

AJMAL NATIONAL TALENT SEARCH (ANTS) EXAMINATION - 2011

Class : VIII

Time / a] : 2 hours/ H³⁰

Full Marks/]BX=6 / a]BXf (25+25+25+25)=100

General Knowledge / অধিক পুর্ণ / অধিক পুর্ণ

1. Mark Zuckerberg is famous as -

জেডেল এক্সেস বাই ফিল্ডে ?
জেডেল এক্সেস লিমিটেড ফিল্ডে ?

- | | |
|---|--|
| a) CEO of Facebook Inc.
অফিস এক্সেস বাই ফিল্ডে
অফিস এক্সেস লিমিটেড | b) Man Booker Prize winner of 2010
২০১০ সালের বার্ষিক বার্ষিক পুরস্কার জিতেন্ত্রিত মানুষ
২০১০ সালের বার্ষিক বার্ষিক পুরস্কার জিতেন্ত্রিত মানুষ |
| c) The Best athelete in Guangzhou Asian Games
মানবিক আশেপাশে অঙ্গ কুসূম ও প্রতিযোগিতা
মানবিক আশেপাশে অঙ্গ কুসূম ও প্রতিযোগিতা | d) The President of France
ফ্রান্সের প্রেসিডেন্ট
ফ্রান্সের প্রেসিডেন্ট |

2. Which of the following classical singers hails from Assam ?

টো এক্সেস আগুন্তুকু লেখা ?
খেলায় এক্সেস আগুন্তুকু লেখা ?

- | | | | |
|----------------------|--------------------|---------------------|-------------------|
| a) Ustad Rashid Khan | b) Parveen Sultana | c) Ajoy Chakroborty | d) Pulak Banerjee |
| কুণ্ডলী এক্সেস | যোগী জো টোকু | কল্পনা শ্বেতচূড়া | বিজেতা খণ্ডক |
| কুণ্ডলী এক্সেস | যোগী জো টোকু | কল্পনা শ্বেতচূড়া | বিজেতা খণ্ডক |

3. Somdev Devvarman clinched the tennis men's doubles gold medal in the Asian Games, 2010 along with :

২০১০ সালের আশেপাশে চীনের প্রতিযোগিতায় ক্লিনিকাল জিতেন্ত্রিত মানুষ ?
২০১০ সালের আশেপাশে চীনের প্রতিযোগিতায় ক্লিনিকাল জিতেন্ত্রিত মানুষ ?

- | | | | |
|------------------|----------------|-----------------|----------------|
| a) Rohan Bapanna | b) Uki Bhambri | c) Leander Paes | d) Sanam Singh |
| অক্ষয় বাপন্না | উকি ভাম্বে | লিন্ডেন পেস | সানাম সিঙ্গ |
| অক্ষয় বাপন্না | উকি ভাম্বে | লিন্ডেন পেস | সানাম সিঙ্গ |

4. ISRO failed to launch successfully which of the following on 25 Dec, 2010 :

২০১০ সালের ডিসেম্বরের ২৫ তারিখে ইস্রো প্রক্রিয়া করে নির্মাণ করে নির্মাণ করে ?
২০১০ সালের ডিসেম্বরের ২৫ তারিখে ইস্রো প্রক্রিয়া করে নির্মাণ করে ?

- | | | | |
|------------|---------------|-------------------|----------------------------|
| a) RISAT-2 | b) GSLV-FO6 | c) Chandrayaan -1 | d) Oceansat - 2 (IRS-P4) |
| রিসেট-২ | গ্লেস্লি-এফ-৬ | চন্দ্রয়ান-১ | ওয়েসেন্সেট-২ (আইআরএস-পি৪) |
| রিসেট-২ | গ্লেস্লি-এফ-৬ | চন্দ্রয়ান-১ | ওয়েসেন্সেট-২ (আইআরএস-পি৪) |

5. India's oldest football club is -

বেঙ্গল কলকাতা ক্লাব ?
বেঙ্গল কলকাতা ক্লাব ?

- | | | | |
|-----------------------------|--------------|----------------|-----------------|
| a) Mohammedan Sporting club | b) Salgaocar | c) Mohun Bagan | d) East Bengal |
| মুহাম্মদেন স্পোর্টিং ক্লাব | সালগোচাৰ | মুহুন বাগান | ইণ্ডিয়া বেঙ্গল |
| মুহাম্মদেন স্পোর্টিং ক্লাব | সালগোচাৰ | মুহুন বাগান | ইণ্ডিয়া বেঙ্গল |

(2)

6. The Supreme Court of India was known earlier as :

યોગ ખિદ્ગ રાજ્ય કોર્ટ -
યોગ ખિદ્ગ રાજ્ય કોર્ટ -

a) The Principal Court of India

યોગ રાજ્ય કોર્ટ -
યોગ રાજ્ય કોર્ટ -

c) The Federal Court of India

યોગ રાજ્ય કોર્ટ -
યોગ રાજ્ય કોર્ટ -

b) The Apex Court of India

યોગ રાજ્ય કોર્ટ -
યોગ રાજ્ય કોર્ટ -

d) The British Court of India

યોગ રાજ્ય કોર્ટ -
યોગ રાજ્ય કોર્ટ -

7. The first TV serial in Doordarshan was -

બાળ ટીવી -

બાળ ટીવી -

a) Nukkad

બાળ

b) Buniyad

બાળ

c) Humlog

હુમ્લો

d) Ramayana

રામયાન

8. Find the odd one :-

અભિજ્ઞાન -

અભિજ્ઞાન -

a) Ignited Minds

અભિજ્ઞાન

b) India 2020

ભારત 2020

c) Goal

ગો

d) Guiding Souls

ગેડિંગ સૌલ / ગેડિંગ સૌલ

9. Massive stars end their lives in an explosion called :

સ્પેન્દ્ર વિસ્તાર -

સ્પેન્દ્ર વિસ્તાર -

a) Supernova

સ્પેન્દ્ર

b) Big Bang

બાંગ

c) Stellar collapse

સ્ટેલર કોલપેશ

d) Blastic

બ્લાસ્ટ

10. The only organ in the human body which if partially removed grows back to its original size -

કાની કાની કાની કાની ?

કાની કાની કાની કાની ?

a) Kidney

કાન

b) Lungs

લંગ્સ

c) Liver

લિવર

d) Pancreas

પન્ક્રેસ

11. An imaginary memory supported by the operating system in conjunction with the secondary memory is -

કેચ મેમોરી એટો વિસ્તાર -

કેચ મેમોરી એટો વિસ્તાર -

a) Cache Memory

કેચ મેમોરી

b) Primary Memory

પ્રાઇમરી મેમોરી

c) Virtual Memory

વિર્યુલ મેમોરી

d) None of these

એટો વિસ્તાર એટો વિસ્તાર

(3)

12. Which country's high-speed train service is usually referred to as TGV ?

ଏକ ଦୀର୍ଘ ଯାତ୍ରା ରୋଡ଼୍ ଟେଗ୍ବୁନ୍ଡି ଟାଇପ୍ ଟେଗ୍ବୁନ୍ଡି ?

ଏକ ଦୀର୍ଘ ଯାତ୍ରା ରୋଡ଼୍ ଟେଗ୍ବୁନ୍ଡି ଟାଇପ୍ ଟେଗ୍ବୁନ୍ଡି ?

a) Germany
ଜାର୍ମାନୀ

b) France
ଫ୍ରାନ୍ସ

c) China
ଚିନ

d) Russia
ରୂସ

13. Artificial silk is also called :

ଏଲ୍ୟୁର୍ମ ଅନ୍ଧାରୀ କାପିଳିକା -

ଏଲ୍ୟୁର୍ମ ଅନ୍ଧାରୀ କାପିଳିକା -

a) Rayon
ରେଣ୍ଯୁନ

b) Dacron
ଡାକ୍ରାନ

c) Fiber glass
ଫିବର ଗ୍ଲେସ

d) Nylon
ନ୍ୟୁଲନ

14. Fish can survive inside a frozen lake because -

ଯେତେ ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ କରିବାକୁ ପାଇଁ ମରାନ୍ତିମ ବିଶ୍ଵାସ -

ଯେତେ ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ କରିବାକୁ ପାଇଁ ମରାନ୍ତିମ ବିଶ୍ଵାସ -

a) Fish are warm-blooded animals

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

c) Water near the bottom does not freeze

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

b) Fish hibernates in ice

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

d) Ice is a good conductor of heat

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

ଜାହାନାରେ ମରାନ୍ତିମ ବିଶ୍ଵାସ

15. What is the term of a member of Rajya Sabha ?

ରାଜ୍ୟ ସମ୍ବନ୍ଧିତ ଅଧିକାରୀଙ୍କ ପରିବାରର ପରିବାରର ?

ରାଜ୍ୟ ସମ୍ବନ୍ଧିତ ଅଧିକାରୀଙ୍କ ପରିବାରର ?

a) 2 years

୨ ବର୍ଷ

b) 5 years

୫ ବର୍ଷ

c) 6 years

୬ ବର୍ଷ

d) None of the above

ନିର୍ଦ୍ଦେଖ କରିବାକୁ ପାଇଁ

16. Lake 'Hussain Sagar' is in -

ହୁସୈନ ସାଗର ଜିଲ୍ଲା ଅଧିକାରୀଙ୍କ ପରିବାରର -

ହୁସୈନ ସାଗର ଜିଲ୍ଲା ଅଧିକାରୀଙ୍କ ପରିବାରର -

a) Kashmir

କଶ୍ମିର

କଶ୍ମିର

b) Andhra Pradesh

ଆନ୍ଧ୍ର ପ୍ରଦେଶ

ଆନ୍ଧ୍ର ପ୍ରଦେଶ

c) Manipur

ମାନିପୁର

ମାନିପୁର

d) Odisha

ଓଡ଼ିଶା

ଓଡ଼ିଶା

17. 'Soyabeen' is rich in

ଜୀବନ୍ତ ପରିବାରର -

ଜୀବନ୍ତ ପରିବାରର -

a) Protein

ପ୍ରୋଟିନ୍

ପ୍ରୋଟିନ୍

b) Vitamin

ବିଟାମିନ୍

ବିଟାମିନ୍

c) Minerals

ମିନେରାଲ୍

ମିନେରାଲ୍

d) Fats

ଫେଟ୍

ଫେଟ୍

(4)

18. Which of the following towns is the Capital of Dadra and Nagar Haveli ?

Tó » ÆðX XG» VdI»ç%çÓXG» cç\ö_ß »dWXY?

X̄ĒM̄ȳǣX̄ēv̄d̄l̄j̄c̄Āj̄ēX̄Ḡl̄ȳc̄ē\ō_V̄ȳl̄ȳl̄W̄x̄ȳ?

19. The news agency 'Reuter' is in

"»Töd«" X=L Añxa ñóx al' Tö%/~~Tö~~

'[y]o[y] x=L AãLxã a ãEçã álã %[y]o?

20. Bhavani can eat 8 mangoes in 2 days. Dharani can eat 6 mangoes in 3 days. In how many days can both eat 66 mangoes ?

\f1X\kern-1.5em\kern1.5em 2 \kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em T\kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em 8 \kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em %] F\kern-1.5em\kern1.5em d\kern-1.5em\kern1.5em y\kern-1.5em\kern1.5em Y\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em »\kern-1.5em\kern1.5em * \kern-1.5em\kern1.5em W\kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em 3 \kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em T\kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em 6 \kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em %] F\kern-1.5em\kern1.5em d\kern-1.5em\kern1.5em y\kern-1.5em\kern1.5em Y\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em »\kern-1.5em\kern1.5em * \kern-1.5em\kern1.5em V\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em 66 \kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em %] F\kern-1.5em\kern1.5em d\kern-1.5em\kern1.5em y\kern-1.5em\kern1.5em è\kern-1.5em\kern1.5em ñ\kern-1.5em\kern1.5em ñ\kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em _\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em G\kern-1.5em\kern1.5em [y\kern-1.5em\kern1.5em ?\kern-1.5em\kern1.5em
\f1Y\kern-1.5em\kern1.5em 2 \kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em 8 \kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em %] F\kern-1.5em\kern1.5em a\kern-1.5em\kern1.5em f\kern-1.5em\kern1.5em ö\kern-1.5em\kern1.5em Y\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em »\kern-1.5em\kern1.5em * \kern-1.5em\kern1.5em W\kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em 3 \kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em 6 \kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em %] F\kern-1.5em\kern1.5em a\kern-1.5em\kern1.5em f\kern-1.5em\kern1.5em ö\kern-1.5em\kern1.5em Y\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em »\kern-1.5em\kern1.5em * \kern-1.5em\kern1.5em V\kern-1.5em\kern1.5em ç\kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em _\kern-1.5em\kern1.5em ä\kern-1.5em\kern1.5em 66 \kern-1.5em\kern1.5em 0\kern-1.5em\kern1.5em %] F\kern-1.5em\kern1.5em a\kern-1.5em\kern1.5em f\kern-1.5em\kern1.5em ö\kern-1.5em\kern1.5em ñ\kern-1.5em\kern1.5em ñ\kern-1.5em\kern1.5em X\kern-1.5em\kern1.5em _\kern-1.5em\kern1.5em G\kern-1.5em\kern1.5em ?

21. Ptyalin is an enzyme produced in the
→ a. salivary gland b. liver c. stomach d. small intestine

..... $\partial \Omega \setminus \{x_0\} = \partial \Delta \setminus E \sim E''$

..... $\text{O} \downarrow \text{C} \times \text{X} \text{C} \downarrow \text{E} \ddot{\text{o}} = \text{d} \ddot{\text{a}} \text{a} \text{J} \text{E} \ddot{\text{o}} = \text{d} \text{Y} \sim \text{E} \ddot{\text{o}} \text{y}^*$

- a) Salivary glands b) Pituitary glands c) Thyroid glands d) Pancreas

C \rightarrow G H B
C \rightarrow G H B

X Q O D Y G H B
X Q O D Y G H B

U C Q O G H B
U C [] Q O G H B

% G A T
% G A T

22. The line demarcating the boundary between India and China is the -

«Tö%çÓñX» aÝç YÜEöEöçåFcçQç c! -

\c{y}oA[yé] ñ[ýaV] ç YBEöE[dýaV] ç[FdýXç] -

- a) Durand Line b) Radcliffe Line c) Mc Mohan Line d) Straford Line

Durand Line: *ðʊrənd_ℓɪn*

Radcliffe Line: *ɹædklɪf_ℓɪn*

Mc Mohan Line: *mæk_ℓɪn*

Straford Line: *stræfɔːrd_ℓɪn*

23. The white Colour of our National flag signifies -

%-C]Q» »qM` VTëEö» [yGç»älo>EöaM` -

LçTđ^ YTçEçýadç[yä] ýTçY^i c+ -

- a) Truth and Courage b) Truth and Peace c) Courage and sacrifice d) Faith and chivalry
aTō %>Óaçça
aTō Alé açça

b) **ç**ü%>ÓaTō
çüA[é aTō

c) **açça %>ÓTōç**
açça Alé Tōç

d) **{**ý {a %>Ó{ç}ý
{ý {a Alé {ç}ý

(5)

24. What is the full Form of AVSM ?

AVSM » યુનિફોર્મ એસ્મ?

AVSM અધ્યાત્મિક એસ્મ?

a) Ati Visist Seva Medal
અધ્યાત્મિક રૂપાંશાદી

b) Ati Vishesh Seva Medal
અધ્યાત્મિક બાંશાદી

c) Ajivan Vishesh Seva Medal
અધ્યાત્મિક બાંશાદી

d) None of the above
અધ્યાત્મિક કોઈ વિષય

25. Who was the first actress in Indian Cinema ?

વિદેશી મહિલા યુનિફોર્મ એસ્મ?

વિદેશી મહિલા યુનિફોર્મ એસ્મ?

a) Gita Dutta
ગિતા દત્ત

b) Devika Rani
દેવિકા રાણી

c) Madhubala
મધુબાળા

d) Madhumala
મધુમાલા

General English

Fill up the blanks with the most appropriate word. :

26 He gave ----- at the sensational trial.

- a) witness b) evidence c) proof d) advice

27 Just ----- , he could complete the work to my satisfaction.

- a) in a hour's time. b) in a hour c) in an hour's time d) in the time of an hour.

28 If I were a millionaire, I ----- the poor.

- a) would have helped b) could have helped c) would help d) will help

29 Mother always ----- with the maid servant.

- a) finds fault b) finds faults c) find faults d) is finding fault

30 When I was sixteen, I ----- the Engineering Entrance examination.

- a) sat on b) sat in c) sat at d) sat for

31. No sooner ----- the power went off.

- a) he had returned home than
c) had he returned home when
- b) did he return home than
d) when he returned then

(6)

32. His conduct is bad and his honesty is not Suspicion.
a) beyond b) under c) above d) out
33. In the fierce attack, the enemies were completely wiped
a) off b) away c) over d) out
34. Dhoni ----- another feather ----- his cap by his wonderful performance in the World Cup.
a) took, in b) created, for c) captured , from d) added , to
35. Since we ----- read every book , we ----- only the famous ones.
a) must , ignore b) have , sold c) should , buy d) cannot , select
36. The ----- of glory lead but to the ----- .
a) paths , grave b) ways , happiness c) acts , prosperity d) achievements , suffering.

Pick out the part that can complete the sentence.

37. He passed the examination in the first class because he
a) worked hardly for it b) was working hard for it. c) had worked hard for it. d) was hard working for it.
38. Whichever way you approach the problem
a) it will not solve. b) it can not solve c) no one will solve it d) it will not be solved

The sentence given here in Active Voice will be changed to which of the following in Passive Voice ?

39. 'Do you imitate others ?
a) Are others imitated by you ? b) Do others are imitated by you ?
c) Are you imitated by others ? d) Are others being imitated by you ?

Find out the correct Indirect Speech form of the following sentence.

- 40 She said to him, " Why don't you go today ?"
a) She asked him why did not he go that day. b) She asked him why he did not go that day.
c) She enquired that why had not he gone that day . d) She enquired of him that why had he not gone that day.

Choose the word **nearest in meaning** to the word underlined in italics

41. Some of the discoveries of modern science are simply marvellous.
a) praiseworthy b) commendable c) amazing d) admirable
42. The novel was so interesting that I was oblivious of my surroundings.
a) indifferent b) unmindful c) watchful d) careful

(7)

Choose the word that is **opposite in meaning** to the word underlined in italics

43. There was a marked deterioration in his condition.

- a) improvement b) revision c) worsening d) abatement

44. He was in a dejected mood.

- a) irritable b) romantic c) melancholic d) jubilant

Pick out the correct meaning of the idiom in bold letters.

45. He **egged me on** to join the protest march.

- a) Told me to throw rotten eggs at the procession. b) Told me not to join.
c) Told me about the dangers of joining the march d) Instigated me to join the march.

46. Tendulkar's **midas touch** helped India to win the World Cup.

- a) anger b) inspiring words c) a touch which turns anything in to gold. d) good fielding

In each of the following questions five words are given, out of which four are same in one way and the fifth one is different from others. Select the odd one.

47. a) silk b) fur c) milk d) leather e) Rubber

48. a) ink b) pen c) pencil d) brush e) chalk stick

49. Look at this series: 14, 28, 20, 40, 32, 64, . . .

What number should come next?

- a) 52 b) 56 c) 96 d) 128

50. Which word does NOT belong with the others?

- a) mayor b) lawyer c) governor d) senator

General Mathematics / ~~adMİS GÖSTÖ/ adMİS GÖSTÖ~~

51. Which of the following statements is false ?

Tüm分数都是有理数吗？

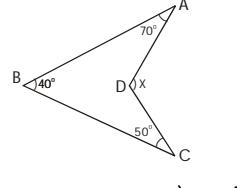
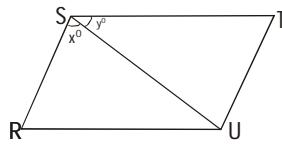
所有的分数都是有理数吗？

- a) Every fraction is a rational number

Y

(8)

52. When 75% of a number is added to 75 the result is the number again. The number is
A
A
 a) 150 b) 300 c) 100 d) 450
53. How much pure alcohol should be added to 400 ml of strength 15% to make its strength 32% ?
A
A
 a) 50 ml b) 75 ml c) 100 ml d) 150 ml
54. RSTU is a parallelogram as shown in the figure below. Then the shown angles x and y are related as
A
A
 a) $x = y$ b) $x < y$ c) $x > y$ d) can not be determined from given data
 =
 =
55. If the lengths of two diagonals of a rhombus are 12 cm and 16 cm, then the length of each side of the rhombus is
A
A
 a) 10 cm b) 14 cm c) cannot be determined d) none of these
 =
 =
56. In the given diagram, find the value of x.
A
A
 a) 60° b) 80° c) 160° d) 180°
57. The value of $\sqrt{(-1)} \times \sqrt{(-1)}$ is
A
A
 a) -1 b) +1 c) ± 1 d) none of these



(9)

58. $\sqrt[3]{-2,744} \div \sqrt[3]{0.008} = \dots$

59. The difference in SI and CI on a certain sum of money in 2 years at 15% p.a. is Rs. 144. Sum is

**Æðækç*xwib] É WK» 15% Cç» 2 [W»» a»_ açó%»Ó]` Qaçó YdJEô 144 Cççççä] É WK» Y»]ç
.....**

কোনো নির্দিষ্ট **JÉ** **WY** (15% **c**) **y** **2** **[****X****a****y****a****y****A****j****e****s****]** **O****a****g****l****y****Y****ü****E****ö** **144** **C****E****c****c****+****ä****_** **JÉ** **WY** **y** **Y****x****y****c**

- a) Rs. 6,000 b) Rs. 6,200 c) Rs. 6,300 d) Rs. 6,400

60. If SP of an article is $\frac{4}{3}$ of its CP then the profit in the transaction is

A0ç [ywɔ̃] + [y ð] E i + lç = dYdJX] E i » $\frac{4}{3}$ %e` cã_ [ywð] à_XâlXTö_çlöc! [y

AEēōō[ywūy{yū]E i+cqyū]h_i[y $\frac{4}{3}$] %e` c:a_, +cqy_clöc:aý.....*

- a) $\frac{1}{3}\%$ b) $20\frac{1}{2}\%$ c) $33\frac{1}{3}\%$ d) $25\frac{1}{2}\%$

61. The product of x^2y and $\frac{x}{y}$ is equal to the quotient obtained when x^2 is divided by

$x^2 E \tilde{o} \dots \rightarrow C \gg S E \tilde{o} \tilde{a} _ \backslash _ G Z \tilde{o} _ x^2 y \% \tilde{o} \tilde{0} \frac{x}{y} \rightarrow Y \tilde{b} S Z \tilde{o} _ a] \tilde{C} \tilde{X} \tilde{C} \tilde{F}^*$

$x^2 \ddot{E} \ddot{o} \dots \ddot{y} \ddot{d} \ddot{y} \ddot{\backslash} \ddot{G} \ddot{E} \ddot{d} \ddot{y} \ddot{_} \ddot{\backslash} \ddot{G} \ddot{Z} \ddot{o} \ddot{_} x^2 y \ddot{A} [\ddot{y} \ddot{\frac{x}{y}} \ddot{_} \ddot{A} \ddot{l} \ddot{y} \ddot{m} \ddot{X} \ddot{Z} \ddot{o} \ddot{_} [\ddot{y} \ddot{a}] \ddot{_} \ddot{c} \ddot{F}^*$

62. If $x^2 + \frac{1}{x^2} = 79$ then $x + \frac{1}{x} = \dots$

- a) $\sqrt{75}$ b) 9 c) $\sqrt{79}$ d) None of these

63. The shape of the following figure is

Xéloa/Cırçışlıy. % EBT'ly



- a) Circle b) Cone c) Cylinder d) Cuboid

(10)

64. The area of an isosceles triangle having base x cm and one side y cm is

Area $\frac{1}{2} \times \text{base} \times \text{height}$ \Rightarrow $\frac{1}{2} \times x \times y \times \frac{1}{2} \sqrt{y^2 - \frac{x^2}{4}}$ \therefore $\frac{1}{4} xy \sqrt{y^2 - \frac{x^2}{4}}$

a) $\frac{x}{2} \sqrt{y^2 + \frac{x^2}{4}}$ cm² / [Gülfxfif/ [Giåa. x].

b) $\frac{x}{2} \sqrt{\frac{4y^2 - x^2}{4}}$ cm² / [Gülfxfif/ [Giåa. x].

c) $\frac{x^2 - y^2}{4}$ cm² / [Gülfxfif/ [Giåa. x].

d) None of these /AOC Xcf/ AEOC Xr

65. Simplified form of $\left[3\sqrt{x^4 y} \cdot \frac{1}{4\sqrt{x^2 y^8}} \right]^{-6}$ is

$\left[3\sqrt{x^4 y} \cdot \frac{1}{4\sqrt{x^2 y^8}} \right]^{-6} \Rightarrow a^{-6} (x^4 y)^{-\frac{1}{2}} = \frac{y^2}{x^5}$

a) $x^5 y^{10}$

b) $\frac{y^{10}}{x^5}$

c) $\frac{y^2}{x}$

d) $\frac{x^5}{y^5}$

66. A fort had provision of food for 150 men for 45 days. After 10 days, 25 men left the fort. The number of days for which the remaining food will last, is

Avgot 150 LX]xc» [ya45 VX » Föi %k * 10 VX » YÖTö25 LX]xc» VG» Y»cm»Gä_ [yEÜUEçFöia » VX ^dý

Avgot 150 LX]xc» [ya45 VX » Föi %k * 10 VX YÖTö25 LX]xc» VGic»Töde_ lçäda_ [yEÜUEçFöia » VX ^dý

a) $29\frac{1}{5}$

b) $37\frac{1}{4}$

c) 42

d) 54

67 Factors of $(4a-3b)^3 - (3a-b)^3 - (a-2b)^3$ are

$(4a-3b)^3 - (3a-b)^3 - (a-2b)^3 \Rightarrow dYdEö$

$(4a-3b)^3 - (3a-b)^3 - (a-2b)^3 A[y=dYdEö$

a) $3(4a-3b)(b-3a)(2b-a)$

b) $3(a-b)(b-c)(c-a)$

c) $(a-b)^2 (c-a)$

d) None of these /AOC Xcf/ AEOC Xr

68. Which of the following number is divisible by 11 ?

Tö » EöXäaeFic 11 ä » [Nöli ?

XädyEöX aeFic 11 y » [Nöli ?

a) 3,116,365

b) 9,01,351

c) 8,790,322

d) None of these /AOC Xcf/ AEOC Xr

69. If $(\sqrt{0.04 \times 0.04 \times a}) = 0.4 \times 0.04 \times \sqrt{b}$ then $(\frac{a}{b})^{\frac{a}{b}} = \dots$

a) 0.016

b) 1.60

c) 0.16

d) None of these /AOC Xcf/ AEOC Xr

70. If the ratio of areas of two circles is 16:25 then the ratio of their circumference is

VÖc [jö EöX » %XVÖtö16:25 cä_ [jöVÖ » Y»W » %XVÖtö!ý

VÖc [jö EöX » %XVÖtö16:25 cä_ [jöVÖ » Y»W » %XVÖtö!ý

a) 25:16

b) 5:4

c) 4:5

d) 3:5

(11)

71. The value of the product $(3+\frac{5}{x})(9-\frac{15}{x}+\frac{25}{x^2})$ at $x = 1$ is

$$x \rightarrow 1 \text{ için } (3+\frac{5}{x})(9-\frac{15}{x}+\frac{25}{x^2}) \rightarrow 1 \text{}$$

$$\times A[ý] \rightarrow 1 \text{ için } (3+\frac{5}{x})(9-\frac{15}{x}+\frac{25}{x^2}) A[ý] \text{}$$

a) 150

b) 148

c) 152

d) None of these

(AÖC Xçf / AEööC Xî)

72. If $\frac{-3}{x} = \frac{x}{27}$, then the value of 'x' is

$$\cancel{x} \frac{-3}{x} = \frac{x}{27} \text{ çf atdır } x \rightarrow 1 \text{}$$

$$\cancel{x} \frac{-3}{x} = \frac{x}{27} \text{ çf, Tüy } \times A[ý] \text{}$$

a) a rational number

AÖC Y»a]ı aeFic
AEööY{j]ı aeFic

b) not a rational number

AÖC Y»a]ı aeFicXçf
AEööY{j]ı aeFicXçf

c) an integer

AÖC %F%aeFic
AEöö%F%aeFic

d) a natural number

AÖC ö3EöaeFic
AEööö3EöaeFic

73. If $(x^2+3x+5)(x^2-3x+5) = m^2 - n^2$, then $(\text{atdır}) m = \dots$

a) x^2-3x

b) $3x$

c) x^2+5

d) None of these

(AÖC Xçf / AEööC Xî)

74. Which of the following is not a linear equation ?

Tö » EöXäc=FEöa] VEöS Xçf ?

XööyæXööyFEöa] Eöy Xî ?

a) $4x+1 = x$

b) $\frac{5}{3}y+y = 4$

c) $-pq+5 = -3$

d) None of these

(AÖC Xçf / AEööC Xî)

75. Which of the following statements is true ?

Tö » EöXäc=AlpåTö ?

XööyæXööy=AlpåaTö ?

a) Cubes of all even natural numbers are even

AÖC %^G1%æEöaeFic HX AÖC %^G1%aeFic
aEö %^G1%æEöaeFid y HX AEöö%^G1%aeFic

c) Cubes of negative integers are negative.

@SçEö%F%aeFic HX @SçEö
@SçEö%F%aeFid y HX @SçEö

b) Cubes of all odd natural numbers are odd

aEö %^G1%æEöaeFic HX AÖC %^G1%aeFic
aEö %^G1%æEöaeFid y HX AEöö%^G1%aeFic

d) All the above

%d= Eö-0*
a[y ö-0]

(12)

General Science / ଅଧ୍ୟସ୍ତ୍ରୀୟ ପ୍ରକାଶ / ଅଧ୍ୟସ୍ତ୍ରୀୟ ପ୍ରକାଶ

76. Which of the following always produces a virtual image ?

Tୋ ଏକାନ୍ତରିକ ଲେଂସ୍ ଯେଉଁଳାଏ ?

Xାନ୍ଦ୍ରୋପାଦୀ ଯେଉଁଳାଏ ?

a) Plane mirror

ତୋ ବାଯୁଶବ୍ଦି

b) Concave mirror

ବାହୀ ବାଯୁଶବ୍ଦି

c) Convex lens

ବାହୀ ବାଯୁଶବ୍ଦି

d) Convex mirror

ବାହୀ ବାଯୁଶବ୍ଦି

77. The refractive index is minimum for colour.

..... ଲାଲ ରତ୍ନାକରିତା *

..... ରହିଲା ରତ୍ନାକରିତା *

a) red

ଲାଲ

b) violet

ବିଜୁଳି

c) green

ବିଜୁଳି

d) yellow

ବିଜୁଳି

78. No current flows between two charged bodies if they have same

Aଏହି ବିଭିନ୍ନ ଚିହ୍ନରେ ଯେଉଁଳାଏ ?

Aଏହି ବିଭିନ୍ନ ଚିହ୍ନରେ ଯେଉଁଳାଏ ?

a) Capacity

କାର୍ଯ୍ୟ

b) Potential

ପୋତ୍ର

c) Charge

ଚାର୍ଜ

c) None

କାର୍ଯ୍ୟ

79. When main switch of the house circuit is put off it disconnects the

ଘରର ବର୍ତ୍ତନୀର ମେଇନ ଚୁଇଚ୍ଛୋ ବନ୍ଧ କରିଲେ କେ ବିଚିନ୍ନ କରେ ।

ଘରର ବର୍ତ୍ତନୀର ମେଇନ ସୁଇଚ୍ଟି ବନ୍ଧ କରିଲେ କେ ବିଚିନ୍ନ କରା ହ୍ୟ ।

a) Live wire

ଲାଇସ୍

b) Neutral Wire.

ନୋଟ୍ରୋଲ୍

c) Earth Wire

ଭାରତୀୟ ଲାଇସ୍

d) Live and Neutral Wires.

ଲାଇସ୍ ଓ ନୋଟ୍ରୋଲ୍

80. The atmospheric pressure is due to the

[ବାହୀ ବାଯୁଶବ୍ଦି] » [ବାହୀ ବାଯୁଶବ୍ଦି]

[ବାହୀ ବାଯୁଶବ୍ଦି] Lାଇସ୍

a) Sky above our head

ବାହୀ ବାଯୁଶବ୍ଦି

b) Air mass surrounding earth

ବାହୀ ବାଯୁଶବ୍ଦି

c) Gravitational force of sun and other planets.

ବାହୀ ବାଯୁଶବ୍ଦି

d) Mass of the earths

ବାହୀ ବାଯୁଶବ୍ଦି

(13)

81. While walking on ice, one should take small steps to avoid slipping. This is because smaller steps ensure

$\text{[y]ZööFd EööTööVööXY} \rightarrow [\text{e}_\text{Fd} \text{d} \text{p}] \text{EöS Fd} \text{ööca}$ Cf*

$\text{[y]ZööVööXçYööCööLxi YVäöV a[yçad]Mäk Väöcf} \rightarrow \text{Eöf} \text{S YVäöV ad]Mäk c-ä}$ Cf*

- | | | | |
|--|---|---|---|
| a) Larger friction
$\text{Hb} \text{d} \text{y} \text{v}$
$\text{Hb} \text{d} \text{y} \text{Y}$ | b) Smaller friction
$\text{Hb} \text{d} \text{E} \text{d}$
$\text{Hb} \text{d} \text{E} \text{d}$ | c) Larger normal force
$= \text{P} \text{b} \text{y} \text{d} \text{v}$
$= \text{P} \text{b} \text{y} \text{d} \text{y} \text{Y}$ | d) Smaller normal force
$= \text{P} \text{b} \text{y} \text{E} \text{d}$
$= \text{P} \text{b} \text{y} \text{E} \text{d}$ |
|--|---|---|---|

82. The chemical reaction due to passage of electric current depends on

$\text{[y]YööZööTööe} \rightarrow \text{c} \text{ad} \text{x} \text{Eö} \text{y} \text{öö} \rightarrow \text{CY} \text{XööEö}$ *

$\text{[y]YööZööc} \text{Eö} \text{c} \text{ad} \text{x} \text{Eö} \text{y} \text{öö} = \text{Y} \text{XööEö}$ *

- | | | | |
|---|---|---|--|
| a) Electrodes
+a Eööoo
+a Eööoalý | b) Magnitude of current
$\text{Yöö} \rightarrow \text{Jx}$
$\text{Yööc} \text{y} \rightarrow \text{Jx}$ | c) density of liquid
$\text{Töö} \rightarrow \text{HX} \text{d} \text{v}$
$\text{Töö} \text{y} \text{HX} \text{d} \text{v}$ | d) All of the above.
$\text{CY} \rightarrow \text{%} \text{Eö} \text{Eö}$
$\text{a[Eö]d} \text{y}$ |
|---|---|---|--|

83. Electric charge is measured in

$\text{[y]CTEö} \rightarrow \text{AE} \text{Eö}$ *

$\text{[y]CTEö} \rightarrow \text{AE} \text{Eö}$ *

- | | | | |
|-------------------------------------|--|--------------------------|---|
| a) Coulombs
$\text{Eö} \text{p}$ | b) Amperes
$\text{A} \text{y} \text{r} \text{p} / \text{A} \text{y} \text{r} \text{d} \text{y}$ | c) Volts
Vöö | d) Watts
$\text{Wöö C} \text{r} \text{d} \text{b}$ |
|-------------------------------------|--|--------------------------|---|

84. The E.N.T. doctor uses a

E.N.T. $\text{O} \text{öö} \rightarrow \text{[y} \text{c} \text{e}] \text{E} \text{ö}$ *

$\text{AE} \text{d} \text{X} \text{E.N.T. O} \text{öö} \text{p} \text{y} \rightarrow \text{[y} \text{c} \text{d} \text{y} \text{E} \text{ö}] \text{x}$ *

- | | | | |
|---|---|--|--|
| a) Convex mirror
$= \text{w} \text{o} \text{ Vç} \text{y} \text{s}$
$= \text{w} \text{o} \text{ VYK}$ | b) Convex lens.
$= \text{w} \text{o} \text{ a} \text{3} \text{a}$
$= \text{w} \text{o} \text{ a} \text{3} \text{a}$ | c) Plane mirror
$\text{a} \text{]Tö} \text{ Vç} \text{y} \text{s}$
$\text{a} \text{]Tö} \text{ VYK}$ | d) Concave mirror
$\% \text{3} \text{a} \text{ö} \text{ Vç} \text{y} \text{s}$
$\% \text{[Tö} \text{ VYK}$ |
|---|---|--|--|

85. Which of the following statements is not true ?

$\text{Tö} \rightarrow \text{Eö} \text{X} \text{d} \text{c} = \text{N} \text{b} \text{E} \text{ö} \text{u} \text{X} \text{c} \text{f}$ *

$\text{X} \text{d} \text{y} \text{a} \text{E} \text{ö} \text{X} = \text{N} \text{b} \text{E} \text{ö} \text{u} \text{X} \text{f}$?

- | | |
|--|--|
| a) Polymer occurs in nature
$\text{[s} \text{a} \text{ç} \text{y} \text{a} \text{ig} \text{ Y} \text{b} \text{b} \text{t} \text{ö} \text{a} \text{v} \text{c} \text{c} \text{d} \text{}$
$\text{[s} \text{a} \text{ç} \text{y} \text{a} \text{ig} \text{ Y} \text{b} \text{b} \text{t} \text{ö} \text{y} \text{c} \text{t} \text{c} \text{d} \text{}$ | b) Cellulose is made up of glucose units
$\text{a} \text{ö} \text{a} \text{d} \text{ G} \text{a} \text{d} \text{a} \rightarrow \text{G} \text{p} \text{ö}$
$\text{a} \text{ö} \text{a} \text{d} \text{ G} \text{a} \text{d} \text{ y} \text{d} \text{c} \text{G} \text{p} \text{ö}$ |
| c) Nylon is used to make parachute
$\text{a} \text{v} \rightarrow \text{a} \text{b} \text{e} \text{t} \text{d} \text{c} \text{p} \text{e} \rightarrow \text{E} \text{ö} \rightarrow \text{[e}_\text{X} \text{c}_\text{X} \text{[y} \text{c} \text{e}] \text{E} \text{ö} \text{c} \text{f}$
$\text{a} \text{v} \text{y} \text{a} \text{b} \text{e} \text{t} \text{d} \text{c} \text{p} \text{e} \rightarrow \text{E} \text{ö} \text{y} \text{a} \text{t} \text{ö} \text{X} \text{c}_\text{X} \text{[y} \text{c} \text{d} \text{y} \text{E} \text{ö} \text{y} \text{c} \text{f}$ | d) Cotton thread is stronger than nylon thread
$\text{E} \text{ö} \text{ç} \text{y} \text{a} \text{ç} \text{X} \text{c}_\text{X} \text{a} \text{ç} \text{t} \text{e} \text{ö} \text{X}$
$\text{E} \text{ö} \text{ç} \text{a} \text{ç} \text{y} \text{a} \text{ç} \text{X} \text{c}_\text{X} \text{a} \text{ç} \text{t} \text{y} \text{a} \text{ç} \text{t} \text{ö} \text{L} \text{[y} \text{o}$ |

86. Which of the following is not a heavy metal ?

$\text{Tö} \rightarrow \text{Eö} \text{X} \text{d} \text{G} \text{m} \text{ w} \text{t} \text{ö} \text{c} \text{f}$ *

$\text{X} \text{d} \text{y} \text{a} \text{E} \text{ö} \text{X} \text{d} \text{m} \text{ y} \text{w} \text{t} \text{ö} \text{c} \text{f}$?

- | | | | |
|-------|-------|-------|------|
| a) Cu | b) Hg | c) Pb | d) K |
|-------|-------|-------|------|

(14)



In the above reactions



- a) Carbon is reduced



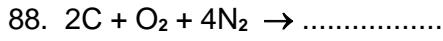
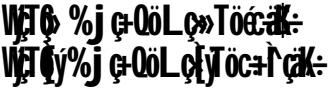
- c) Metal oxide is reduced to metal



- b) Carbon is oxidised



- d) Metal oxide is oxidised



a) $2CO + 2N_2$

b) $CO + H_2$

c) $CO + CH_4$

d) $CO + NO_2$

89. Which of the following is most harmful for human body ?



a) CO

b) CO_2

c) Oxides of nitrogen



d) Lead compounds



90. Incomplete combustion of a fuel gives

ইঞ্জনৰ অসম্পূর্ণ দহনত উৎপন্ন হয়।

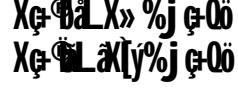
ইঞ্জনের অসম্পূর্ণ দহনে উৎপন্ন হয়।

a) CO

b) CO_2

c) SO_2

d) Oxides of Nitrogen



91. Which of the following dissolves more rapidly in blood haemoglobin than oxygen ?



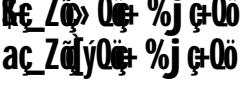
a) Ozone



b) Nitrous oxide



c) Sulphur dioxide



d) Carbon monoxide

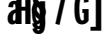


92. *Gundhi* bug is a small insect that attacks

গাঁফী পোকে ক আক্ৰমণ কৰে।

গাঁফী পোকা কে আক্ৰমণ কৰে।

a) Wheat



b) Millet



c) Paddy



d) Cotton



(15)

93. Cell membrane is composed of

Հիմքներ » Կոչ ԳՐԴԾ
Հիմքներ Կոչ ԳՐԴԾ

- a) Lipid and starch b) Lipids and proteins c) Lipids and sugars d) Sugars and proteins
Ձևականացնելու աղյուսակը **Ձևականացնելու աղյուսակը** **Ձևականացնելու աղյուսակը** **Ձևականացնելու աղյուսակը**

94. Bacteria living in the intestines of herbivorous animals help in the digestion of

Եթաղաղի կազմություն » Կազմությունը աղջկական է » Կազմությունը աղջկական է

- a) Cellulose b) Proteins c) Fats d) Vitamins
Ալիքական պատճեն **Ալիքական պատճեն** **Ալիքական պատճեն** **Ալիքական պատճեն**

95. Wildlife protection Act was passed in the year

Խնդիրական պահպանական օրենք » Օրենքը
Խնդիրական պահպանական օրենք » Օրենքը

- a) 1972 b) 1970 c) 1982 d) 1990

96. Internal fertilization occurs in

Կաթնավոր կամ բարձրակարգ անողության օրինակ » Անողության օրինակ
+ շահագործական կամ բարձրակարգ անողության օրինակ

- a) Bird, fish b) Reptile, frog c) Mammal, frog d) Reptile, Mammal
Թռչող կամ ձկնարկական օրինակ **Թռչող կամ ձկնարկան օրինակ** **Մամուլ կամ անողության օրինակ** **Մամուլ կամ անողության օրինակ**

97. Non-living part of the plant cell is

= Անդամական մաս անդամական մաս
= Անդամական մաս անդամական մաս

- a) Nucleus b) Protoplasm c) Mitochondrion d) Cell wall
Հիմքներ **Հիմքներ** **Հիմքներ** **Հիմքներ**

98. Which of the following groups represent the bacterial diseases ?

Տօնություն աղյուսակը » Կազմությունը աղյուսակը ?
Խնդիրական պահպանական օրենքը ?

- a) Cholera, tuberculosis, malaria, measles
Էթաղաղի կազմություն, **Հիմքներ**
Էթաղաղի կազմություն
- b) Small pox, tuberculosis, malaria, typhoid
Անողության օրինակ, **Հիմքներ**
Անողության օրինակ
- c) Cholera, tuberculosis, typhoid, measles
Էթաղաղի կազմություն, **Հիմքներ**
Էթաղաղի կազմություն
- d) Cholera, anthrax, tuberculosis, typhoid
Էթաղաղի կազմություն, **Հիմքներ**
Էթաղաղի կազմություն

(16)

99. Energy currency of the cell is

..... ئەپپىچىلەتلىك ئەنپىچىلەتلىك
..... ئۆزىلىك ئەنپىچىلەتلىك

- a) ADP b) FTP c) ATP d) All of these
%اپپىچىلەتلىك / ئەنپىچىلەتلىك

100. Velocity of light is maximum in

..... ئۆزىلىك ئەنپىچىلەتلىك
..... %اپپىچىلەتلىك

- a) Diamond b) Water c) Glass d) Vacuum
کېلىم سۇ ئەسلىك [يۈچۈنى]

XXX THE END XXX