

AJMAL NATIONAL TALENT SEARCH (ANTS) EXAMINATION - 2010

Conducted by : **AJMAL FOUNDATION, A Registered Public Charitable Trust**  
**Hojai, Nagaon (Assam)**

ANTSE/VII/2000

## Class /æʃɪf VII

## Invigilator

Date.....

## **Script No.**

**Roll No. / रोल नं. / X=०० / X=०० X=००**

## **INSTRUCTIONS TO CANDIDATE**

1. Write your **Centre Code and Roll No.** legibly in the space provided. Do not write your name anywhere in the book.
  2. 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.
  3. No extra sheet will be provided for making notes or calculations. **Candidates may use the inner cover pages of this booklet for this purpose.**
  4. An examinee must not talk to, disturb or seek assistance from a fellow examinee during the examination.
  5. No leaf of the booklet must be torn or detached.
  6. Any mechanical or digital calculating device (calculator etc.) shall not be used by the examinee during the examination.
  7. Mobile Phones shall not be used by candidates inside the examination Hall.
  8. No candidate will be allowed to leave or go out of the Examination Hall during the first hour of the examination.
  9.
    - i. Questions are of multiple-choice type carrying one mark each and all questions are compulsory.
    - ii. Students are required to write the correct answer [i.e. any one of (a), (b), (c) or (d)] in the box provided alongside the question.
    - iii. A candidate having completed his/her question-answer booklet must hand it over, even if blank, to the invigilator before leaving the Examination Hall.
  10. Contravention of any of the instruction mentioned above shall render a candidate liable for disciplinary action as per rule.



MARKS OBTAINED				
General Knowledge	General English	General Mathematics	General Science	Total

**Signature of Examiner**

## **Signature of Scrutiniser**

### **Signature of the Head Examiner**

# AJMAL NATIONAL TALENT SEARCH (ANTS) EXAMINATION - 2010

**Class : VII**

**Time/સમાય : 2 hours/ દર્શકના સમાય**

**Full Marks/ પૂર્ણ માર્ક (25+25+25+25)=100**

**INSTRUCTIONS / નિરીક્ષણ**

1. Attempt All Questions / પ્રશ્નોનું કોઈપણ પ્રશ્ન જવાબ દો.
2. There are four options to every question. Choose the correct option by putting any one of **a, b, c** or **d**, in the box **Y** **E** **O** **S** **A** **D** **E** **C** **T** **O** **U** **E** **C** [ **E** **D** **T** **O** **a, b, c** **[** **d** **x** **F** **\*** ]

## General Knowledge / વિદેશી જ્ઞાન / વિદેશી જ્ઞાન

1. Nuclear explosive devices were tested in India at :

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ :

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ :

- |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Sri Harikota          | b) Bangalore             | c) Pokhran               | d) Kanchipuram           |
| નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. 100% concession has been given for travelling in the railways for the patients of :

નિર્ધારિત જગતીની સ્થળીએ 100% નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

- |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a) AIDS                  | b) Cancer                | c) TB                    | d) Swine flu             |
| નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. The Indian Air Force (IAF) has changed its formal colour 'Blue' into :

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

- |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a) White                 | b) Light Grey            | c) Green                 | d) Yellow                |
| નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. The language spoken by the greatest number of people in the world is :

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

- |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a) English               | b) French                | c) Arabic                | d) Mandarin              |
| નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. 'DIET' is the parliament of :

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

નિર્ધારિત જગતીની સ્થળીએ નિર્ધારિત જગતીની સ્થળીએ ?

- |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Spain                 | b) Germany               | c) Japan                 | d) Israel                |
| નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  | નિર્ધારિત જગતીની સ્થળીએ  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(1)

6. The creature that can move its eyes in two different directions at the same time is :

କୋକରୋଚ୍ ଆଏତୋ ଏକାଟେ ବେଳେ କେବେ ପିଲାଗ ଏବଂ ତୋହାରୁ ଯାଇ ?

କୋକରୋଚ୍ ଆଏତୋ ଏକାଟେ ବେଳେ କେବେ ପିଲାଗ ଏବଂ ତୋହାରୁ ଯାଇ ?

a) Cockroach

କୋକରୋଚ୍  
କୋକରୋଚ୍

b) Chameleon

କେମେଲିଆନ  
କେମେଲିଆନ

c) Butterfly

ଫଲିଆନ  
ଫଲିଆନ

c) Crocodile

କ୍ରୋକୋଡିଲ  
କ୍ରୋକୋଡିଲ

7. Choose the correct answer :

କୌଣସି କୌଣସି କୌଣସି :

କୌଣସି ଫେଲ୍ କୌଣସି :

A

a) Mahasweta Devi

ମହାସ୍ଵେତା ଦେବି  
ମହାସ୍ଵେତା ଦେବି

b) Indira Goswami

ଇନ୍ଦ୍ରିଆ ଗୋସ୍ବାମୀ  
ଇନ୍ଦ୍ରିଆ ଗୋସ୍ବାମୀ

c) Rajendra Keshawal Shah

ରାଜେନ୍ଦ୍ର କେଶାଵାଳ ଶାହ  
ରାଜେନ୍ଦ୍ର କେଶାଵାଳ ଶାହ

d) Girish Karnad

ଗିରିଷ କରନାଡ  
ଗିରିଷ କରନାଡ

B

i) Assamese

ଅସାମୀ  
ଅସାମୀ

ii) Bengali

ବଙ୍ଗାଲୀ  
ବଙ୍ଗାଲୀ

iii) Kannada

କନ୍ଧାଦା  
କନ୍ଧାଦା

iv) Gujrati

ଗୁଜରାଟୀ  
ଗୁଜରାଟୀ

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

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

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

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

8. The computer language 'Java' has been named after a famous make of :

କୋକରୋଚ୍ ଲେବ୍ (Java) କେବେ କୋକରୋଚ୍ ?

କୋକରୋଚ୍ ଲେବ୍ (Java) କୋକରୋଚ୍ କେବେ କୋକରୋଚ୍ ?

a) Chocolates

କୋକରୋଚ୍

b) Coffee

କୋକରୋଚ୍

c) Fruit

ଫୁଲ୍

d) Steel

ରୋଲ୍

9.  is the logo of :

କୋକରୋଚ୍ ଲେବ୍ ?

କୋକରୋଚ୍ ଲେବ୍ ?

a) L.I.C.I. of India

କୋକରୋଚ୍ ଲେବ୍

b) Welcome group

କୋକରୋଚ୍ ଲେବ୍

c) Delhi University

ଦେଲି ବିଶ୍වବିଦ୍ୟାଳୟ

d) Guwahati University

ଗୁଵାହାଟି ବିଶ୍ୱବିଦ୍ୟାଳୟ

(2)

10. Indigo, Spicejet, Kingfisher, Jetlite are names of :  
 a) YX<sup>1</sup>  
 b) YX<sup>1</sup>  
 c) YX<sup>1</sup>  
 d) YX<sup>1</sup>

11. The number of books in the New Testament is:  
 a) 12  
 b) 22  
 c) 27  
 d) 32

12. Which of the following you can see from space :  
 a) Great wall of China  
 b) Statue of Liberty  
 c) Great Barrier Reef  
 d) Leaning Tower of Pisa

13. Which river is declared as the National river of India ?  
 a) Ganga  
 b) Godavari  
 c) Yamuna  
 d) Brahmaputra

14. 'Young World' is a supplement for the children of the newspaper :  
 a) The Assam Tribune  
 b) The Times of India  
 c) The Hindu  
 d) The Pioneer

15. Pt. Hariprasad Chaurasia plays on :  
 a) The Guitar  
 b) The Sitar  
 c) The Flute  
 d) The Sarod

16. The Delhi Sultan known as 'Wisest fool' :  
 a) Ala-uddin Khilji  
 b) Mohammad-Bin Tuglaq  
 c) Ilutmish  
 d) Giyas Uddin Balban

17. "Padma" Awards are given away by :

Y<sup>2</sup> Y<sup>2</sup> [ ] É-åEçäX YVçX Eä» ?

Y<sup>2</sup> Y<sup>2</sup> Y<sup>2</sup> äEö YVçX Eä» X ?

a) The President

»çñX<sup>2</sup>

[çñX<sup>2</sup>

c) The Chief Justice of Supreme Court

00T<sup>2</sup> Xid<sup>2</sup> ] Fî Xid<sup>2</sup> V

aM<sup>2</sup> äEö X<sup>2</sup> Fî Xid<sup>2</sup> M

b) The Prime Minister

YVçX<sup>2</sup> Üä

YVçX<sup>2</sup> Üä

d) The Vice President

0Y<sup>2</sup> çñX<sup>2</sup>

=Y[çñX<sup>2</sup>

18. In the last edition of Nehru Cup (Football) India won the trophy defeating :

å^ç<sup>2</sup> Y<sup>2</sup> åXc<sup>2</sup> 0EçY<sup>2</sup> (Z<sup>2</sup>) Y<sup>2</sup> »åTöåEçX åV` Eöc<sup>2</sup> 0VçZ<sup>2</sup> VF\_ Eö» X<sup>2</sup> ?

GTöåXc<sup>2</sup> 0EçY (Z<sup>2</sup>) Y<sup>2</sup> »åTöåEçX åV` åEö Zç<sup>2</sup>+Xç<sup>2</sup> c<sup>2</sup> ] åVçZ<sup>2</sup> VF\_ Eö» ?

a) Thailand

Uçç<sup>2</sup> %

Uç+ä<sup>2</sup> %

b) Syria

»ô<sup>2</sup> V<sup>2</sup>

å<sup>2</sup> V<sup>2</sup>

c) Kyrgyzstan

åEçG<sup>2</sup> X

åEçG<sup>2</sup> X

d) South Korea

V<sup>2</sup> iS åEç<sup>2</sup> V<sup>2</sup>

V<sup>2</sup> iS åEç<sup>2</sup> V<sup>2</sup>

19. Anil is taller than Sunil but Dilip is taller than Kamil. Kamil is taller than Anil and Sunil. Who is the tallest boy ?

%»X\_ aX<sup>2</sup> TæEö CF xEöV<sup>2</sup> Y Eö<sup>2</sup> ] TæEö CF\* Eö<sup>2</sup> \_ %»X\_ %»X\_ 0aX<sup>2</sup> TæEö CF cä<sup>2</sup> %»X\_ TæEö CF åEçX ?

%»X\_ aX<sup>2</sup> åUäEö\_ ¶<sup>2</sup> xEöV<sup>2</sup> Y Eö<sup>2</sup> ] åUäEö\_ ¶<sup>2</sup>\* ^V Eö<sup>2</sup> \_ %»X\_ %»X\_ åUäEö\_ ¶<sup>2</sup> Tæä<sup>2</sup> a[¶+åTö\_ ¶<sup>2</sup> åEö ?

a) Kamil

Eö<sup>2</sup> \_

b) Anil

%»X\_

c) Dilip

å<sup>2</sup> V<sup>2</sup>

d) Sunil

aX<sup>2</sup> \_

20. Ganga, Kaveri, Krishna and Yamuna are :

GeG<sup>2</sup>, Eçä[¶<sup>2</sup>, Ebb<sup>2</sup>; %ç>0<sup>2</sup>] Xç :

GeG<sup>2</sup>, Eçä[¶<sup>2</sup>, Ebb<sup>2</sup>; A[é ^] Xç c<sup>2</sup> :

a) Actress

Xç<sup>2</sup> Eç

Xç<sup>2</sup> Eç

b) All sister

\ô<sup>2</sup>

å[ç<sup>2</sup>

c) Model

] åö<sup>2</sup>

] åö<sup>2</sup>

d) Rivers

XV<sup>2</sup>

XW<sup>2</sup>

21. What will be the next number in the series : 2, 5, 9, 14, ..... ?

æ S<sup>2</sup> Y<sup>2</sup> Y<sup>2</sup> »TöaeF<sup>2</sup> »Eö ?

A+ `E.<sup>2</sup> Y<sup>2</sup> Y<sup>2</sup> »TöaeF<sup>2</sup> »Eö c<sup>2</sup> ?

a) 20

b) 18

c) 19

d) 17

22. 'Democracy is by the people, for the people and of the people' - this was said by :

GXTöLXad<sup>2</sup> S<sup>2</sup> Y<sup>2</sup> G<sup>2</sup> P<sup>2</sup> LXad<sup>2</sup> S<sup>2</sup> Eö<sup>2</sup> åS LXad<sup>2</sup> S<sup>2</sup> \$öEö<sup>2</sup> - [¶<sup>2</sup> åEçäX åEö<sup>2</sup> ?

GXTöLXad<sup>2</sup> Y<sup>2</sup> G<sup>2</sup> P<sup>2</sup> LXad<sup>2</sup> Y<sup>2</sup> LX<sup>2</sup> LXad<sup>2</sup> Y<sup>2</sup> al<sup>2</sup> Eö<sup>2</sup> - åEö [¶<sup>2</sup> å<sup>2</sup> X ?

a) Aristotle

A»r<sup>2</sup>

A<sup>2</sup> r<sup>2</sup>

b) Abraham Lincoln

%ç[¶ç] x\_eEç

%ç[¶ç] x\_eEç

c) Rousseau

»ô<sup>2</sup>

»ô<sup>2</sup>

d) J.S. Mill

åL.A<sup>2</sup> x<sup>2</sup>

åL. Aa. x<sup>2</sup>

23. Euro Cup is associated with :

'C<sup>0</sup>U<sup>0</sup>Y<sup>0</sup> (Euro) E<sup>0</sup>Y<sup>0</sup> X<sup>0</sup> aF<sup>0</sup> » G<sup>0</sup>T<sup>0</sup>L<sup>0</sup>X<sup>0</sup>T<sup>0</sup>?  
'+=<sup>0</sup>Y<sup>0</sup> (Euro) E<sup>0</sup>Y<sup>0</sup> aE<sup>0</sup>X<sup>0</sup> aF<sup>0</sup> d<sup>0</sup>y a<sup>0</sup>aU L<sup>0</sup>X<sup>0</sup>T<sup>0</sup>?

- a) Cricket      b) Chess      c) Badminton      d) Football
- x<sup>0</sup>E<sup>0</sup>0  
x<sup>0</sup>E<sup>0</sup>0  
x<sup>0</sup>E<sup>0</sup>0  
x<sup>0</sup>E<sup>0</sup>0
- x<sup>0</sup>T<sup>0</sup>t  
x<sup>0</sup>T<sup>0</sup>t  
x<sup>0</sup>T<sup>0</sup>t  
x<sup>0</sup>T<sup>0</sup>t
- å[00]3R0X  
[y00]3R0X
- Z00ly  
Z00ly  
Z00ly  
Z00ly

24. The Elephant Falls is situated at

A<sup>0</sup>x<sup>0</sup> Z<sup>0</sup>0L<sup>0</sup> Y<sup>0</sup>Y<sup>0</sup>C<sup>0</sup>T<sup>0</sup>E<sup>0</sup>T<sup>0</sup>%/40T<sup>0</sup>  
A<sup>0</sup>x<sup>0</sup>Z<sup>0</sup>0L<sup>0</sup> Y<sup>0</sup>Y<sup>0</sup>C<sup>0</sup>T<sup>0</sup>aE<sup>0</sup>U<sup>0</sup> %/40T<sup>0</sup>

- a) Simla      b) Shillong      c) Serapunji      d) Patna
- x<sup>0</sup>0<sup>0</sup>C<sup>0</sup>T<sup>0</sup>  
x<sup>0</sup>a<sup>0</sup>  
x<sup>0</sup>0<sup>0</sup>  
x<sup>0</sup>0<sup>0</sup>
- x<sup>0</sup>Y<sup>0</sup>eT<sup>0</sup>  
x<sup>0</sup>Y<sup>0</sup>e  
x<sup>0</sup>Y<sup>0</sup>e
- å[00]Y<sup>0</sup>T<sup>0</sup>  
[y00]Y<sup>0</sup>T<sup>0</sup>
- Y<sup>0</sup>00X<sup>0</sup>T<sup>0</sup>  
Y<sup>0</sup>00X<sup>0</sup>

25. A said, X is my mother. X said D is not my son. D said, X is my mother but A is not my brother. what is the relation between A and D ?

A å[00] eE<sup>0</sup>X<sup>0</sup>=x<sup>0</sup> å<sup>0</sup>]ç<sup>0</sup> ]ç<sup>0</sup>\* X<sup>0</sup>c<sup>0</sup>\* D å<sup>0</sup> eE<sup>0</sup>X<sup>0</sup>=x<sup>0</sup> å<sup>0</sup>]ç<sup>0</sup> ]ç<sup>0</sup>\* E<sup>0</sup>D<sup>0</sup>A<sup>0</sup> å<sup>0</sup>]ç<sup>0</sup> \ç<sup>0</sup>T<sup>0</sup>X<sup>0</sup>c<sup>0</sup>\* å<sup>0</sup>T<sup>0</sup>A<sup>0</sup> %/0D<sup>0</sup> » a + E<sup>0</sup>\*E<sup>0</sup>?  
A [y<sup>0</sup>\_ X<sup>0</sup>%/ç<sup>0</sup>]ç<sup>0</sup>\* X<sup>0</sup>[y<sup>0</sup>\_ D<sup>0</sup>%/ç<sup>0</sup>]ç<sup>0</sup>\* å<sup>0</sup>X<sup>0</sup>a<sup>0</sup>X<sup>0</sup> X<sup>0</sup> D [y<sup>0</sup>\_ X<sup>0</sup>%/ç<sup>0</sup>]ç<sup>0</sup>\* E<sup>0</sup>D<sup>0</sup>A<sup>0</sup> %/ç<sup>0</sup>]ç<sup>0</sup>\* \ç<sup>0</sup>c<sup>0</sup>X<sup>0</sup>\* T<sup>0</sup>[y<sup>0</sup>A<sup>0</sup>%/ç<sup>0</sup>]ç<sup>0</sup>\* D A[y<sup>0</sup>a + E<sup>0</sup>\*E<sup>0</sup>?

- a) Brother      b) Brother and sister      c) Sister      d) Mother and Daughter
- \ç<sup>0</sup>T<sup>0</sup>  
[y<sup>0</sup>c<sup>0</sup>a<sup>0</sup>[y<sup>0</sup>X<sup>0</sup>
- \ç<sup>0</sup>T<sup>0</sup>\ç<sup>0</sup>  
[y<sup>0</sup>c<sup>0</sup>a<sup>0</sup>[y<sup>0</sup>X<sup>0</sup>
- \ç<sup>0</sup>I<sup>0</sup>  
[y<sup>0</sup>c<sup>0</sup>a<sup>0</sup>[y<sup>0</sup>X<sup>0</sup>
- J<sup>0</sup>E<sup>0</sup>L<sup>0</sup>\ç<sup>0</sup>E<sup>0</sup>  
]ç<sup>0</sup>a<sup>0</sup>[y<sup>0</sup>

## General English

26. .... he been more careful, he would have spotted the mistake.

- a) Were      b) Had      c) Has      d) Is

27. If I ..... you, I wouldn't risk it.

- a) had been      b) am      c) would be      d) were

28. If I pay you twice as much,..... to finish by Tuesday?

- a) are you able      b) is it able      c) will you be able      d) can you be able

29. In winter time, bears hide themselves in caves and .....

- a) hibernate      b) take a nap      c) snooze      d) relax

30. You need not worry that you'll be left on your own because I'll always ..... you.

- a) stand for      b) stand to      c) stand by      d) stand from

31. Students were given five minutes to ..... the examination paper before they were told to start writing.

- a) look after      b) look through      c) look into      d) look up

32. Our new teacher is so ..... If we don't understand something, she goes over it again and again until we do.

- (a) lazy      (b) shy      (c) patient      (d) friendly

33. The scheme will be ..... into the school curriculum at the beginning of next academic year.  
 a) entered      b) presented      c) welcomed      d) introduced
34. It's a long way we have to travel tomorrow. So we must get up very early in the morning at the crack of .....  
 a) dawn      b) crow      c) day      d) sun
35. If you really want to send that letter off today, it's ..... time you went to the post office.  
 a) high      b) quick      c) proper      d) right
36. Welcome to our house. Come in and make yourself .....  
 a) comfortable      b) easy      (c) relaxing      (d) comforting
37. You just ..... touch that piece of paper and I'll kill you.  
 a) Attempt      b) dare      c) try      d) endeavour
38. The police broke \_\_\_\_ the temple when they got information that a terrorist was hiding in it.  
 a) Into      b) Up      c) No preposition      d) Out
39. You have to enter \_\_\_\_ the date of birth in the job application form.  
 a) Into      (b) In      c) No Preposition      d) On
40. He seldom goes to parties.  
 a) does he      b) doesn't he ?      c) should he ?      d) Needn't he ?
41. Dr. Iyer \_\_\_\_\_ in scientific research since 1950.  
 a) Has engaged      b) Has been engaging      c) Had engaged      d) has been engaged

**In the following questions you have to choose the phrase or word that *comes next* as a sequel or as a response to the first sentence .**

42. **Q.** : Did you follow all that?  
**Ans.**: No, .....  
 a) my mind's a complete blank      c) my mind's a complete space  
 b) my mind's a complete hole      d) my mind's a complete void
- 43 **Q.** : What do you make of this test?  
**Ans.**: It's quite .....  
 a) beyond me      b) below me      c) behind me      d) beside me

**Select from the choices given below each sentence the word that is nearest in meaning to the word given in *italics*.**

44. I was **astonished** to see my friend smoking in front of his elder brother.  
 a) Happy      b) Amazed      c) Pleased      d) Angry

45. My friend has a fascination for ***antique*** things.

- a) Strange      b) Funny      c) Ancient      d) Modern

Select from the choices given below each sentence the word that is **opposite in meaning** to the word given in ***italics***.

46. I found it difficult to ***accept*** his proposal.

- a) Reject      b) Dismiss      c) Decline      d) Disagree

47. The Minister said, " My ***predecessor*** didn't do enough to eradicate poverty".

- a) Heir      b) Follower      c) Descendant      d) Successor

**Tick mark the right choice on the basis of the relationship shown in the first part of the question :**

48. Nainital is to hills as Jaisalmer is to :

- a) Fort      b) Border      c) Desert      d) Security

49. Paper is to pen as garden is to :

- a) Flowers      b) Health      c) Spade      d) Lawn

50. Morning is to Noon as Youth is to :

- a) Energy      b) Childhood      c) Love      d) Old age

### General Mathematics / ~~Maths GSTO / Maths GSTO~~

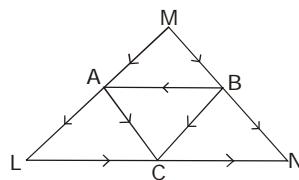
51. Which of the following is a perfect square ?

- To » àEçXàò Aàò Yàò [G? Xàò àEçXàò AEàò Yàò [G?  
a) 0.09      b) 8.1      c) 0.025      d) None of these (Aàò C Xçà / AEàò C Xà)

52.  $\frac{1}{15} \div (\frac{4}{15} + \frac{1}{3}) = \dots$

- a)  $\frac{1}{9}$       b) 9      c)  $\frac{1}{5}$       d) 5

53. Using only the paths and directions shown how many different routes are there from M to N ?  
E → S → Y → C → A → Y → A → E → M → Y → C → E → X → O → U → E → Y  
T → Y → J → C → Y → F → X → Y → U → E → A → E → N → A → C → Y → E → M → X → O → U → E → Y






What is the quotient when  $(x^2 + 6x + 5)$  is divided by  $(x^2 + 4x + 5)$ ?  $\frac{x+1}{x+2}$ ,  $\frac{x-1}{x+2}$ ,  $\frac{x+1}{x-2}$ ,  $\frac{x-1}{x-2}$

- a)  $x = 5$       b)  $x = 1$       c)  $x = -1$       d)  $x = -5$

55. The product of the 9 fractions :

The product of the 9 fractions  
 $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6} \times \frac{6}{7} \times \frac{7}{8} \times \frac{8}{9} \times \frac{9}{10}$

ХАЛДЫХ СИРСАЛАН

$$(1 - A)(1 - B)(1 - D) \dots (1 - P) \equiv \dots$$

- a)  $\frac{10}{11}$       b)  $\frac{1}{9}$       c) P      d) A

56. If  $a$ ,  $b$  and  $c$  are the sides of a triangle then.

$\wedge \forall a, b \in C \exists c \in A \wedge \forall d \in C \exists f \in F$

$\wedge \forall a, b \in A \exists c \in A \forall d \in A \exists e \in A \forall f \in A \exists g \in A$

- a)  $a - b > c$       b)  $c > a + b$       c)  $a + b > c$       d)  $a + b = c$

57. Which pair of numbers does not have a product equal to 36 ?

åEçX å^ç» aeFîç» YÉSZö\_ 36 Xçf ?

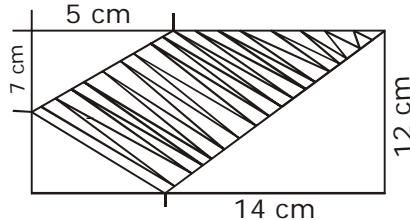
åEçX åLçQç aeFidýmXZö\_ 36 Xr ?

- a) (-4, -9)      b) (-72, A)      c) (-3, -12)      d) (1, 36)

58. Find the area of the shaded portion in the figure given below :

Tö\_ Tö\_ »V̄ç\_ »Soy» »Kä» %ç[ Tö%e\_ » Eçx\_ 00\_C3/ç\*

XfajdýåVCrçxöylyKeçç[ßö%eä`lyEçx\_Eötö?



- a)  $114 \text{ cm}^2$       b)  $144 \text{ cm}^2$       c)  $49 \text{ cm}^2$       d)  $25 \text{ cm}^2$

(8)

59. Two-third of one fifth of a number is 6. What is the number ?

A) aeFicx xTöX \G» Vçø%e` » AEö Ytu]ce` 6 cä\_ aeFicx Eö?

AEööbaeFidjy xTöX \G» Vçø%e` » AEö Ytu]ce` 6 cä\_ aeFicx Eö?

a) 45

b) 60

c) 75

d) 90

60. The real factor of  $x^2 + 4$  are

$x^2 + 4 \gg [p0740dYçVEä[p]$ :

$x^2 + 4 A[y [p074 = dYçVEäm x :$

a)  $(x^2 + 4)(x^2 + 2)$  b)  $(x^2 + 2)(x^2 - 2)$  c)  $(x^2 - 2x + 2)(x^2 + 2x + 2)$  d) do not exist ( $Xçø/ äX+$ )

61. If SI is fixed as a constant, then  $\frac{P_1}{P_2} = \dots$

$\wedge a_ aTösi EöW/Eö x SöaY äç/cf, aTöU\frac{P_1}{P_2} = \dots$  (P, T,R yü] ]EWM, a]r %çø/ aTöo ce)

$\wedge a[y aTöaEö SI A[y W/Eö x aä[y Crçcf, Töä_ \frac{P_1}{P_2} = \dots$  (P, T,R yü] ]EWM, a]r A[y aM[yce)

a)  $\frac{T_1R_1}{T_2R_2}$  b)  $\frac{T_1R_1}{T_2R_1}$  c)  $\frac{T_2R_2}{T_1R_1}$  d) None of these (A) Xcf / AEööC Xr)

62. Capacity of a tank is 70 KL. If length and breadth of the tank are 7m and 5m respectively. Then its depth is ..... m

A)  $2\frac{1}{2}$  B)  $3\frac{1}{2}$  C)  $4\frac{1}{2}$  D)  $5\frac{1}{2}$

a) 2 b) 8 c) 9 d) 5

63.  $\frac{8.63 \times 8.63 - 1.37 \times 1.37}{0.726} = \dots$

a) 1000

b) 100

c) 10

d) 0

64. If  $\frac{x}{y} = \frac{3}{4}$ , then the incorrect expression from the following is .....

$\wedge \frac{x}{y} = \frac{3}{4} cf, aTöU\frac{tö}{tö} \%E^u 00npaö : \frac{41}{3}$

$\wedge \frac{x}{y} = \frac{3}{4} cf, Tö[y Xäd[y \%E^u a]Eöjs aEöXöö :$

a)  $\frac{x+y}{y} =$  b)  $\frac{y}{y-x} =$  c)  $\frac{x+2y}{x} =$  d)  $\frac{x-y}{y} =$

65. For any two rational number x and y which of the following properties are correct ?

$x \%çø/ y \wedge aEöaXç Vöö Y»ä]r aeFicx äl yTöTö » aEöXäö W]i E^u ?$

$x A[y A Vöö Y»ä]r aeFidjy al y Xäd[y aEöX W]i E^u ?$

i)  $x < y$  ii)  $x = y$  iii)  $x > y$

a) only i and ii are correct

$]çy i \%çø/ ii E^u$

i A[y ii E^u

c) only ii is correct

$]çy ii \%çø/ E^u$

ii Xe \%çø/ E^u

b) only ii and iii are correct

$]çy ii \%çø/ iii E^u$

ii A[y iii E^u

d) all i, ii and iii are correct

$i, ii \%çø/ iii \%çø/ E^u$

i, ii A[y iii a[mx\_ E^u

(9)

66. The value of  $(9^{\frac{4}{3}} \div ) \times$  is :

( $\div$ )  $\times$   $\Rightarrow$  ]cx :

( $\div$ )  $\times$  A[y]cx :

- a) b) c)

- d) None of these (AOC Xcf / AEOC Xf)

67. A and B can do a piece of work in 72 days, B and C can do it in 120 days and A and C can do it in 90 days. In how many days can A do it alone ?

A %>0 B & AAE[ ] 72 & XT0E0» [yYca], B %>0 C & AEE[ ] 120 & XT0E0» [yYca] %>0 A %>0 C & E[ ] 90 & XT0E0» [yYca]\* aacE[ ] A c0%E0\_ \_E0]cx & XT0E0» [yYc] [y?

A A[je B AE00 ECL 72 & XE[ ] Yca] y B A[je C AE0+ ECL E[ ] Yca] 120 & XE[ ] y A A[je C A+ ECL E[ ] Yca] 90 & XE[ ] UaE[ ] A AE[ ] E0T0 XE[ ] Yca] [y?

- a) 150 b) 120 c) 100 d) 180

68. If 'n' is a prime number, then the L.C.M. of 'n' and  $(n + 1)$  will be :

$\wedge$  'n' A00 a]x\_E0 aeFic cf at00 n' %>0 (n + 1) » \_façfm- c{y:

$\wedge$  'n' AE00 a]x\_E0 aeFic cf Tocä\_ 'n' A[je (n + 1) A[y] \_façfm cä[y:

- a)  $n^2$  b)  $(n + 1)^2$  c)  $n(n + 1)$  d)

69. Any cyclic parallelogram having unequal adjacent sides is necessarily a.....

$\wedge$  aEçäXç Jy0 ac]d»E0» ae\_Gâ[ySâ[ %a]cx cä\_ ac]d»E0» .....

$\wedge$  aEçäXç Jy0 ac]d»E0» ae\_Gâ[ySmx %a]cx c+ä\_ ac]d»E0» .....

- a) Square b) Rectangle c) Rhombus d) Trapezium

70. Raju secured 60% marks in Maths and 40% marks in English. Total marks allotted for Maths and English were 120 and 70 respectively. What average marks did Raju secure in Maths and English ?

$\wedge$  L0% eE0T0 60% X=d %>0 C0»L YT0 40% X=d Yd \*  $\wedge$  %eE0 %20C0»L Y»] P0X=d yâ] 120 %>0 70 cf at00 »cL0% eE0%>0 C0»L YT0 Ga0b>E0]cx X=d Yd ?

$\wedge$  L0% eE0T0 60% A[je +e]L YT0 40% X=d Yd \*  $\wedge$  %eE0 A[je +e]L Yâ] P0X=d yâ] 120 A[je 70 cf, Tocä\_ [yL] %eE0 A[je +e]L YT0 Ga0b>E0]cx X=d Yd ?

- a) 45 b) 55 c) 100 d) 50

71. A radio is bought for Rs. 1000 and sold for Rs. 1200. Find the gain percent ?

A00 a]x 1000 MCT0E0X 1200 MCT0Jy0E0»a\_ `TE0ç E0]cx \_ç\öc{y?

AE00 a]y0C 1000 MCT0Jy0E0» 1200 MCT0Jy0E0» `TE0ç E0T0\_c\öc{y?

- a) 12 b) 15 c) 18 d) 20

72. The perimeter of a rectangle is 25.5m, its length is 9.5m. calculate its area.

A00 %>0T0l iy» Y»aY]ç 25.5 x], cPc eVH 9.5 x], cä\_ E0x\_ E0]cx c{y?

AE00 %>0T0l iy» Y»aY]ç 25.5 x], cPc eVH 9.5 x], c+ä\_ E0x\_ E0T0?

- a)  $12.75 \text{ m}^2 (x)^2$  b)  $30.875 \text{ m}^2 (x)^2$  c)  $121.125 \text{ m}^2 (x)^2$  d) Not possible (ab04 Xcf)

(10)

73. If  $7x + 3 = 17$ , What is the value of  $7x - 3$  ?  
A)  $7x + 3 = 17$  C)  $7x - 3 = 17$  E)  
B)  $7x + 3 = 17$  D)  $7x - 3 = 17$  F)  
a) 14 b) 11 c) 0 d) -3

74. The degree of a trinomial  $ax^5 - bx^4 + c$  is .....  
A)  $ax^5 - bx^4 + c$  .....  
B)  $ax^5 - bx^4 + c$  .....  
a) 9 b) 5 c) 4 d) 1

75. The missing fraction in the series given below is .....  
A)  $\frac{9}{20}$ , ..... B)  $\frac{45}{100}$ , .....  
C)  $\frac{17}{40}$ , ..... D)  $\frac{29}{53}$

General Science / adverb / adverb / [júçX / adverb / [júçX

79. A torch-light uses which of the following as the reflector ?

બાંધું ગ્રાહક તો હોય એવી રીતે કે જે એવી રીતે ?

બાંધું ચોંકાયા એવી રીતે કે જે એવી રીતે ?

a) concave mirror

ભૂમિ વિચારણ  
= વાં વિચાર

b) convex mirror

ભૂમિ વિચારણ  
= વાં વિચાર

c) plane mirror

ભૂમિ વિચારણ  
= વાં વિચાર

d) any of these

ભૂમિ વિચારણ  
અન્યાં

80. .... is known as queen of textiles :

..... એવી રીતે કે જે લાદાની હોય :

..... એવી રીતે કે જે લાદાની હોય :

a) wool

> S  
= \_

b) cotton

બાંધું  
અન્ય

c) silk

બાંધું  
અન્ય ]

d) jute

બાંધું  
અન્ય ]

81. An act of emission and diffusion of rays is known as :

..... એવી રીતે કે જે કે જે રીતે :

..... એવી રીતે કે જે રીતે :

a) specific heat

જાંગાની  
જાંગાની

b) conduction

જાંગાની  
જાંગાની

c) radiation

જાંગાની  
જાંગાની

d) All the above

જાંગાની  
જાંગાની

82. .... is used in auto mobile industry as a dehydrating agent :

..... એવી રીતે કે જે રીતે સેલ્ફોન એવી રીતે :

..... એવી રીતે કે જે રીતે સેલ્ફોન એવી રીતે :

a) hydrochloric acid

બાંધું  
બાંધું

b) turmeric acid

બાંધું  
બાંધું

c) citric acid

બાંધું  
બાંધું

d) sulphuric acid

બાંધું  
બાંધું

83. .... is the basic structural and functional unit of a kidney.

..... એવી રીતે કે જે રીતે એવી રીતે :

..... એવી રીતે કે જે રીતે :

a) medulla

બાંધું  
બાંધું

b) capsule

બાંધું  
બાંધું

c) cortex

બાંધું  
બાંધું

d) nephron

બાંધું  
બાંધું

84. Speed of wind is measured by .....

[YÖÖC» å[G åLçFç ^ÜÖRÖ écäk÷

[jçTɔ̃ãa] [y å[yG ] çYd] [y ^Üöc÷ :

- a) Galvanometer      b) Voltmeter      c) Anamometer      d) None of above

Galvanometer: A device used to measure electric current. It consists of a coil of wire wound around a soft iron core, which is mounted on a balance wheel. When a current flows through the coil, it creates a magnetic field that interacts with the earth's magnetic field, causing the balance wheel to rotate. The angle of rotation is proportional to the current flowing through the coil.

Voltmeter: A device used to measure electric potential difference (voltage). It consists of a galvanometer connected in series with a high-value resistor. The total resistance of the circuit is very large, so most of the current passes through the resistor and very little through the galvanometer. This allows the galvanometer to measure small currents accurately.

Anamometer: A device used to measure wind speed. It consists of three or more blades mounted on a central axis. As the wind blows, the blades rotate, and the rotation is measured by a sensor. The rotation rate is proportional to the wind speed.

None of above: This option is correct because none of the given devices are anamometers.

1

85. .... is a part of the ovary and where fertilization takes place.

..... éçäë:G\@†`%e^, ^,Tö×åb\$óK a + ç\TöçF\*

..... C÷ Gx@ ãr%e` å^FçX YLXX aNyçVÖcf\*



1

86. PVC stands for :

PVC » a + Si Xç ] ý:

PVC Aýa Míki Xç :

- a) plastic vinegar chloride b) polyvinyl chlorine c) polyvinyl chloride d) none of these

Y[CH2O]nXGCl ZOCClO Yx\XCClZoCS Yx\XCClZoCClO

Y[CH2O]nXGCl ZOCClO Yx\XCClZoCS AEOC XCF

1

87. Which of the following statements is correct ?

Tö\_» åEçXäøQøNþ E^ù?

X̄yāJd̄yåEçX =>Nb E^ù :

- a) acid + base = salt + water  
 $A\text{H}_3\text{O}^+ + \text{B}^- = \text{X}^+ \text{F}^- + \text{Y}^- \text{C}^+$   
 $\text{A}^- \text{aH}_3\text{O}^+ + \text{B}^- = \text{X}^+ \text{L}^- + \text{Y}^- \text{C}^+$

b) acid + base = salt  
 $A\text{H}_3\text{O}^+ + \text{B}^- = \text{X}^+ \text{F}^-$   
 $\text{A}^- \text{aH}_3\text{O}^+ + \text{B}^- = \text{X}^+ \text{L}^-$

c) both a and b  
a)  $\text{H}_3\text{O}^+ + \text{OH}^- \rightarrow \text{H}_2\text{O}$   
b)  $\text{H}_3\text{O}^+ + \text{CH}_3\text{COO}^- \rightarrow \text{H}_2\text{O} + \text{CH}_3\text{COH}$

d) None of these  
~~A)  $\text{H}_3\text{O}^+ + \text{C}_6\text{H}_5\text{COO}^- \rightarrow \text{H}_2\text{O} + \text{C}_6\text{H}_5\text{COH}$~~   
~~B)  $\text{H}_3\text{O}^+ + \text{CH}_3\text{COO}^- \rightarrow \text{H}_2\text{O} + \text{CH}_3\text{COH}$~~   
~~C)  $\text{H}_3\text{O}^+ + \text{CH}_3\text{COO}^- \rightarrow \text{H}_2\text{O} + \text{CH}_3\text{COO}^-$~~   
~~D)  $\text{H}_3\text{O}^+ + \text{CH}_3\text{COO}^- \rightarrow \text{H}_2\text{O} + \text{CH}_3\text{COO}^-$~~

1

88. When we hold a piece of ice in our hand, it feels cold. This is because :

[yZöAññöç %çx] cëTöö\_ä\_ Piç%ç %Xçç[yEññç, EççS:

A E D E Y V Z O C E A T X A P O % % X & Y E O Y E O S

- a) the cold of the ice flows into our hands  
[ʃ̪Zō] `YTö[%ç]ç> cëTë\_ YÖ[x]ç-Töcf  
[ʃ̪azdý] Pö[%ç]ç> çäVíy cëTö YÖ[x]ç-Töcf
  - b) the heat of the ice flows into our hands  
[ʃ̪Zö] TöY %ç]ç> cëTë\_ YÖ[x]ç-Töcf  
[ʃ̪azdý] TöY %ç]ç> çäVíy cëTö YÖ[x]ç-Töcf
  - c) the cold of our hands flows into the ice  
cëTö\_ `YTö[ʃ̪Zö]çLé\_ YÖ[x]ç-Töcf  
cëTödý Pö%ç [ʃ̪azZö] YÖ[x]ç-Töcf
  - d) the heat of our hands flows into the ice  
cëTö\_ TöY [ʃ̪Zö]çLé\_ YÖ[x]ç-Töcf  
cëTödý TöY [ʃ̪azdý]Wí Víç YÖ[x]ç-Töcf

1

89. Ovules of the flowers turn in to :

Y<sub>0</sub> Y » X<sub>0</sub> E<sub>0</sub> Y » 3/4 T<sub>0</sub> C<sub>0</sub> :

Z<sub>0</sub> I<sub>0</sub> Y<sub>0</sub> X<sub>0</sub> Y<sub>0</sub> E<sub>0</sub> X<sub>0</sub> T<sub>0</sub> Y<sub>0</sub> 1/4 T<sub>0</sub> C<sub>0</sub> :

a) seeds

b) ovary

c) pollen

d) fruit

90. The celphones use what kind of waves for the transfer of data :

A<sub>0</sub> Z<sub>0</sub> X<sub>0</sub> T<sub>0</sub> I<sub>0</sub> a<sub>0</sub> S<sub>0</sub> [y<sub>0</sub> T<sub>0</sub> X<sub>0</sub> T<sub>0</sub> ] [3/4 C<sub>0</sub> E<sub>0</sub>] :

aa\_ aZ<sub>0</sub> X<sub>0</sub> T<sub>0</sub> I<sub>0</sub> a<sub>0</sub> X<sub>0</sub> L<sub>0</sub> X<sub>0</sub> aE<sub>0</sub> X<sub>0</sub> T<sub>0</sub> y<sub>0</sub> [y<sub>0</sub> C<sub>0</sub> E<sub>0</sub>] ?

a) radio

b) light

c) sound

d) electro-magnetic

91. Which of the following can react with cold water ?

T<sub>0</sub> » A<sub>0</sub> E<sub>0</sub> X<sub>0</sub> 3/4 A<sub>0</sub> Y<sub>0</sub> X<sub>0</sub> » ea<sub>0</sub> T<sub>0</sub> [y<sub>0</sub> C<sub>0</sub> E<sub>0</sub>] ?

X<sub>0</sub> a<sub>0</sub> Y<sub>0</sub> aE<sub>0</sub> X<sub>0</sub> P<sub>0</sub> % L<sub>0</sub> I<sub>0</sub> a<sub>0</sub> U<sub>0</sub> [y<sub>0</sub> C<sub>0</sub> H<sub>0</sub>] ?

a) Ag

b) K

c) Al

d) None of these (A<sub>0</sub> C<sub>0</sub> X<sub>0</sub> / A<sub>0</sub> E<sub>0</sub> C<sub>0</sub> X<sub>0</sub>)

92. Chemically rust is :

I<sub>0</sub> » » ca<sub>0</sub> X<sub>0</sub> » M<sub>0</sub> éca<sub>0</sub>:

I<sub>0</sub> y<sub>0</sub> I<sub>0</sub> ca<sub>0</sub> X<sub>0</sub> » Y<sub>0</sub> C<sub>0</sub> :

a) Fe

b) Fe<sub>2</sub>O<sub>3</sub>

c) Fe<sub>3</sub>O

d) Fe<sub>2</sub>O<sub>3</sub>H<sub>2</sub>O

93. Which of the following element(s) can not react with other elements :

T<sub>0</sub> » A<sub>0</sub> E<sub>0</sub> X<sub>0</sub> [y<sub>0</sub> a] i<sub>0</sub> c<sub>0</sub> % X<sub>0</sub> a] i<sub>0</sub> » \_G<sub>0</sub> T<sub>0</sub> [y<sub>0</sub> C<sub>0</sub> X<sub>0</sub>] ?

X<sub>0</sub> a<sub>0</sub> Y<sub>0</sub> aE<sub>0</sub> X<sub>0</sub> a] i<sub>0</sub> m<sub>0</sub> % X<sub>0</sub> a] i<sub>0</sub> I<sub>0</sub> a<sub>0</sub> U<sub>0</sub> [y<sub>0</sub> C<sub>0</sub> E<sub>0</sub>] Y<sub>0</sub> X<sub>0</sub> ?

a) He

b) Ne

c) Xe

d) All the above % C<sub>0</sub> E<sub>0</sub> M<sub>0</sub> / a[ E<sub>0</sub> C<sub>0</sub> ]

94. The life span of RBC is about :

â<sub>0</sub> c<sub>0</sub> T<sub>0</sub> » N<sub>0</sub> E<sub>0</sub> S<sub>0</sub> » L<sub>0</sub> X<sub>0</sub> E<sub>0</sub> Y<sub>0</sub> :

â<sub>0</sub> c<sub>0</sub> T<sub>0</sub> » N<sub>0</sub> E<sub>0</sub> X<sub>0</sub> Y<sub>0</sub> X<sub>0</sub> E<sub>0</sub> Y<sub>0</sub> :

a) 10 days

b) 120 days

c) 65 days

d) 35 days

95. The nature of the image formed by a convex mirror is always :

% 3/4 T<sub>0</sub> V<sub>0</sub> Y<sub>0</sub> X<sub>0</sub> a<sub>0</sub> r<sub>0</sub> a<sub>0</sub> c<sub>0</sub> Y<sub>0</sub> T<sub>0</sub> [y<sub>0</sub> aV<sub>0</sub> ] :

% [T<sub>0</sub> V<sub>0</sub> Y<sub>0</sub> X<sub>0</sub> a<sub>0</sub> r<sub>0</sub> c<sub>0</sub> C<sub>0</sub> Y<sub>0</sub> T<sub>0</sub> ] ba[W<sub>0</sub> :

a) diminished

b) virtual

c) Both a & b

a %> b 00

a %> b =\00+

c) none of these

A<sub>0</sub> C<sub>0</sub> X<sub>0</sub>

96. Tube lights consume less electrical energy than bulbs because :

[y\_ Y\_Eo > 80% y\_cc 80% Eo] x [y\_Cd ` Np [y] ace/c» Eo»S :

[y\_ YaUaEo > 80 = [y\_c+a06 x y\_Cd` Np [y] Eo] cEcI dy Eo]S :

a) there is minimum loss in the form of heat.

TcY %xTcEo] [y] cF

TcY %xTcEo] [y] cF

b) tube lights are bigger in size

x 80% y\_cc 80% Eo» TcQcl »

80 = [y\_c+a06 y %cEo] [y] b

c) the colour of light of the tube lights and bulbs differ

> 80% y\_cc 80% c» [y] aYcc» » e a[y\_G a[y\_G

> 80 = [y\_c+a06 y %c\_a\_d[y] e x o- x o-

d) the filament of the bulb burns.

[y] aZo ca] 30% yL x TocF

[y] a[y x Zo ca] 30 L a\_ ^d^

97. Which of the following is not correctly matched :

Tc\_ » aEcXa#c a#c aPEo XcF :

Xfaud y aEcXa#c aPEo a[y acLcaXc Xc :

i) plane mirror - virtual, same size

a] Tc\_ VcaYcX - %[y] %cEo» Tc a] cX / a] Tc\_ VYK-%[y] %cEo] y a] cX\*ö

ii) concave mirror - virtual, enlarged

00% VcaYcX - %[y] %cEo] y Mto / =w0\_ VYK-%[y] %cEo] y Mto

iii) convex mirror - real, diminished.

%3% Tc\_ VcaYcX - %[y] %cEo] y Mto / %[y] %cEo] y Mto / %[y] %cEo] y Mto

a) i

b) ii

c) iii

d) both 'b' & 'c' (b %c» 0 c 000 / b %c» 0 c 000)

98. The inert form of carbon is :

Eo[X» x x d » 0 y a00 ecak:

Eo[jax]y X» d » 0 y a00 ecak:

a) diamond

Ctyc

Ctyc

b) graphite

aGZcR

aGZcR

c) coal

Et\_c

Et\_c

d) charcoal

Atp

EoPEd\_c

99. The harmful ultraviolet radiation of the sun does not reach the surface of the earth. This is because high above the earth's atmosphere there is a layer containing :

aE» Y»c x Eo» Tc% Tc[1]X% c » 1/2 YFU3/4 Yfu \_ %c c y aXc/c a» Eo»S YFU3/4 » [y] %a » CY»Tc..... » Aa0000 %cak:

af^y %Tc[ymX]y 1/2 YFU[y]Yfu Xc %cad y Eo]X YFU[y]y %a ] CYa y ..... A[y 000 %cak:

a) CO<sub>2</sub>

b) O<sub>3</sub>

c) O<sub>2</sub>

d) NH<sub>3</sub>

100. The molecule of life is :

Lb%cx[EcAEecak:

Lb[jy %Sx[EcAEecak:

a) protein

Yorox

aey00x

b) carbohydrate

` Eoç

` Edç

c) nucleic acid

X00ZEcAaQo

X=xEcAaQo

d) lipid

aoC÷YVdJi

aoC÷YVdJi

\*\*\*\*\*

(15)