## **DAILY EXAM MATHS - 2 KEY 19-04-2020**

1. 8

2. does not belong

4.  $9\pi$ 

5.  $4\pi$ 

6. 90°

7. 12

3.2

8. 70°

9. the diameter

10. tangent

11. 102.67*cm*<sup>2</sup>

12. 90°

13. a rhombus

14.  $\frac{40}{3}$ 

15. 30°

16. 34

17.  $\pi$ 

18. normal

19. 2

20 tangere

21. proof

22. proof

23.  $\frac{154}{3}$ 

24. A straight line that intersects circle at two distinct points is called a secant of a circle.

25. proof

26. The point that is common to both the circle and the tangent is called a point of contact.

27. The region which is bounded by an arc and the chord joining the end points of the arc is called the segment of the circle.

28. Area of a sector =  $\frac{x}{360} \times \pi r^2$ 

where r is the radius of the circle and x is the angle at the centre of the sector

29. 
$$\frac{200}{7}cm^2$$

30. 30°

31. 7.6 cm

32. Area of the major segment = Area of the circle – area of the minor segment.

33. We can locate the centre of the circle by taking the point of intersection of the perpendicular bisectors of any two non parallel chords of the circle.

34.  $10.5 cm^2$ 

35.  $6\sqrt{3} \ cm^2$ 

## **GENERAL SCIENCE - 2 KEY**

- 1. Pericardium
- 2. Marcello Malpighi
- 3. Platyhelminthes
- 4. Cockroach, butterfly
- 5. Once
- 6. Single circuit
- 7. Due to transpiration, the humidity in the atmosphere increases and more humid air causes rain. Therefore rainfall is heavier in forest areas.
- 8. 2(pacemaker---AV node)
- 9. pea plant
- 10. Deoxyribose nucleic acid
- 11. Charles Lyell
- 12. Homologous organs
- 13. Analogous organs
- 14. 2(inheritance of acquired characters.....lamarck)
- 15. Paleontologists
- 16. one pair of sex chromosomes are called allosomes.
- 17. 1. Cutting down trees
  - 2. Cementing of roads.
  - 3. lack of percolation of rainwater.
  - 4. improper drainage facility
  - 5. Heavy rains (any two points).
- 18. composting
- 19. lymph is the vital link between blood and tissues and it is the substance that contains blood without solid particles.
- 20. systemic aorta originates from left ventricle and carries oxygenated blood.

Or

Pulmonary aorta originates from right ventricle and carries deoxygenated blood.

- 21. 1. Pollution increases"
  - 2. Many small towns maybe established near the small scale industries.
- 22. As a result of sitting continuously during long journey, the tissue fluid is not circulated all over. And it is deposited in legs. So legs seems to be swollen which is called edema.
- 23. The walls of arteries are thicker than those of veins as they receive blood directly from heart which flows with pressure.
- 24. In some people, blood do not clot due to genetic disorder. Such a disease is called haemophilia. In some people, hemoglobin in the blood is very less. Such a disease is called thalassemia.
- 25. Phloem.
- 26. Number of leaves, stomata, temperature, light and water.
- 27. Yes, plants do have circulatory system. Xylem and Phloem are two components.
- 28. Due to blood pressure, the valves present between auricles and ventricles will close making a " lub' "sound.

- 29. As human beings carry nearly about 180 vestigial organs in their body, they are called museum of vestigial organs.
- 30. Book on paleontology.
- 31. 9:3:3:1" Round and yellow -- 9"Round and green-- 3"Wrinkled and yellow---- 3"Wrinkled, green --- 3
- 32. Heredity: the process of passing of characters from parents to offspring.

  Variations:. The difference in characters among the individuals of a species.
- 33. The gene for tallness (T) being dominant it doesn't allow the gene for dwarfness (t) to express in F1 generation. As the genotype of F1 individuals is heterozygous (Tt) the tall gene will not allow dwarf gene to express.
- 34. The genetic makeup of an individual is called genotype.
- 35. When we breed two plants having one contrasting character each to obtain new plants then is called monohybrid cross where as if we breed two plants having two contrasting characters each to obtain new plants then it is called dihybrid cross.