



20th NTST/CTSE

NATIONAL TALENT SEARCH TEST (1st to 10th classes)

COMMERCE TALENT SEARCH EXAM (11th & 12th Commerce)

(Sample Paper Class-10th)

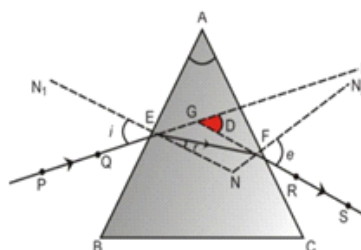


Commerce Talent
Search Exam

Science

1. Identify the D in given diagram

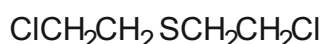
- (a) Angle of dispersion
- (b) Angle of emergence
- (c) Angle of deviation
- (d) Angle of difference



2. Which of following is incorrect about the parts of human eye :

- (a) Fovea: keen eyesight is provided by the macula's center.
- (b) Sclera: the iris-surrounded, inner-white layer of the eye.
- (c) Vascular Humor: The transparent, gelatinous material that lines the eye's center chamber.
- (d) cornea: The transparent, front part of the eye that helps focus incoming light.

3. X is used in the preparation of poisonous gas, one of them is Y, which can be represented by the formula



- (a) X - Cl , Y- $\text{C}_4\text{H}_8\text{Cl}_2\text{S}$
- (b) X - Cl , Y- $\text{C}_5\text{H}_8\text{Cl}_2\text{S}$
- (c) X - Cl , Y- $\text{C}_4\text{H}_9\text{Cl}_2\text{S}$
- (d) X - Cl , Y- $\text{C}_4\text{H}_8\text{Cl}_3\text{S}$

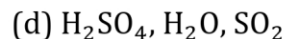
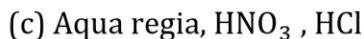
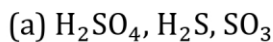
4. During which process, enzymes remove ammonia which is highly toxic in nature.

- (a) excretion
- (b) deamination
- (c) oxidation
- (d) digestion

5. Flavor of almonds is due the presence of

- (a) esters
- (b) ketones
- (c) alcohol
- (d) aldehydes

6. Latin name for royal water is X. It is a mixture of Y and Z in the ratio 3 : 1 . Some of the properties of X are different from Y and Z. What are X, Y and Z respectively?



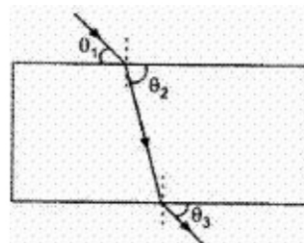
7. A student, while doing the experiment, on tracing the path of a ray of light passing through a rectangular glass slab, measured the three angles marked as θ_1 , θ_2 and θ_3 in the figure. His measurements could be correct if he were to find:

(a) $\theta_1 > \theta_2$ but $\theta_2 = \theta_3$

(b) $\theta_1 > \theta_2 > \theta_3$

(c) $\theta_1 < \theta_2$ but $\theta_1 = \theta_3$

(d) $\theta_1 < \theta_2 < \theta_3$



8. For verifying Ohm's law, we design an electric circuit diagram in which we show the arrangement of different circuit components. We find that with respect to the resistor, the:

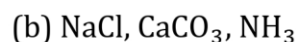
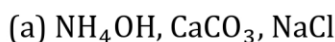
(a) ammeter and voltmeter are both connected in parallel.

(b) ammeter and voltmeter are both connected in series.

(c) ammeter is connected in parallel and the voltmeter in series.

(d) ammeter is connected in series and the voltmeter in parallel.

9. The raw materials that are required for the manufacturing of washing soda by the Solvay process are:



10. A Geyser with resistance $10\ \Omega$ having the many coils, if $12.4\ \text{A}$ is passing through theses coils through the service mains in 1.45 hours. At which rate heat is developed in the Geyser.

(a) $1538\ \text{j/s}$

(b) $1540\ \text{j/s}$

(c) $1535\ \text{j/s}$

(d) $1531\ \text{j/s}$

Q.1 The number $(\sqrt{3} + \sqrt{5})^2$ is

(a) an irrational number

(b) an integer

(c) a rational number

(d) not a real number

Q.2 A polynomial of the form $ax^5 + bx^3 + cx^2 + dx + e$ has atmost _____ zeroes.

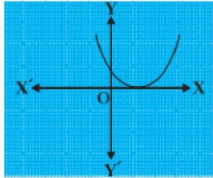
(a) 7

(b) 3

(c) 11

(d) 5

Q.3 Find the number of zeroes of $p(x)$ in the figure given below.



(a) 3

(b) 1

(c) 2

(d) 0

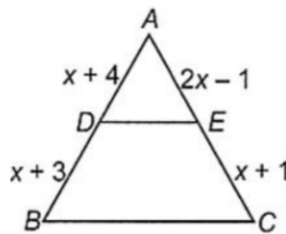
Q.4 In the given figure, $DE \parallel BC$. Find the value of X .

(a) $\sqrt{6}$

(b) $\sqrt{7}$

(c) $\sqrt{3}$

(d) $\sqrt{5}$



Q.5 The value of $\frac{\tan 30^\circ}{\cot 60^\circ}$ is

(a) 1

(b) $\frac{1}{\sqrt{3}}$

(c) $\frac{1}{\sqrt{2}}$

(d) $\sqrt{3}$

Q.6 The mean of the first 10 natural odd numbers is

a) 9

b) 12

c) 11

d) 10

Q.7 What is the probability that a leap year has 52 Mondays?

(a) $\frac{5}{7}$

(b) $\frac{6}{7}$

(c) $\frac{2}{7}$

(d) $\frac{4}{7}$

Q.8 If four sides of a quadrilateral ABCD are tangential to a circle, then

(a) $AB + CD = AC + BC$

(b) $AC + AD = BC + DB$

(c) $AB + CD = BC + AD$

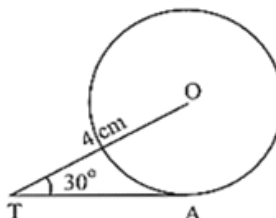
(d) $AC + AD = BD + CD$

Q.9 In the given figure, TA is a tangent to the circle with centre O such that $OT = 4$ cm, $\angle OTA = 30^\circ$, then length of TA is:

(a) 2 cm

(b) $2\sqrt{2}$ cm

(c) $\sqrt{3}$ cm



(d) $2\sqrt{3} \text{ cm}$

Q.10 A ladder 16 m long just reaches the top of a vertical wall. If the ladder makes an angle of 45° with the wall, then the height of the wall is

(a) $8\sqrt{2} \text{ m}$

(b) $12\sqrt{2} \text{ m}$

(c) 16 m

(d) $6\sqrt{2} \text{ m}$

English

1 Select the correct question tag. He watches a film every day, _____?

(A) does he

(B) has he

(C) doesn't he

(D) didn't he

2 Change the following sentence from Active to Passive

"The students supported him during his rally"

(A) He is supporting the rally with students.

(B) He was supported during his rally.

(C) He was being supported for the rally.

(D) The rally was supported by him.

3 Select the antonym for the given word "affluence"

(A) poverty

(B) prosperity

(C) richness

(D) luxury

4 Select the most appropriate meaning of the given idiom.

In the blink of an eye.

(A) To make progress

(B) Happen fast and instantaneously

(C) To flourish

(D) To have problem in eye

5 Fill in the blanks with appropriate word.

_____ she is clever, she often makes mistakes.

(A) Despite

(B) Since

(C) Although

(D) Because

6 "_____! She's dead now."

(A) Oh!

(B) Ah!

(C) Alas!

(D) Hmm!

7 Choose the correct option.

Nancy said, "I may leave tomorrow"

(A) Nancy said that she might leave the next day.

(B) Nancy said that she might leave tomorrow.

(C) Nancy asked if she could leave the next day.

(D) Nancy informed me to leave tomorrow.

8 Choose the correct articles.

We have a very good train service from here to _____ city centre and many people go to _____ work by train.

(A) a/a

(B) the/ the

(C) no article/ no article

(D) the / no article

9 In which sentence is the past perfect continuous tense used?

(A) I was waiting for an hour

(B) I had been waited for an hour

(C) I have waited for an hour

(D) I am waiting for an hour.

10 Identify the underlined word in the given sentence.

I see him passing my house every day.

(A) gerund

(B) infinitive

(C) present participle

(D) object