are in the ratio 5:7:8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

a) 2:3:4 b) 6:8:9 c) 6:7:8 d) none

The seats for M:P:B=5:7:8
 So let the no of seats in M,P,B= 5x,7x,8x respectively
 Increase percentage in M,P,B=40,50,75
 After increase
 Maths seats=5x+40 percent of 5x=5x+2x=7x
 Physics seats=7x+50 percent of 7x=7x+3.5x=10.5x
 Biology seats=8x+75 percent of 8x=8x+6x=14x
 So new ratio of seats=7x:10.5x:14x
 That is 1:1.5:2
 or 2:3:4
 Ans is A

60. Excluding stoppages, the speed of bus is 54 kmph and including is 45 kmph. For how many minutes does the bus stop per hour?

a) 9 b) 12 c) 10 d) 20

The point to note is that the bus TRAVELS at 54 mph, never at 45 mph; due to stoppages, the total time for the trip increases resulting in the reduction of AVERAGE speed to 45. With stoppages, the bus travels 9 miles (54-45) less in 1 hr so the bus remains motionless for the span of time it would have taken to travel 9 miles which is $9/54=1/6$ hrs=10 mins.
 Answer:C

Read the following puzzle and answer the questions (61-65)

*A, B, C, D, E, and F are six students in a class, B and C are shorter than F but Heavier than A
 D is heavier than B and taller than C*

E is shorter than D but taller than F

F is heavier than D

A is shorter than E but taller than F

61. Who is among them the tallest?

a) A b) B c) D d) E

62. Who among them is shorter than F?

a) C only b) B only c) A only d) B&C

63. Who is third from the top when they are arranged in descending order in height?

a) A b) B c) C d) E

64. Which of following group of friend is shorter than A?

a) B,C b) D, B c) E,B, C d) F, B, C

65. Who among them is the lightest?

a) A b) B c) B or C d) data inadequate

66. 'Ebola' virus is named after a ____

a) mountain b) river c) desert d) lake

67. Which of the following country is not a member of BRICS bank?

a) South Korea b) China c) Brazil d) India

68. Which of the following is a product of Akiz food and beverage?
 a) Clemon b) Fizz up c) Pran up d) Sting
69. What was the schedule destination of missing Malaysia Airlines Flight MH370?
 a) Beijing b) Chengdu c) Shanghai d) Kuala Lumpur
70. The first Bangladeshi web search engine?
 a) pipra b) pipilika c) bijoy d) khoj
71. The founder of the Wikileaks is:
 a) Geroge Assange b) Julian Armani c) Steve Jobs d) Julian Assange
72. In which country the 2016 summer Olympic games going to be held?
 a) Russia b) Brazil c) USA d) Denmark
73. The acronym 'BARD' stands for
 a) Board of Agriculture and Rural Development
 b) Bangladesh Agriculture and Rural Development
 c) Bangladesh Academy and Rural Development
 d) Bangladesh Agriculture and Regional Development
74. Which district has been identified as poorest district in the country according to the Poverty Maps of Bangladesh 2010?
 a) Kushtia b) Rangpur c) Dhaka d) Kurigram
75. Along with whom Bill Gates founded Microsoft?
 a) Mark Zuckerberg b) Steve Jobs c) Paul Allen d) Eduardo Saverin

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