

Students of Class VII, VIII, IX, X, XI, XII & XII Pass
Get Rank, Recognition, Cash Prize



Karan More

2-Year Classroom Programme



Niket Loyalekar

2-Year Classroom Programme

IIT-JEE Advanced-2023
ALL INDIA RANK



SIMPLY'S MASTER APTITUDE & REWARD TEST

2023

For Students Presently in
Class VII, VIII, IX, X & XI
on

22nd October 2023

#SuccesskaAssurance

**MUMBAI'S
BIGGEST
TALENT HUNT
EXAM**

Students of Class V to X

**SIMPLY SMART
SAMPLE TEST PAPER**

CLASS X

"Guiding You to Career Success"
**Simply Learnt
Academy**
NEET(UG) | IIT-JEE | MHT-CET | SCIENCE

PCB Point
Educating for a better future
IIT-JEE | NEET(UG) | MHT-CET | SCIENCE

GENIUS+
IIT-JEE • MEDICAL • FOUNDATIONS
Powered By **PCB Point**
IIT-JEE | NEET(UG) | MHT-CET | SCIENCE

Simply Corporate Office: 1st & 2nd Floor, Narayan Krupa Bldg, Opp. Kasturi Plaza, Manpada Rd, Dombivli East.
Call : +91-8080775553 | Mail : call8108832051@gmail.com | Website : www.simplyacademy.in/ | www.smart.simplyacademy.in/

Chapter

1.00,2.00,3.00,4.00,5.00,6.00,7.00,8.00

Marks 25

- 1) Escape velocity is velocity
- A) Required to escape gravitational boundaries B) Required to escape the potential energy
- C) Required to escape kinetic energy D) Required to escape out of any motion
-
- 2) In equation $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$; Magnesium oxide is
- A) White powder B) Black powder C) Red powder D) Brown powder
-
- 3) Vertebrata is divided into classes.
- A) Six B) Five C) Ten D) Nine
-
- 4) Reproduction is one of the life processes that occur in living organisms.
- A) True B) False
-
- 5) Animal classification helps to understand various adaptations shown by animals.
- A) False B) True
-
- 6) Metals lose electrons easily and hence are called as electronegative.
- A) True B) False
-
- 7) If mass of the object is 10 kg, its weight is
- A) 10 kg B) 10 N C) 9.8 N D) 98 N
-
- 8) Humidity is measured by relative humidity.
- A) True B) False
-
- 9) $\text{Na}_2\text{O} + \text{H}_2\text{O} \rightarrow 2\text{NaOH}$
- A) Right B) Wrong
-
- 10) The Power of lens is negative.
- A) Concave B) Convex C) Plano convex D) Biconvex
-
- 11) If the number of atoms of the elements in the reactant in an equation is same as the number of atom of element in products then the equation is

A) Unbalanced equation **B)** Balanced equation **C)** Quadratic equation **D)** None of these

12) The process of gamete production and spore formation occurs by mitosis.

A) True **B)** False

13) Name the pioneer of modern genetics.

A) Johann Gregor Mendel **B)** Francois Jacob **C)** Jack Monad **D)** Ostwald Avery

14) Cryolite is added in the mixture to lower the melting point of alumina.

A) True **B)** False

15) Most of the equipments in domestic as well as industrial use, run on

A) DC power **B)** AC Power **C)** Batteries **D)** Wind mill

16) Milk is pasturized at the beginning to destroy unwanted

A) Energy **B)** Proteins **C)** Vitamins **D)** Microbes

17) Name a gas which is poisonous

A) Carbon – di – oxide **B)** Nitrogen – di – oxide **C)** Oxygen **D)** None of these

18) Bacteria used to clear oil spills are called as

A) Hex bacteria **B)** Hydrocarbonoclastic bacteria **C)** Viridans **D)** Ideonella

19) and syrup can be obtained from corn flour by action of enzymes obtained from bacilia and Streptomyces.

A) Glucose and lactose **B)** Lactose and fructose **C)** Lactose and galactose
D) Glucose and fructose

20) When air cools, it becomes saturated with water vapor and excess of water vapor is converted into tiny droplets.

A) True **B)** False

21) Fibers help in the digestion of other substances and egestion of undigested substances.

A) True **B)** False

22) The refractive index of water is

A) 1.33 **B)** 1.36 **C)** 1.31 **D)** 1

23) The capacity of the lens to change its focal length as per need is called its

- A)** Power of accommodation **B)** Persistence **C)** Nearsightedness **D)** Farsightedness
-

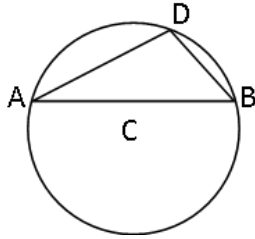
24) For critical angle, the angle of refraction is

- A)** 180° **B)** 90° **C)** 45° **D)** 60°
-

25) These elements were placed in the same box in Newlands' octave.

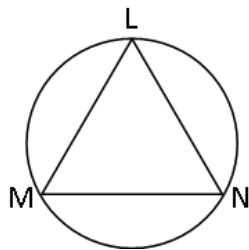
- A)** Co and La **B)** Co and Ni **C)** Ce and Ni **D)** Co and Ce
-

- 1) In the figure alongside AB is the diameter of the circle, having point D on circumference find $m(\text{arc DB})$ if $\angle ABD = 77^\circ$



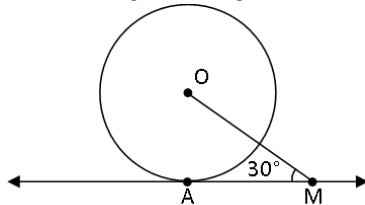
- A) 26° B) 13° C) 39° D) 42°

- 2) In the figure alongside, $\angle LMN \cong \angle LNM$, $m(\text{arc MN}) = 40^\circ$. Find $m(\text{arc LN})$.



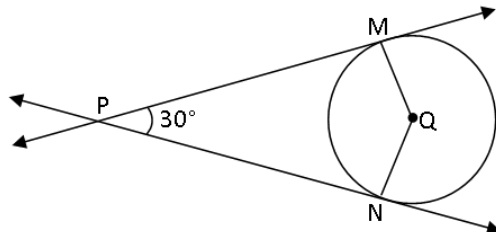
- A) 180° B) 160° C) 120° D) 150°

- 3) From the figure alongside $\angle AOM = ?$ if AM is tangent at A.



- A) 30° B) 60° C) 90° D) 120°

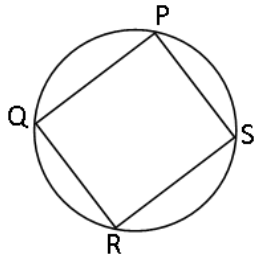
- 4) In the figure above, Q is the centre of circle and PM and PN are tangents to the circle. If $\angle MPN = 30^\circ$ find $\angle MQN$.



- A) 140° B) 150° C) 60° D) 90°

- 5)

In figure alongside, $\angle PQR = 60^\circ$ then find $\angle PSR$ if $\square PQRS$ is a cyclic quadrilateral.



- A) 120° B) 110° C) 140° D) 150°

- 6) Use Pythagoras theorem to check which of following triplets would make a right triangle.

- A) 5, 20, 25 B) 7, 24, 25 C) 7, 23, 25 D) 15, 20, 25

- 7) In $\triangle ABC$, $AB = 6\sqrt{2}$ cm, $AC = 12$ cm, $BC = 6\sqrt{2}$ cm Find $\angle A$.

- A) 45° B) 90° C) 60° D) 30°

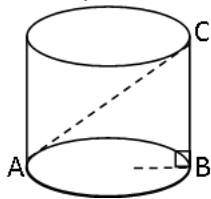
- 8) Two walls of building on either side of a street are parallel to each other. A ladder $5\sqrt{2}$ m long is placed on street such that the top of the ladder just reached the window of building at height of 5m, on moving the ladder over the other side of street, its top reaches the window of the other building at height of 4 m. What is width of street?

- A) $5 + \sqrt{14}$ m B) $15 + \sqrt{17}$ m C) 10 m D) 20 m

- 9) What is side and perimeter of square having diagonal $5\sqrt{2}$ cm.

- A) 5 and $20\sqrt{5}$ cm. B) 5 and 20 cm. C) 10 cm and $20\sqrt{5}$ cm. D) $10\sqrt{2}$ cm and 20 cm.

- 10) In the cylinder alongside if $AC = 13$ units and $BC = 12$ units what is the radius of base of cylinder?



- A) 2.5 units B) 5 units C) 3 units D) 3.5 units

- 11) Which of the following could not be the lengths of the sides of a right angled triangle?

- A) 3, 4, 5 B) 5, 12, 13 C) 8, 15, 17 D) 12, 15, 18

- 12) Find the odd man out.

- A) (3, 5, 6) B) (5, 12, 13) C) (24, 25, 7) D) (8, 15, 17)

- 13)

According to Apolloneous Theorem, if AD is a median of $\triangle ABC$, then $AB^2 + AC^2 =$

- A) $AD + BD$ B) $AD - BD$ C) $2(AD^2 + BD^2)$ D) $2(AD^2 - BD^2)$

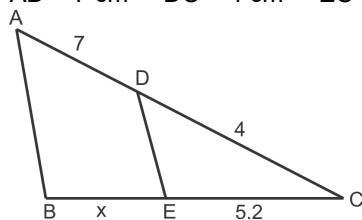
- 14) Which is the correct order of writing pythagoras triplet?
A) (8, 15, 17) **B)** (17, 15, 8) **C)** (15, 8, 17) **D)** All of above

- 15) Find hypotenuse of isosceles triangle having congruent side a cm
A) $\sqrt{2}a$ cm **B)** $\sqrt{3}a$ cm **C)** 2a cm **D)** 3a cm

- 16) $\triangle LMN$ is an equilateral triangle. Find side of triangle if height LD is $2\sqrt{3}$ cm.
A) 4 cm **B)** 8 cm **C)** 2 cm **D)** 1 cm

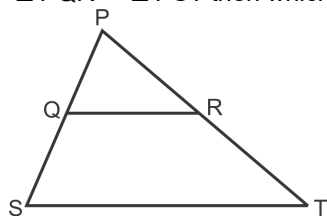
- 17) $\triangle PQR \sim \triangle KLM$, $16 \times A(\triangle KLM) = 25 \times A(\triangle PQR)$. If QR = 28 units. ML = ?
A) 34 units **B)** 29 units **C)** 35 units **D)** 36 units

- 18) Find x if $DE \parallel AB$
 AD = 7 cm DC = 4 cm EC = 5.2 cm



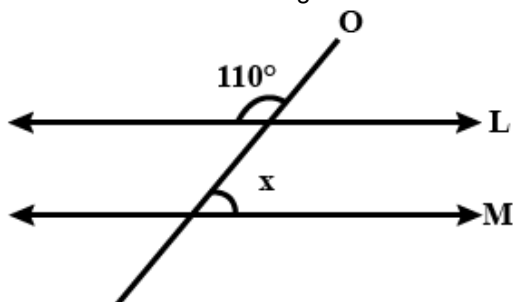
- A)** 9 cm **B)** 8.1 cm **C)** 10.1 cm **D)** 9.1 cm

- 19) $\triangle PQR \sim \triangle PST$ then which of the following is false.



- A)** $\frac{PQ}{QS} = \frac{PR}{RT}$ **B)** $\frac{A(\triangle PQR)}{A(\triangle PST)} = \frac{PQ^2}{PS^2}$ **C)** $\frac{A(\triangle PQR)}{A(\triangle PST)} = \frac{PQ}{PS}$ **D)** None of above

- 20) Find the value of x in the figure if L/M.

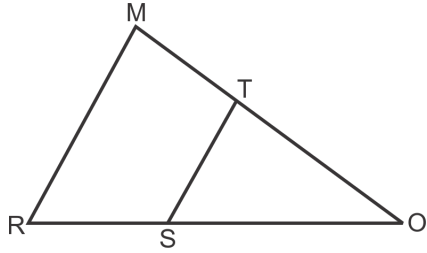


- A)** 70° **B)** 110° **C)** 180° **D)** 100°

$\triangle XYZ \sim \triangle OPQ$. Length of altitude drawn from point Z is 3 and length of altitude drawn from point Q is $9 \frac{A(\triangle XYZ)}{A(\triangle QRS)}$
 = ?

- A) $\frac{1}{81}$ B) $\frac{9}{27}$ C) $\frac{1}{9}$ D) $\frac{1}{3}$

- 22) In $\triangle OMR$, seg $ST \parallel$ seg MR . Which of the following is true?



- A) $\frac{OT}{RS} = \frac{SO}{MT}$ B) $\frac{OS}{OR} = \frac{OT}{OM}$ C) $TS = MR$ D) $OR = OM$

- 23) In $\triangle ABC$, if D and E are mid points of BC and AD respectively such that $ar(AEC) = 4\text{cm}^2$ then $ar(BEC) =$

- A) 4 cm^2 B) 6 cm^2 C) 8 cm^2 D) 12 cm^2

- 24) BPT (Basic proportional theorem) states that if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points then the other two sides are divided in the present ratio.

- A) True B) False

- 25) Given $\triangle ABC$ is similar to $\triangle PQR$. Where $AB = 1\text{cm}$ and $PQ = 3\text{ cm}$. Find the ratio of their areas.

- A) $\frac{1}{9}$ B) $\frac{1}{8}$ C) $\frac{8}{9}$ D) $\frac{9}{1}$