ExSAT

EXCEL SCHOLARSHIP ADMISSION TEST

Time Alloted : 2 hours   ***Total Marks : 100***

Instructions

The scholarship test will be 2 hours in duration and will be 100 marks in total.

The test consists of multiple-choice questions only .

All questions must be answered on the provided answer sheet.

You are not allowed to use any electronic devices during the test.

You will not be allowed to leave the test room until the end of the test.

Any form of cheating will result in disqualification from the scholarship.

You will be notified of your test results within a week after the test.

If you have any questions or concerns, please ask the invigilator before the test.

Read all instructions and questions carefully before answering

Do not spend too much time on a single question. Attempt all questions to the best of your ability

You will be required to submit your answer sheet before leaving the test room.
Do not forget to fill in your personal details on the answer sheet.

The scholarship test is a competitive process and only a limited number of scholarships will be awarded.

Name : _____

Class : _____8th_____   School : _____

Education Board : _____ Contact : _____

Signature of Invigilator

Excel Institute
UNADDEEP COMPLEX , SUSSEN-TARSALI
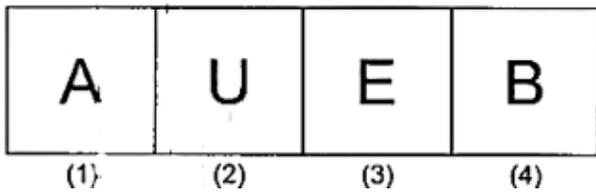RING ROAD , TARSALI ,
VADODARA , 390010
CONTACT : 9824042421

EXSAT 8TH
Class 08 - Admission Test

Time Allowed: 1 hour and 30 minutes   **Maximum Marks:** 100

1. Choose the correct verb:

   How long have you been _____ this material?

   a) prepares   b) preparing

   c) prepared   d) prepare

2. Passive voice of the sentence **They were calling us**.

   a) I was called by them.   b) We had to be called by them.

   c) We are called by them.   d) We were being called by them.

3. Choose the correct verb:

   She _____ a dress at a very reasonable rate.

   a) been bring   b) does bought

   c) am bring   d) has bought

4. Choose the correct verb:

   My computer broke down, so I _____ continue my work.

   a) could not   b) cannot be

   c) couldn't been   d) can't

5. On a test containing 150 questions carrying 1 mark each, Rajnish answered 80% of first 75 questions correctly. What percent of the other 75 questions does he need to answer correctly to score 60% in the examination ?

   a) 40%   b) 50%

   c) 20%   d) 60

6. By what number should we multiply $\frac{15}{-28}$ so that the product may be $\frac{-5}{7}$?

   a) $-\frac{4}{3}$ b) $\frac{4}{3}$

   c) $\frac{3}{4}$ d) $-\frac{3}{4}$

7. If $a^x = \sqrt{b}, b^y = \sqrt[3]{c}$ and $c^2 = \sqrt{a}$ then the value of XYZ is

   a) $\frac{1}{12}$ b) $\frac{1}{3}$

   c) $\frac{1}{2}$ d) $\frac{1}{6}$

8. Simplify: $\frac{3^2 \times 4^5 \times x^4}{3^4 \times 4^3 \times x^9}$.

   a) $\frac{4^2}{3^2 \times x^5}$ b) 4^2

   c) 2^2 d) 3^2

9. A sum amounts to ₹3720 in 8 months at 5% per annum simple interest. The sum is

a) ₹2600   b) ₹3600

c) ₹4600   d) ₹3000

10. Which of the following is a two dimensional figure?

     a) Rectangle   b) Square prism

     c) Square pyramid   d) Rectangle prism

11. If $x = \left(\frac{-2}{5}\right)^{30} \div \left(\frac{-2}{5}\right)^{28}$ and $y = \left(\frac{-2}{5}\right)^{2} \times \left(\frac{-2}{5}\right)^{3}$ then find the value of $(x^3 \div y)^2$.

     a) $\frac{-2}{5}$ b) $\frac{4}{25}$

     c) $\frac{25}{4}$ d) $\frac{5}{40}$

12. Which of the following organism breathe through the skin?

     a) Earthworm   b) Human

     c) Fish   d) Cockroach

13. Which type of mirror is used as concentrator in solar furnace?

     a) Concave mirror   b) Plane mirror

     c) Bifocal mirror   d) Convex mirror

14. Fuse is a safety device which is made up of

     a) Alloy of low melting point   b) Pure metal of low melting point

     c) Alloy of high melting point   d) Pure metal of high melting point

15. Early time people used such type of clocks and this is used in Jantar Mantar.Name it.

     a) Sundial   b) Sand clock

     c) Waterclock   d) pendulum clock

16. Which of the following is a olfactory indicators?

     a) Vanilla   b) Litmus paper

     c) Rose petals   d) Methyl orange

17. Light is a form of

     a) Energy   b) Mass

     c) Length   d) Power

18. From a source light travels as rays which are

     a) Diffused   b) Convergent

     c) Parallel   d) Divergent

19. In a certain code language, GYPSUM is written as GMPSUY. How will GARDEN be written in that language?

     a) GEDANR   b) ADEGNR

     c) ADENGR   d) ADEGRN

20. Select the figure which is different from others.

A	U	E	B
(1)	(2)	(3)	(4)

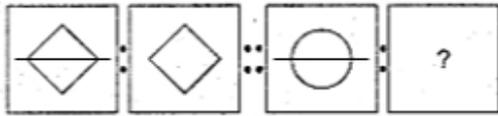a) Figure (1)   b) Figure (3)

c) Figure (4)   d) Figure (2)
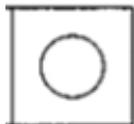
21.   Select the figure that shows a similar relationship.

a)
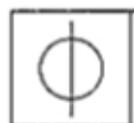

b)

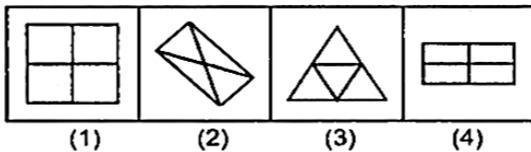
c)

d)

22.   Select the figure which is different from others.

a) Figure (3)   b) Figure (1)

c) Figure (4)   d) Figure (2)

23.   Odd one out.

21, 15, 7, 27

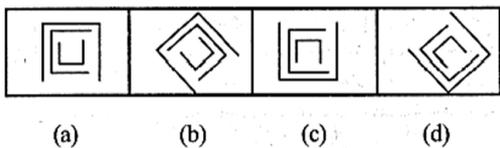a) 7   b) 15

c) 21   d) 27

24.   Select the figure which is different from others.

a) Figure (c)   b) Figure (d)

c) Figure (b)   d) Figure (a)

25.   In a certain code STAR is written as 5&*2 and TORE is written a &32@. How is OATS written in that code?

a) 35*&

b) 3*&5

c) 3&*5

d) 3*5&

1.

(b) preparing
Explanation:
preparing

2.

(d) We were being called by them.
Explanation:
We were being called by them.

3.

(d) has bought
Explanation:
has bought

4. **(a)** could not
Explanation:
could not

5. **(a)** 40%
Explanation:
Total marks to score $\frac{150 \times 60}{100}$ = 90

Marks obtained in first 75 questions

= $\frac{75 \times 1 \times 80}{100}$ = 60

∴ Marks to be obtained in next 75 questions

= 90 - 60 = 30

∴ % of questions to be answered correctly

= $\left(\frac{30 \times 1 \times 100}{75} \right)$ % = 40%

6.

(b) $\frac{4}{3}$

Explanation:
Let multiply by x.
According to the question,

$\frac{15}{-28} \times x = \frac{-5}{7}$

$\Rightarrow$ x = $\frac{-5}{7} \times \frac{-28}{15} = \frac{4}{3}$

7. **(a)** $\frac{1}{12}$

Explanation:

$a^x = \sqrt{b}, b^y = \sqrt[3]{c}$ and $c^z = \sqrt{a}$

a^{2x} = b, b^{3y} = c, c^{2z} = a

$(a^{2x})^{3y}$ = c $\Rightarrow$ $(a^{6xy})^{2z}$ = a

a^{12xyz} = a

$\Rightarrow$ xzy = $\frac{1}{12}$

8. **(a)** $\frac{4^2}{3^2 \times x^5}$

Explanation:

$\frac{3^2 \times 4^5 \times x^4}{3^4 \times 4^3 \times x^9}$ We know that $\frac{m^a}{m^b} = m^{a-b}$, then

$3^{2-4} \times 4^{5-3} \times x^{4-9}$

$= 3^{-2} \times 4^2 \times x^{-5}$

$= \frac{4^2}{3^2 \times x^5}$

9.

(b) ₹3600

Explanation:

Let Sum = P

Time = 8 month = $\frac{8}{12}$ = $\frac{2}{3}$

Amount = ₹3720

Amount = S.I + Sum

$\Rightarrow$ 3720 = $\frac{PRT}{100}$ + P

$\Rightarrow$ 3720 = $\frac{P \times 5 \times 2}{3 \times 100}$ + P

$\Rightarrow$ 3720 = $\frac{P}{30}$ + P

$\Rightarrow$ 3720 = $\frac{31P}{30}$

$\Rightarrow$ P = $\frac{3720 \times 30}{31}$ = $\frac{111600}{31}$ = ₹3600

10. **(a)** Rectangle

Explanation:

A two dimensional figure has two dimensions (measurements) like length and breadth. In the given options, only rectangle has two dimensions, i.e. length and breadth.

11.

(b) $\frac{4}{25}$

Explanation:

$x = \left(\frac{-2}{5}\right)^2, y = \left(\frac{-2}{5}\right)^5$

$x^3 = \left(\frac{-2}{5}\right)^6$

$x^3 \div y = \frac{-2}{5}$

$\therefore (x^3 \div y)^2 = \frac{4}{25}$

12. **(a)** Earthworm

Explanation:

Earthworm breathes through their skins, the skin of an earthworm feels moist and slimy on touching and gases can pass easily through them.

13. **(a)** Concave mirror

Explanation:

Concave mirrors are used in solar furnaces because concave mirrors are the only type of mirror that reflects light towards a single focal point. A flat mirror does not have a focal point. It does regular reflection off all of its points. A convex mirror does have a focal point, but it is an imaginary point that exists behind the mirrored surface.

14. **(a)** Alloy of low melting point

Explanation:

Fuse is a safety device which is made up of alloy of low melting point to break the circuit in case of excess current. It prevents damages to electrical circuits and possible fires.

15. **(a)** Sundial

Explanation:

A sundial is a device that measures time by using a light spot or shadow cast by the position of the Sun on a reference scale. It consists of a flat plate (the *dial*) and a gnomon which casts a shadow onto the dial. The Jantar Mantar is a sundial, consisting of a gigantic triangular gnomon with the hypotenuse parallel to the Earth's axis.

16. **(a)** Vanilla
Explanation:
Those indicators that give different smells with acid and base are called olfactory indicators. Vanilla is an olfactory indicator.

17. **(a)** Energy
Explanation:
Light is a form of energy that enable us to see the different things present around us. When it strikes the earth's surface it converts to heat which is in the form of photons. These helps in transforming to electromagnetic energy

18.
(c) Parallel
Explanation:
From a source light travels as rays which are parallel beam of light. Light always travel in straight line.

19.
(b) ADEGNR
Explanation:
All the letters of the word are arranged in alphabetical order.
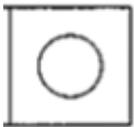
20.
(c) Figure (4)
Explanation:
Except figure (4), each figures contains vowels from English language.

21.

(b)

Explanation:
In the question figures, the line segment is removed.

22. **(a)** Figure (3)
Explanation:
Except figure (3), in all other figures there are two lines which divides the main figure in four parts.

23. **(a)** 7
Explanation:
All other numbers are divisible by 3, except 7.

24.
(d) Figure (a)
Explanation:
all other figure can be rotated into each other. The middle element is obtained by rotating the outer element through 90 degree clock wise and the inner element is obtained by rotating the middle element through 90 degree clock wise.

25.
(b) 3*&5

Explanation:
The following table depicts the code of used letters in the two given words:
S = 5, T = &, A = *, R = 2, T = &, O = 3, R = 2, E = @
Therefore, OATS = 3*&5