ADITYA TALENT SCHOOL

DAILY EXAM

X CLASS   **Dt : 09-04-2020**

MATHEMATICS PAPER - 2 (25 MARKS)

SECTION - I

$^1/_2$ mark questions.   **20 x $^1/_2$ = 10**

1. The distance of the point (3, 4) from x-axis is ....

2. Heron's formula to find the area of triangle is ....

3. ....is the condition that A,B,C are the successive points of a line.

4. The area of a triangle whose vertices are (3, 0), (0, 4) and (0, 0) is ....

5. If the slope of a line joining the points P(2, 5) and Q(x, 3) is 2, then $x =$ ....

6. The points which devide a line segment into 3 equal points are said to be...................

7. The co-ordinates of the centroid of the triangle whose vertices are A(a, 0), B(0, b) and C(1, 1) is ....

8. If the points (x, 0), (0, y) and (1, 1) are collinear then the condition is ....

9. If the midpoints of three sides of a triangle ABC are (5, –3), (–5, 3) annd (6, 6), then the centroid of $\Delta^{le} ABC$ is ....

10. If the area of the triangle given in the figure is 20, then the co-ordinates of the point C are ....
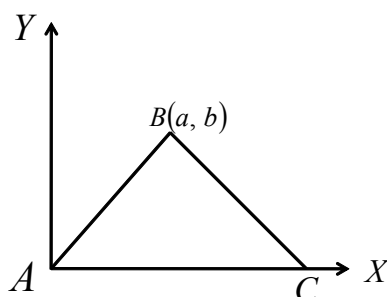
11. The ratio in which y-axis divides the line segment joing the points (7, 3) and (–4, 5) is ....

12. The distance between the points $\left(\sqrt{3}+1, \sqrt{2}-1\right)$ and $\left(\sqrt{3}-1, \sqrt{2}+1\right)$ is ....

13. The perimeter of a triangle formed by (0, 0), (1, 0) and (0, 1) is ....

14. The number of points on x-axis which are at a distance 'c' units $\left(c<3\right)$ from (2, 3) is ....

15. In which quadratnt (s) is abscissa positive?

16. If a point p is at a distance of 3 units from the x-axis and 4 units from the y-axis and p is in 3rd quadrant then the coordinates of p are ....
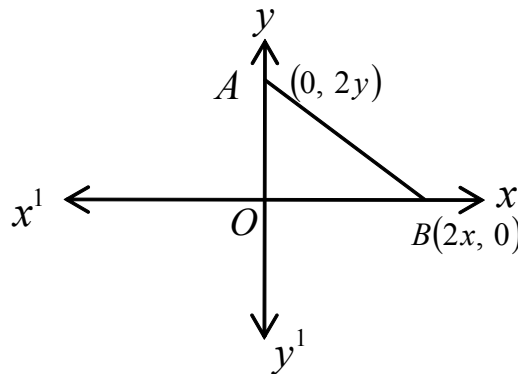
17. In the adjacent figure, slope of the line l is ....
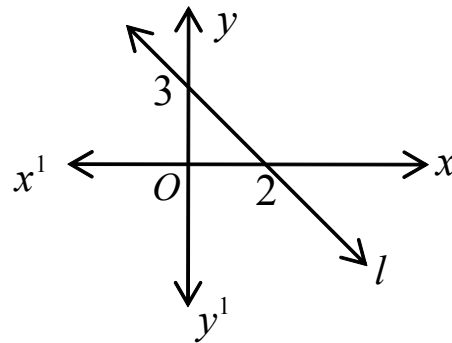
18. If the area of Δ^{le} formed by midpoints of the $\Delta^{le} ABC$ is 4 sq-units, then the area of $\Delta^{le} ABC$ is ....

19. In parallelogram $PQRS$, if $P = (-1,-1), Q = (8,0)$ and $R = (-7,5)$ then $S = $ ....

20. The co-ordinates of the point which is equidistant from the three vertices of the ΔAOB as shown in the figure is ....

SECTION - II

1 mark questions.   **15 x 1 = 15**

21. If the opposite vertices of a square area (5, –4) and (–3, 2), then find the length of its diagonal.

22. If the points (2, 3), (4, k) and (6, –3) are collinear then find the value of k.

23. Do the points (3, 2) (–2, –3) and (2, 3) from a triangle ? If so, name the type of triangle formed.

24. Find a relation between x and y such that the point (x, y) is equidistant from the points (7, 1) and (3, 5).

25. Find the co-ordinates of the point which divides the line segment joining the points (4, –3) and (8, 5) in the ratio 3:1 innternally.

26. If the points (6, 1), (8, 2), (9, 4) and (p, 3) are the vertices of a parallelogram, taken in order, find the value of p.

27. Find the co-ordinates of A, where AB is diameter of a circle whose centre is (2, –3) and B is (1, 4).

28. Find the area of a triangle whose vertices are (1, –1), (–4, 6) and (–3, –5).

29. Find the ratio in which the x-axis divides the line segment joining the points (5, –6) and (1, 4).

30. Find the centroid of the triangle whose vertices are (3, –5), (–7, 4) and (10, –2) respectively.

31. Find the slope of the line joining the points (2, 3) and (4, 5).

32. Find the radius of the circle whose centre is (3, 2) and passes through (–5, 6).

33. Find the point on x-axis which is equidistant from (2, –5) and (–2, 9).

34. Find the mid point of the line joining the points (2, 7) and (12, –7).

35. Write 'Heron's formula' to find area of triangle, and explain the terms involving in it.

GENERAL SCIENCE - 2 (25 MARKS)

SECTION - I

$^1/_2$ mark questions.   **20 x $^1/_2$ = 10**

1.   Who is the scientist that concluded that water is important for plant growth and increase in body mass.

2.   Food is ingested in paramoecium at a specific spot on its body called____.

3.   Dodder, absorbs food through____and it shows____type of nutrition.

4.   I separate oral cavity from nasal passage . Who am I?

5.   End products of fat digestion are fatty acids and glycerol whereas for proteins_____.

6.   I am one of the main intermediate compounds of biosynthetic phase. Who am I?

7.   Correct the sentence and rewrite it

     Trypsin is found in gastric juice and it acts on fats.

8.   Find the mismatch

     1. Toco feral   ----   eye and skin diseases

     2. Calciferol   ----   rickets

     3. Phylloquinone   ----   blood clotting

9.   Identify the scientist by reading the paragraph.

     Plants restore the air what breathing animals and burning candles remove.

10. Earth may sink into ocean --don't allow it to sink.

     Cook fresh food--- avoid refrigerators.

     Can you name the occasion for which above placards can be used?

11. Expand BBF.

12. What is the best method for soil conservation?

13. Name the plant used for producing biofuel.

14. Which fossil fuel resources are decreasing rapidly in India?

15. Which human activity is releasing huge amount of toxic chemicals into ecosystem?

16. Name two micro irrigation techniques

17. How can groundwater be recharged?

18. A person is showing symptoms of delay in healing of wounds and fractures of bones. Which vitamin do you suggest him to take?

19. Which process results in vomiting in our body?

20. Find the correct match

    1. Gliricidia   ----   dry land plantation

    2. ICRISAT   ----   New Delhi

    3. Biodiversity   ----   deforestation

SECTION - II

1 mark questions.   **15 x 1 = 15**

21. What is the element found in chlorophyll?

22. Name the biological catalysts that bring about chemical digestion of food.

23. Give examples of organisms showing heterotrophic nutrition.

24. What happens to plant if the rate of respiration becomes more than the rate of photosynthesis?

25. What is biodiversity?

26. If baby is eats more of carbohydrates and very less of proteins which deficiency disease she is going to suffer from?

27. Mention the apparatus required for conducting experiment to show the presence of starch in leaves.

28. A patient is suffering from acidity. What would you suggest him, if you were a doctor?

29. What are the favourite rays of light for plants?

30. What is selective harvesting?

31. Mention two harmful effects of deforestation?

32. What is the speciality of bishnoi tribe and name the plant saved by them.

33. Prepare a questionnaire on different ways in which water is used?

34. How did Priestley light the candle from outside?

35. What made plants carry out photosynthesis while even green coloured animals (like some birds) could not?