

AJMAL NATIONAL TALENT SEARCH (ANTS) EXAMINATION - 2014

Conducted by : **AJMAL FOUNDATION, A Registered Public Charitable Trust**

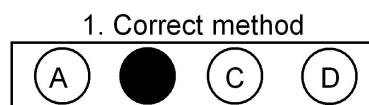
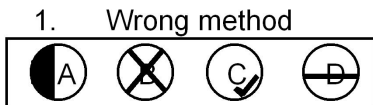
Hojai, Nagaon (Assam)

ANTSE/ VII/6500

Class / **অষ্টম** VII

INSTRUCTIONS TO CANDIDATE

- Write your **CENTRE CODE AND ROLL NO.** legibly in the **OMR ANSWER SHEET ATTACHED.** Do not write your name anywhere in the **ANSWER SHEET.**
- Questions are of multiple-choice type carrying one mark each and all questions are compulsory.
- Candidates are required to mark the correct choice by shading the circle completely with blue or black ball point pen. (Pencil is not allowed). For example, if the correct answer to question no 1. Is 'B' then the marking should be:



- Only one circle, i.e. the correct one should be shaded and not more than one.
- A candidate having completed his/her **OMR ANSWER SHEET** must hand it over, even if blank, to the invigilator before leaving the Examination Hall.
- An examinee must not bring any loose paper, book, etc. except the **ADMIT CARD** to the Examination Hall. Any examinee found in possession of even loose papers will be **EXPELLED.**
- No extra sheet will be provided for making notes or calculations. **CANDIDATES MAY USE THE INNER COVER PAGES OF THIS BOOKLET FOR THIS PURPOSE.**
- An examinee must not talk to, disturb or seek help from a fellow examinee during the examination.
- Any mechanical or digital calculating device (calculator etc.) shall not be used by the examinee during the examination.
- Mobile Phones shall not be used by candidates inside the examination Hall.
- No candidate will be allowed to leave the Examination Hall during the first hour of the examination.
- Contravention of any of the instruction mentioned above shall render a candidate liable for disciplinary action as per rule.

যাৰ নিৰ্বাচন কৰা হৈছে

- যাৰ নিৰ্বাচন কৰা হৈছে **যিটোবোৰ** **কেন্দ্ৰীয়** **কোড** **আৰু** **ৰোল নং** **সঠিকভাৱে** **উল্লেখ** **কৰা** **হৈছে** **আৰু** **নাম** **কোনো** **স্থানত** **উল্লেখ** **কৰা** **নহৈছে**।
- সকলো** **প্ৰশ্ন** **এক** **মৰ্ক** **ৰেখা** **কৰা** **হৈছে** **আৰু** **সকলো** **প্ৰশ্ন** **অপৰিহার্য**।
- কандিডেটসকলে সঠিক উত্তৰ চিনাক্ত কৰিবলৈ বৃত্তটো সম্পূৰ্ণৰূপে শেয়াবলৈ বা ক'লা বা নীলা বিন্দুৰ ব্যৱহাৰ কৰিবলৈ অনুৰোধ কৰা হৈছে। (পেন্সিল অনুমোদিত নহৈছে)। যেন্তে প্ৰশ্ন নং ১ৰ সঠিক উত্তৰ হৈছে 'B' তেন্তে চিনাক্ত কৰাৰ পদ্ধতি হ'ব:
- শুধু এটা বৃত্ত, অৰ্থাৎ সঠিক উত্তৰটোৰ বৃত্তটো শেয়াবলৈ আৰু অধিক নহৈ।
- এক কандিডেটই নিজৰ **OMR ANSWER SHEET** সম্পূৰ্ণ কৰিছে তেন্তেও, যদিহে খালী, তেন্তে ইয়াৰে পৰিচালকক আগবঢ়াবলৈ উচিত।
- এক কандিডেটই কোনো ফাল্টি কাগজ, বই, আদি লৈ আহিব নোৱাৰে। কেৱল **ADMIT CARD** লৈ আহিবলৈ অনুমতি আছে। কোনো কандিডেটই যদি কোনো ফালটি কাগজ লৈ আহে তেন্তে **EXPELLED**।
- কোনো অতিৰিক্ত কাগজ নো দিয়া হৈছে। **CANDIDATES MAY USE THE INNER COVER PAGES OF THIS BOOKLET FOR THIS PURPOSE.**
- এক কандিডেটই কোনো সহকাৰী কандিডেটক প্ৰশ্নবোৰৰ সন্দেহ কৰিবলৈ বা সহকাৰ কৰিবলৈ অনুমতি নাই।
- কোনো যান্ত্ৰিক বা ডিজিটেল গণনা ব্যৱস্থা (ক্যালকুলেটৰ আদি) কандিডেটৰ দ্বাৰা পৰীক্ষাৰ সময়ত ব্যৱহাৰ কৰা হৈছে।
- ম'বাইল ফোন কандিডেটসকলে পৰীক্ষাৰ সময়ত ব্যৱহাৰ কৰিব নোৱাৰে।
- কোনো কандিডেটই পৰীক্ষাৰ সময়ত পৰীক্ষাৰ হলেৰ পৰা প্ৰথম ঘণ্টাৰ সময়ত পলাই যাবলৈ অনুমতি নাই।
- কোনো কандিডেটই উপৰোক্ত নিৰ্দেশনাসমূহৰ কোনো একটোৰ বিৰুদ্ধে অহুঁচি কৰিলে তেন্তে তাকে প্ৰশাসনিক ক্ৰিয়াকলাপৰ অধীনত দণ্ডিত কৰা হ'ব।

7. In the Hindi film 'OMG' Oh My GOD, on what ground does the insurance company reject the claim made by Kanji Bhai ?

- (A) Cheque bounce
 (B) Non-payment of premium
 (C) Act of God
 (D) Incorrect Address

8. Berry White School of Medicine, which later became the first full-fledged medical college in North-East India, is now known as :-

- (A) Assam Medical college, Dibrugarh
 (B) Guwahati Medical College
 (C) Silchar Medical College
 (D) None of these

9. The North Pole experiences complete sunlight each year for :

- (A) 24 hours
 (B) 7 days
 (C) 6 months
 (D) 1 year

10. The country that has the highest number of internet users in the world is :

- (A) USA
 (B) India
 (C) Japan
 (D) China

11. The song 'Oh Laal Meri Pat' is dedicated to the sufi saint

- (A) Bulle Shah
 (B) Nizamuddin Aulia
 (C) Moinuddin Chisti
 (D) Shahbaz Kalandar

12. won the Men's single Australian Open Tournament, 2014

- (A) David Ferrer
 (B) Rafael Nadal
 (C) Robert Lindstedt
 (D) Stanislas Wawrinka

13. The only session of Indian National Congress presided over by Mahatma Gandhi was held at :

মহাত্মা গান্ধীয়ে সভাপতিত্ব করা একমাত্র ভারতীয় জাতীয় কংগ্রেস অধিবেশন কোথায় অনুষ্ঠিত হৈছিল ?

ভারতীয় জাতীয় কংগ্রেসের একমাত্র অধিবেশন যেখানে মহাত্মা গান্ধী সভাপতিত্ব করেন, সেটা অনুষ্ঠিত হয় :

- (A) Belgaum (B) Faizpur (C) Allahabad (D) Karachi
আইলগাম / আইলগাম (B) ফাইজপুর / ফাইজপুর (C) আলহাবাদ (D) কারাচি

14. A session of the Lok Sabha is prorogued by order of

লোকসভার এক অধিবেশন প্রত্যাহারের আদেশের দ্বারা কার দ্বারা করা হয় ?

লোকসভার এক অধিবেশন প্রত্যাহারের আদেশের দ্বারা কার দ্বারা করা হয় ?

- (A) P.M. (B) President (C) L.S. Speaker (D) Leader of the House
প্রধানমন্ত্রী (B) রাষ্ট্রপতি (C) লোকসভার স্পীকার (D) হাউস লিডার

15. The total number of members of South Asian Association for Regional Co-operation (SAARC) is :

দক্ষিণ এশীয় (SAARC) অঞ্চলীয় সহযোগিতার সংস্থাটির মোট সদস্য সংখ্যা কত ?

দক্ষিণ এশীয় (SAARC) অঞ্চলীয় সহযোগিতার সংস্থাটির মোট সদস্য সংখ্যা কত ?

- (A) 8 (B) 7 (C) 6 (D) None of these
৮ / ৭ / ৬ / কোনোটিই নয়

16. won the player of the tournament award in world cup Twenty 20 in Bangladesh, 2014.

২০১৪ সালে বাংলাদেশে টুয়েন্টি টুৱো বিশ্বকাপের খেলোয়াড়ের পুরস্কার জিতেছেন কে ?

২০১৪ সালে বাংলাদেশে টুয়েন্টি টুৱো বিশ্বকাপের খেলোয়াড়ের পুরস্কার জিতেছেন কে ?

- (A) Mahela Jayawardene (B) Rohit Sharma
মহেলা জয়াওয়ার্ডেনে (B) রোহিত শর্মা
(C) Virat Kohli (D) JP Duminy
বিরাট কোহলি (D) জে পি ডুমিনি

17. If Air-India is the airliner of India, then 'Iberia' is the airline of

আইর ইন্ডিয়া যদি ভারতের বিমান সংস্থা হয়, তবে 'ইবেরিয়া' কোন দেশের বিমান সংস্থা ?

আইর ইন্ডিয়া যদি ভারতের বিমান সংস্থা হয়, তবে 'ইবেরিয়া' কোন দেশের বিমান সংস্থা ?

- (A) Italy (B) Spain (C) Japan (D) Norway
ইতালি (B) স্পেন (C) জাপান (D) নরওয়ে

18. The Indian singer, Known as Mallika-e-Ghazal, which means the Queen of Ghazals' is

ভারতীয় গায়কী, যাকে 'মল্লিকা-ই-গাজাল' বলা হয়, যার অর্থ 'গাজাল গায়কীদের রাজা' কে ?

ভারতীয় গায়কী, যাকে 'মল্লিকা-ই-গাজাল' বলা হয়, যার অর্থ 'গাজাল গায়কীদের রাজা' কে ?

- (A) Begum Akhtar (B) Abida Parveen (C) Chitra Singh (D) Peenaz Masani
বেগম আখতার (B) আবিদা পারভীন (C) চিত্রা সিংহ (D) পিনাজ মাসানি

19. The Indian commercial banks were nationalised for the second time in :

ভারতীয় বাণিজ্যিক ব্যাংকগুলি দ্বিতীয়বারের মতো জাতীয়করণের জন্য কখন ?

ভারতীয় বাণিজ্যিক ব্যাংকগুলি দ্বিতীয়বারের মতো জাতীয়করণের জন্য কখন ?

- (A) 1972 (B) 1980 (C) 1985 (D) 1990

28. Fill in the blanks with the appropriate choice
Because tourists were visiting the spot, the government decided to close it.
(A) the few (B) a few (C) few (D) only the few
29. I had no map. That's why I got lost. If I a map, I all right.
(A) have / will be (B) had / would be
(C) had had / would have been (D) a & b are correct
30. We asked him what countries he
(A) had been visited (B) has been visiting (C) visited (D) had visited
31. I could not resist him why he was trying meeting me.
(A) asking / to avoid (B) asking / avoiding (C) to ask / to avoid (D) to ask / avoiding
32. You had better English hard.
(A) to study (B) studying (C) study (D) studied
33. Which of the following has a different answer for the blank ?
(A) you busy? (B) these your books?
(C) your parents ok (D) your friend Victor, Austalian?
34. Choose the one that has different meaning from the others.
(A) You can wear the seat belt (B) You have to wear the seat belt
(C) You must wear the seat belt (D) You ought to wear the seat belt
35. He drives very carefully. He never drives very fast. He be a good driver.
(A) seems (B) definitely (C) must (D) should
36. Choose the answer that fits both the blanks in the following two sentences.
1. I use your pen ?
2. If you go to bed late, you be tired in the morning.
(A) Will (B) Shall (C) Should (D) May
37. The sentence - "She agreed to my proposal" can be written in passive voice as :
(A) My proposal was agreed to (B) My proposal had been agreed to by her
(C) My agreement was proposed to by her (D) She has been agreed to my proposal
38. The police broke the temple when they got information that a terrorist was hiding in it.
(A) into (B) up (C) off (D) out
39. You have to enter the date of birth in the job application form.
(A) into (B) in (C) on (D) no preposition required

40. two thousand people joined the strike.
(A) No less than (B) Not many than (C) No little than (D) No fewer than
41. The given sentence in Direct Narration has four choices in Indirect Narration. Choose the correct one.
He said to me , "Where are you going?"
(A) He asked me where I was going (B) He asked me where was I going ?
(C) He asked me where I had been going (D) He asked me where I was being going
42. The given sentence in Indirect Narration has four choices in Direct Narration. Choose the correct one.
"Father advised me to be slow and steady".
(A) Father said to me , " Son, you must be slow and steady"
(B) Father said to me , " Be slow and steady"
(C) Father said to me , "You should be slow and steady"
(D) Father said to me, " Why can't you be slow and steady"
43. The prisoner made an **abortive** attempt to escape from the jail. "abortive" means
(A) successful (B) illegal (C) futile (D) secret
44. Acts of **vandalism** in the school campus can not be tolerated. "Vandalism" means
(A) ragging (B) late-coming (C) disturbance (D) violence
45. Wood is **opaque** but glass is (Choose the word opposite in meaning to the bold word "opaque")
(A) Soft (B) transparent (C) hard (D) smooth
46. His attitude is very **hostile**. The opposite of " hostile" is
(A) kind (B) friendly (C) helpful (D) aggressive
47. Only a **dare devil** can try these bike stunts. Dare devil means :
(A) a foolish person (B) a rich person (C) a fearless person (D) a terrorist
48. The Latin phrase **ad interim** means
(A) the middle portion (B) unnecessary interference
(C) in the mean time (D) None of these
49. Choose the option that gives the correct sense of the idioms / phrases in the following Sentence.
He does his work by fits and starts.
(A) Regularly (B) Sincerely (C) inattentively (D) Irregularly
50. "In a nut shell, the problem was caused by the fuel", said the mechanic. What does "in a nut shell" means ?
(A) To be blunt about something (B) To be concise about something
(C) To be long and exhaustive about something (D) To be very frank about something

General Maths / সাধাৰণ গণিত / সাধাৰণ গণিত

51. The set of negative numbers and whole numbers is called

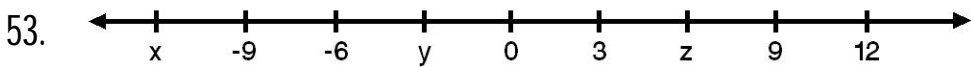
ঋণাত্মক সংখ্যা আৰু শূন্য আৰু ধনাত্মক সংখ্যাৰ গোটক কোৱা হয়।

- (A) natural numbers (B) integers (C) positive numbers (D) none of these
 কোনো সংখ্যাও নহয়।

52. The rational number $\frac{31}{4}$ lies between which two consecutive integers ?

$\frac{31}{4}$ ৰাশিটো কোন দুটা ক্ৰমিক পূৰ্বসংখ্যাৰ মাজত আছে?

- (A) 5, 6 (B) 7, 8 (C) 6, 8 (D) 8, 9



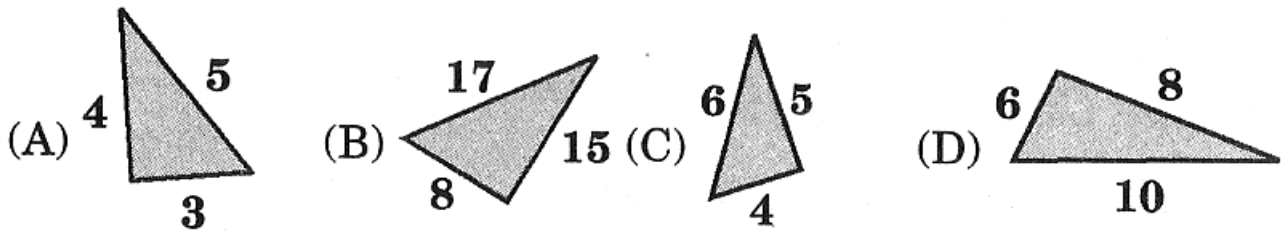
Based on the above number line, the value of x-y-z is

উপৰোক্ত সংখ্যাৰেখাৰ ওপৰত x-y-z ৰ মান কিমান হ'ব?

- (A) - 21 (B) - 3 (C) - 15 (D) 15

54. Which of the following is NOT a right-angled triangle ?

নিচৰ কোনটো সৰ্বস্বিকল ত্ৰিভুজ নহ'ব?



55. For what value of 'x' does the equation : $\frac{a+b-x}{c} + \frac{a+c-x}{b} + \frac{c+b-x}{a} + \frac{4x}{a+b+c} = 1$ satisfy ?

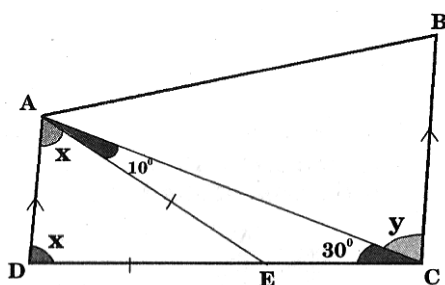
x ৰ কিমান মানত $\frac{a+b-x}{c} + \frac{a+c-x}{b} + \frac{c+b-x}{a} + \frac{4x}{a+b+c} = 1$ সমীকৰণটো সন্তোষিত হয়?

$\frac{a+b-x}{c} + \frac{a+c-x}{b} + \frac{c+b-x}{a} + \frac{4x}{a+b+c} = 1$ সমীকৰণটো সন্তোষিত কৰিবলৈ x ৰ কিমান মান লাগিব?

- (A) ab+bc+ca (B) 0 (C) a+b+c (D) 1

56. In the diagram AD || BC, AED is an isosceles triangle. $\angle x - \angle y$ is

56. AD || BC, AED isosceles triangle. $\angle x - \angle y$ is



- (A) 20° (B) -40° (C) -10° (D) None

57. For what positive integer 'n' does $n^2 \times 1995^2 \times 1996^2 \times 1997^2 = 3990^2 \times 3992^2 \times 3994^2$?

- (A) 2 (B) 4 (C) 5 (D) 8

58. What number should be added to $\frac{-7}{10}$ to get $\frac{-5}{16}$?

- (A) $\frac{-31}{80}$ (B) $\frac{-131}{80}$ (C) $\frac{131}{80}$ (D) $\frac{31}{80}$

59. If $ab=1$, then $\frac{1}{1+a^{-1}} + \frac{1}{1+b^{-1}}$ is

- (A) 0 (B) $a+b$ (C) 1 (D) $a-b$

60. The ratio of X's score to Y's score for a test is 8:9. If Y had scored 30 marks lower, the ratio would have been 4 : 3 instead. How many marks did X score?

- (A) 50 (B) 30 (C) 80 (D) 60

61. At what rate percent per annum will a sum of money double in 8 years?

- (A) $3\frac{1}{3}\%$ (B) $12\frac{1}{2}\%$ (C) $33\frac{1}{3}\%$ (D) $3\frac{1}{2}\%$

62. Simplified value of $\left(2 - \frac{1}{3}\right)\left(2 - \frac{3}{5}\right)\left(2 - \frac{5}{7}\right) \dots \dots \left(2 - \frac{997}{999}\right)$ is

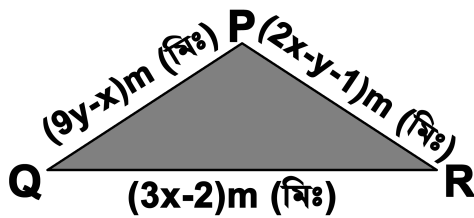
$$\left(2 - \frac{1}{3}\right)\left(2 - \frac{3}{5}\right)\left(2 - \frac{5}{7}\right) \dots \dots \left(2 - \frac{997}{999}\right) \gg a \gg \dots \dots *$$

$$\left(2 - \frac{1}{3}\right)\left(2 - \frac{3}{5}\right)\left(2 - \frac{5}{7}\right) \dots \dots \left(2 - \frac{997}{999}\right) \gg b \gg \dots \dots *$$

- (A) $\frac{5}{999}$ (B) $\frac{1001}{999}$ (C) $\frac{1001}{3}$ (D) $\frac{5}{3}$

63. The perimeter of the following triangle expressed in metre is

$$\text{Perimeter} = \dots \dots * / \text{Perimeter} = \dots \dots *$$



- (A) $8y+4x-3$ (B) $8y-4x+3$ (C) $14x-2y-3$ (D) $12xy-3$

64. The value of 'm' in the equation $\frac{7}{10} + \frac{3}{1000} + \frac{9}{m} = 0.712$ is

$$\frac{7}{10} + \frac{3}{1000} + \frac{9}{m} = 0.712 \gg a \gg \dots \dots * / \frac{7}{10} + \frac{3}{1000} + \frac{9}{m} = 0.712 \gg b \gg \dots \dots *$$

- (A) 10 (B) 100 (C) 1000 (D) None
 AOC XcF/ AE00C Xr

65. If your classroom had 38 students and 1 was absent on Monday, 2 on Tuesday, 4 on Wednesday, 0 on Thursday and 3 on Friday, what was the average daily attendance ?

38 LX Key-Key%ak, T00 aac] [ya 1 LX,]t_ [ya 2, [M]ya 4 LX, [f&t]ya 0 LX %0Ey]ya 3 %XY 00UcEa_ aSc a0T0a SV00 GOb=Y00T0E0]k %k_ ?

38 LX Key-Key%ak, aac] [ya 1 LX,]t_ [ya 2 LX, [M]ya 4 LX, [f&t]ya 0 LX C Ey]ya 3 LX %XY 00UcEa_ aSc a0T0a SV00 GOb=Y00T0E0]k_ ?

- (A) 32 (B) 28 (C) 36 (D) 30

66. The largest of three consecutive multiples of 7 whose sum gives 777 is

$$7 \gg \dots \dots * / 7 \gg \dots \dots *$$

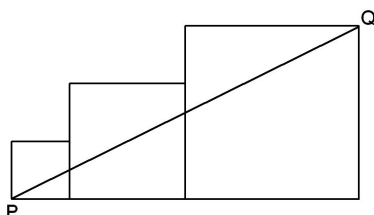
- (A) 259 (B) 352 (C) 189 (D) 266

67. In simplest form, the value of the quotient $\frac{19^{98} + (342)(19^{97})}{19^{99}}$ is

- $\frac{19^{98} + (342)(19^{97})}{19^{99}}$ A+ \qZō » a» _ »Ö écaā = / $\frac{19^{98} + (342)(19^{97})}{19^{99}}$ A+ \qZō [y] cā [ya] [y] Ö c = *
 (A) 0 (B) 1 (C) 19 (D) 100

68. Three squares are lined up horizontally as shown. The area of the first square is 9m^2 , The area of the second square is 16m^2 , the area of the third square is 25m^2 . How long is \overline{PQ} ?

Şöy TöaVFC 3ç Wpäs TöXÖc [Gäl iy AāEō āG » Fç écaā = YÜ] aÖc [Gäl iy» Eōç 9 [Giç]f, TÖTÖ aÖc [Gäl iy» Eōç 16 [Giç]f çÖÖ
 TÖTÖ aÖc [Gäl iy» Eōç 25 [Giç]f cā \overline{PQ} » éMHi »EÖ]ç ?
 Şöy TöXÖc [Gäl iy AāEōāÜ [çç cā āā = YÜ] »Ö [Gäl iy] [y] Eōç 9 [Giç]f, TÖTÖ »Ö [Gäl iy] [y] Eōç 16 [Giç]f A [ç TÖTÖ »Ö
 [Gäl iy] [y] Eōç 25 [Giç]f cā \overline{PQ} A [ç éMHi »EÖ]ç ?



- (A) 8 m (ç]f) (B) 17 m (ç]f) (C) 13 m (ç]f) (D) 7 m (ç]f)

69. A trader has purchased pens at the rate of ₹42 per dozen. If he has earned a profit of $14\frac{2}{7}\%$, what is his selling price ?

ALX ā [yç] [ç] Eō] YÖTÖÖd LX TÖ42 ÖEç Vç] TÖ » EÖç ^çV ā TÖç 14 $\frac{2}{7}$ % ` Tçç ` çÖEÖ » ā TÖç [y] Ö] É i » EÖ]ç ççç ?

AEd LX ā [yç] [ç] YÖTÖÖd LX Eō] 42 ÖEç ççç » EÖç ^çV āā 14 $\frac{2}{7}$ % ` Tçç ` çÖEÖ [y] Töç [y] Ö] É i » EÖç ççç ?

- (A) ₹42 (B) ₹52 (C) ₹48 (D) ₹38

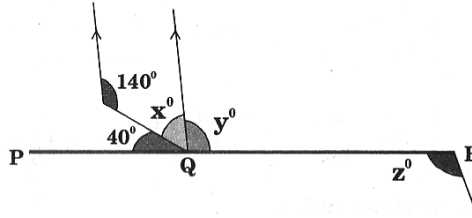
70. When the circumference and area of a circle are numerically equal, then the diameter is numerically equal to

ā ^ ç TÖç AÖç [ç] » Y » a [ç] ç çç » FiEÖç [y] Eōç » a] çç çç ā TÖç TÖç [ç] ç çç » FiEÖç [y] » a] çç çç *

^FX AÉÖÖ [ç] çç [ç] çç çç » FiEÖç [y] Eōç [ç] çç çç, Töç [ç] ç çç » FiEÖç [y] A [ç] çç çç *

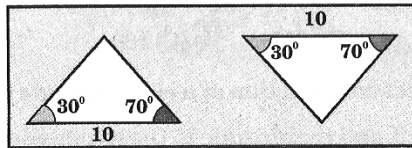
- (A) area (B) circumference (C) 2π (D) 4
 Eōç Y » a [ç] ç / Y çç [ç] çç

71. In the diagram PQR is a straight line ?
 In the diagram PQR is a straight line ?



Which of the following is incorrect ?
 (A) $y-x=60^\circ$ (B) $x=40^\circ$ (C) $y+z=200^\circ$ (D) $x+y+z=220^\circ$

72. The method used to prove that the two triangles are congruent is
 The method used to prove that the two triangles are congruent is

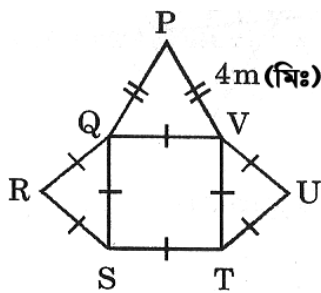


(A) SSS (B) SAS (C) ASA (D) AAS

73. The triangle formed by AB=3m, BC=4 m and AC=8 m is
 The triangle formed by AB=3m, BC=4 m and AC=8 m is

(A) a scalene triangle (B) an isosceles triangle (C) no triangle is formed (D) an equilateral triangle

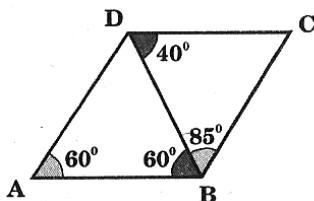
74. In the diagram bellow, the perimeter of $\triangle PQV$ is 11 m. Find the perimeter in m, of the whole diagram.
 In the diagram bellow, the perimeter of $\triangle PQV$ is 11 m. Find the perimeter in m, of the whole diagram.



(A) 32 (B) 23 (C) 28 (D) 43

75. The longest segment shown in the figure is

সর্বদীর্ঘ অংশটি চিত্রে দেখানো হয়েছে।



- (A) \overline{AB} (B) \overline{BD} (C) \overline{DC} (D) \overline{BC}

General Science / সাধারণ বিজ্ঞান / সাধারণ বিজ্ঞান

76. A car travels at a speed of 50 km/h in the 1st 30 minutes and 100 km/h in the next 30 minutes. What is the total distance covered by the car ?

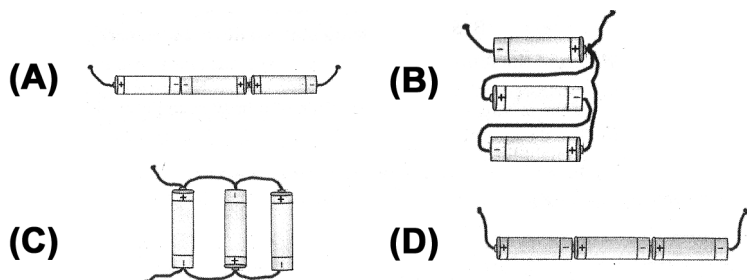
একটি গাড়ি 50 কিমি/ঘণ্টা গতিতে 30 মিনিট এবং 100 কিমি/ঘণ্টা গতিতে পরবর্তী 30 মিনিট অতিক্রম করে। গাড়িটির মোট অতিক্রম করা দূরত্ব কত?

(A) 50 km (B) 75 km (C) 150 km (D) 200 km

77. Rana's teacher asked him to connect 3 cells in different ways to form a battery. Identify the correct way he must connect to form a battery ?

রানা'র শিক্ষক তাকে 3 কোষকে বিভিন্ন উপায়ে সংযোগ করে একটি ব্যাটারি তৈরি করার জন্য বলেছেন। ব্যাটারি তৈরি করার জন্য সঠিক উপায়টি চিহ্নিত করুন।

(A) 50 km (B) 75 km (C) 150 km (D) 200 km

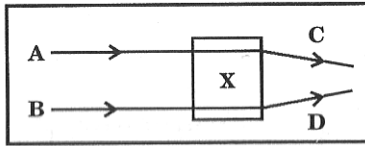


78. A piece of iron becomes hot when exposed to sunlight for a while. The iron does not receive heat of the sun through

একটি লৌহের টুকরা কিছুক্ষণ সূর্যের আলোয় স্পর্শ করা হলে গরম হয়ে যায়। লৌহটি সূর্যের তাপকে নিজে গ্রহণ করে না। তাপ গ্রহণের মাধ্যমটি চিহ্নিত করুন।

- i. Radiation - (কিরণ)
 - ii. Convection - (প্রবাহ)
 - iii. Conduction - (সংস্পর্শ)
- (A) I and II only (B) II and III only (C) III and I only (D) I, II and III

79. The diagram below shows two incident parallel rays A and B which emerge as rays C and D.



What is the appropriate lens used in the box 'X' ?

- (A) convex lens (B) concave lens (C) plane lens (D) plano-concave lens

80. Which of the following is not a scale of temperature ?

- (A) Kelvin scale (B) Celsius scale (C) Fahrenheit scale (D) Richter scale

81. A virtual image is

- (A) always real (B) always erect
(C) always caught on a screen (D) always uncapturable

82. Identify the reasons for excessive currents in electrical circuits.

- i. short circuit -
ii. connection of many devices to a single socket -
iii. using MCB's instead of fuse -
- (A) I and II only (B) II and III only (C) III and I only (D) I, II and III

83. Which of the following is not a unit of distance ?

- (A) metre (B) years (C) light years (D) both B and C

84. Why are acids always stored in glass containers and not in metallic ones ?
 A>00VTC YcyT0X0cF E0 aVd E0k» YcyT0»F0c0F ? / A>a00VTC Ycy Xc alyF aE0 a[VcEgaldyYcy [yF0c0F ?
- (A) Glass containers are transparent (B) Glass containers are cheaper
 E00» Ycy 00k=c0F / E0aldyYcy 00k=c0F E00» Ycy a00[yaly/ E0aldyYcy a00c0F
- (C) Metal containers are not easily available (D) Metal reacts with the acid stored in them
 VTC0 Ycy acL aT00V0c Xc d VTC0 T0T0»F0c A>00» GT0» y0c E00
 VTC0 Ycy ac aL YcT0c ^ d Xc VTC0 A>a00ly a0U » y0c E00ly
85. The ground near a water body will have
 L_c T» C0» T0UE0c \b]T0.....* / L_c aTly XE00U0c \b]ly.....*
- (A) more moisture (B) less moisture (C) no moisture at all (D) more animals
 %d/0c aly%=- %d/0c E0] aE00Xc %d/0c X0U0E0 %»E00aeFiE0Y0SYU0E0
 %d/0c aly Y %d/0c E0] aE0X %d/0c U0E0X %»E00aeFiE0Y0SYU0E0
86. Wind currents are generated due to
» [yaly [y^CY0c» aE0c0F* / A[y LXi [y^CY0c0F y aE0c0F*
- (A) shape of earth (B) uneven heating on earth
 Y0U0/» %0E0T0/ Y0U[yly%0E0T0 Y0U0/ Y0U0G»]» T0T0i / Y0U[yY00G[y] [yT0[yT0i
- (C) thunder storm (D) cyclone
 a00»E0SY/ [y0Y0T0 H0Si [yT0c:/ H0S[yT0c0
87. Which of the following is an example of a physical change ?
 T0 » aE0X0c A0c a0T0E0Y» [y0k» =Vc»S ? / X0aldy aE0X0c a0T0E0Y» [yT0X [y=Vc0F]S ?
- (A) Burning (B) Rusting (C) Melting (D) None of these
 VcX [c]» V0c /]>ly0U0c G_X A00c Xc0F / AE00c X0
88. $2\text{NaOH} + \text{MgSO}_4 \rightarrow$
 (A) $\text{MgO} + \text{Na}_2\text{SO}_4$ (B) $\text{Mg}(\text{OH})_2 + \text{Na}_2\text{SO}_4$ (C) $\text{Mg}(\text{OH})_2$ (D) $\text{MgO} + \text{Na}_2\text{O} + \text{H}_2\text{O}$
89. Washing soda is
 E00Y0» aly0c 000c 0c0c:..... / E0Y0b aly0c 0c0c0c0c:.....*
- (A) NaCl (B) Na_2CO_3 (C) NaHCO_3 (D) NaOH
90. The earth appears blue from outer space because
 » [yaly [ycf %0E0c » Y»c Y0U0FX 000_ XY_c aVFc ^ d^* / A[y LXi [yc=%0E0c aU0E0Y0U[y0E0XY_ aVFc ^ d^*
- (A) of the forest (B) of the sky (C) of the water (D) all of these
 Gk=Gk»X / Gk»Yc_c %0E0c YcXY / L_ %0E0c aE00c / a[y0»00
91. 'A colourless liquid turns blue litmus red and reacts with magnesium to produce a gas. What type of substance must the colourless liquid be ?
 A>[yly [Sc»X T00_ XY_c x_ 00]0E0» I0E00 %00 a] G0k»F0c]» _GT0» [y0c E00» A>[y0aGk»=dY~ E00»* A+ [ySc»X T00_ a00» E00V0S» YVdJic: [yY0c» ?
- AE00 [ySc»X T00_ XY_c x_ 00]ca_c c0F A[y]0G0k»a0T0] [y0a0U G0c0 =dY~ E00ly [ySc»X T00_ x0» E0YVdJic0T0Y0aly?
 (A) Acid (B) Base (C) Salt (D) both B and C
 %00 I0c / I0ly X]F / _[S B %0c0C =\0 B A[y C =\0

92. Which of the following statements best explains why fruits and leafy vegetables are included in a healthy diet?

- (A) They have a high water content
 (B) They are the best source of protein
 (C) They are rich in minerals and vitamins
 (D) They are the best source of carbohydrates

93. Cuscuta is a plant.

- (A) autotrophic (B) parasitic (C) Saprotrophic (D) None of these

94. Identify the animal that pops out its stomach through its mouth to eat the food?

- (A) Hydra (B) Starfish (C) Amoeba (D) Snail

95. Given below are the various steps involved in animal nutrition.

- I. Assimilation - II. Ingestion -
 III. Absorption - IV. Digestion -
 V. Egestion -

Arrange them in proper sequential order. / এইবোৰক নিৰ্দিষ্ট ক্ৰমত লিখ। / এগুলিকে নিৰ্দিষ্ট ক্ৰমে লিখ।

- (A) III, II, IV, I, V (B) III, I, IV, II, V (C) II, IV, III, I, V (D) III, IV, II, V, I

96. shawls are woven from fur of Kashmiri goat.

- (A) Pashmina (B) Parsi (C) Kashmiri (D) Simla

97. Which of the following is incorrect?

Animal (প্রাণী)	Respiratory organ (শ্বাস অংগ)
(A) Frog (ভেকুলী / বেঙ)	Skin (হাল/ত্বক)
(B) Frog (ভেকুলী/বেঙ)	Lungs (হাওঁ-ফাওঁ/ফুসফুস)
(C) Cockroach (পইতাচুৰা/আরশোলা)	Tracheae (শ্বাস নলীকা)
(D) Fish (মাছ)	Tracheae (শ্বাস নলীকা)

98. The ultimate cause of the movement of water against gravity in a tree is

গছ এজোপাত মাধ্যাকর্ষণৰ বিপৰীতে পানীৰ চলাচল সম্ভৱ হোৱাৰ প্ৰধান কাৰণ হৈছে

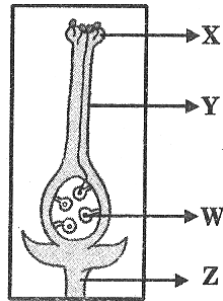
একটি গাছে মধ্যাকর্ষণের বিপৰীতে জল যাওয়া সম্ভব হওয়ার প্ৰধান কাৰণ হল

- (A) Osmosis (B) transpiration (C) photosynthesis (D) both A & B

99. Blood carries

- (A) oxygen (B) waste (C) food (D) All of these

100. The given figure represents a carpel :



Which part bears the female gamete ?
(A) X (B) Y (C) Z (D) W

XXXXXX