

Dr.K.K.R GOWTHAM EDUCATIONAL INSTITUTIONS :: A.P & T.S

Class: 8-S

Marks: 100

Sub: Maths, PHYSICS, CHEMISTRY

Time: 2 ½ Hrs

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**Maths**

I Choose the correct answer 20x1=20M

1. 'O' is the additive identify for \_\_\_\_\_ number [     ]  
a. Natural      b. Whole      c. Integers      d. Rational
2. 'I' is the multiplicative identify for \_\_\_\_\_ number [     ]  
a. Natural      b. whole      c. Integers      d. Rational
3. Rational numbers are also called \_\_\_\_\_ [     ]  
a. Quotient      b. Natural      c. Whole      d. Integers
4. If the degree of an equation is one then it is called a \_\_\_\_\_ equation [     ]  
a. Linear      b. quadratic      c. cubic      d. by Quadratic
5. Golden ratio \_\_\_\_\_ [     ]  
a. 1.615 : 1      b. 1.516 : 1      c. 1. 165 : 1      d. 1.561 : 1
6. a : b and c : d are any two ratios, then their compound ratio is [     ]  
a. ac : bd      b. ab : cd      c. bd : ac      d. cd : ab
7. Generally a, b, c are the positive integers. If \_\_\_\_\_ then (a, b, c) are said to be Pythagorean triplet  
a.  $a^2 + b^2 = c^2$       b.  $a^2 = b^2 + c^2$       c.  $b^2 = c^2 + a^2$       d. none
8. If a number has 1 in the units place, then its cube ends with \_\_\_\_\_ [     ]  
a. 1      b. 2      c. 3      d. 4
9. The sum of the cubes of first 'n' natural numbers is equal to the \_\_\_\_\_ of their sum [     ]  
a. Square      b. cube      c. sum      d. difference
10. If a number can be expressed as a product of three equal factors then it is said to be a  
a. Perfect cube      b. perfect square      c. cube      d. square
11. Square root is the inverse operation of \_\_\_\_\_ [     ]  
a. Squaring      b. cubing      c. square      d. cube
12. Difference between upper and lower boundary of a class is called \_\_\_\_\_ [     ]  
a. Class length      b. class size      c. frequency      d. range
13. All the bars (or rectangles) in a bar graph have \_\_\_\_\_ [     ]  
a. Same length      b. same with equal area      c. same area      d. equal area
14. Area of a square \_\_\_\_\_ [     ]  
a. Side x side      b. side<sup>2</sup>      c. l x b      d. 2(l+b)
15. Area of a parallelogram \_\_\_\_\_ [     ]  
a. b x h      b. b + h      c b/h      d. b - h
16. Area of Rhombas = \_\_\_\_\_ [     ]  
a.  $\frac{1}{2}xd_1xd_2$       b.  $d_1 \times d_2$       c.  $d_1 + d_2$       d.  $2(d_1 + d_2)$

17. Area of the circle \_\_\_\_\_ [     ]  
 a.  $\pi r^2$       b.  $\frac{1}{2}\pi r^2$       c.  $\pi r$       d.  $\pi d$
18. Area of the circular path \_\_\_\_\_ [     ]  
 a.  $\pi(R^2 - r^2)$     b.  $\pi(R^2 + r^2)$     c.  $\pi(r^2 - R^2)$     d.  $\pi(R - r)^2$
19. Area of a sector \_\_\_\_\_ [     ]  
 a.  $\frac{x}{360}x\pi r^2$     b.  $\frac{x}{360}x2\pi r$       c.  $\frac{x}{360}x\pi r$       d.  $\frac{x}{360}x2\pi r^2$
20. Mode is used to analyse both numerical and \_\_\_\_\_ data [     ]  
 a. Verbal      b. Numerical      c. Non-verbal      d. non-Numerical

### Physics

- I**      Answer the following Questions 5x2=10M
1. How do you appreciate the role of friction in facilitating our various activities?
  2. What happens if we do not reduce friction in machines?
  3. What are the differences between the noise and music?
  4. Is plastic coated by the process of electroplating why?
  5. What is the use of artificial satellites in our daily life?
- II**      Answer the following Questions 5x4=20M
1. How can you differentiate between a contact force and a force at a distance?
  2. Explain with one example that frictional force is proportional to the normal force?
  3. Explain the sources which produce sound pollution in your surroundings?
  4. Verify laws of reflection experimentally?
  5. Make a battery from four lemons and test it with a LED in the circuit?

### Chemistry

- I**      **Answer the following Questions** 2x4=8M
1. Define the following  
 a. Boiling point      b. Freezing point      c. evaporation    d. Humidity
  2. The difference b/w Thermoplastics and Thermosetting plastics
- II**      **Answer the following Questions** 4x2=8M
1. How synthetic fibres changed our daily life?
  2. Write the properties of Gases?
  3. Explain the  
 a. Blending                      b. Recycling
  4. Give reasons why plastic containers are used as storage
- III**      **Answer the following Questions** 4x1=4M
1. What is matter ? Give an example?
  2. What is diffusion?
  3. Draw the Recycle code?
  4. What is the full form of C.N.G and L.P.G?

**IV Fill in the blanks**

**5x1=5M**

1. Synthetic fibres are synthesized from raw material called \_\_\_\_\_
2. Nylon is \_\_\_\_\_ fibre
3. The fibres solidify by \_\_\_\_\_ process
4. Freezing point of water is \_\_\_\_\_
5. Electric switches are made by \_\_\_\_\_

**V Matching**

**5M**

- |                           |     |                  |
|---------------------------|-----|------------------|
| 1. Solid to gas           | [ ] | a.) condensation |
| 2. non compressible       | [ ] | b.) 100°C        |
| 3. Diffusion              | [ ] | c.) sublimation  |
| 4. Gas to liquid          | [ ] | d.) Gas          |
| 5. Boiling point of water | [ ] | e) solid         |