Significant figures, Units for measurement, Matter and Separation of mixture

1. One fermi is
   (a) $10^{-13}cm$ (b) $10^{-15}cm$
   (c) $10^{-10}cm$ (d) $10^{-12}cm$

2. A picometre is written as
   (a) $10^{-9}m$ (b) $10^{-10}m$
   (c) $10^{-11}m$ (d) $10^{-12}m$

3. One atmosphere is equal to
   (a) 101.325 K *pa*
   (b) 1013.25 *K pa*
   (c) $10^5 Nm$
   (d) None of these

4. Dimensions of pressure are same as that of
   (a) Energy
   (b) Force
   (c) Energy per unit volume
   (d) Force per unit volume

5. The prefix 10^{18} is
   (a) Giga (b) Nano
   (c) Mega (d) Exa

6. Given the numbers : 161*cm*, 0.161*cm*, 0.0161 *cm*. The number of significant figures for the three numbers are
   (a) 3, 4 and 5 respectively
   (b) 3, 3 and 3 respectively
   (c) 3, 3 and 4 respectively
   (d) 3, 4 and 4 respectively

7. Significant figures in 0.00051 are
   (a) 5 (b) 3
   (c) 2 (d) 4

8. Which of the following halogen can be purified by sublimation
   (a) F_2 (b) Cl_2
   (c) Br_2 (d) I_2

9. Difference in density is the basis of
   (a) Ultrafiltration
   (b) Molecular sieving
   (c) Gravity Separation
   (d) Molecular attraction

10. Which of the following elements of matter would best convey that there is life on earth
    (a) Oxygen (b) Hydrogen
    (c) Carbon (d) Iron

11. The compound which is added to table salt for maintaining proper health is
(a) KCl (b) KBr
(c) NaI (d) $MgBr_2$

12. Which of the following contains only one element
(a) Marble (b) Diamond
(c) Glass (d) Sand

13. In known elements, the maximum number is of
(a) Metals
(b) Non-metals
(c) Metalloids
(d) None of these

14. Which one of the following is not an element
(a) Diamond (b) Graphite
(c) Silica (d) Ozone

15. A mixture of $ZnCl_2$ and $PbCl_2$ can be separated by
(a) Distillation
(b) Crystallization
(c) Sublimation
(d) Adding aceitic acid

16. A mixture of methyl alcohol and acetone can be separated by
(a) Distillation
(b) Fractional distillation
(c) Steam distillation
(d) Distillation under reduced pressure

17. In the final answer of the expression $\frac{(29.2-20.2)(1.79\times10^5)}{1.37}$. The number of significant figures is
(a) 1 (b) 2
(c) 3 (d) 4

18. 81.4 g sample of ethyl alcohol contains 0.002 g of water. The amount of pure ethyl alcohol to the proper number of significant figures is
(a) 81.398 g (b) 71.40 g
(c) 91.4 g (d) 81 g

19. The unit $J\,Pa^{-1}$is equivalent to
(a) m^3
(b) cm^3
(c) dm^3
(d) None of these

20. From the following masses, the one which is expressed nearest to the milligram is
(a) 16 *g* (b) 16.4 *g*
(c) 16.428 *g* (d) 16.4284 *g*

21. The number of significant figures in $6.02 \times 10^{23}$is
(a) 23 (b) 3
(c) 4 (d) 26

22. The prefix zepto stands for
(a) 10^{9} (b) 10^{-12}
(c) 10^{-15} (d) 10^{-21}

23. The significant figures in 3400 are
(a) 2 (b) 5
(c) 6 (d) 4

24. The number of significant figures in 6.0023 are
(a) 5 (b) 4
(c) 3 (d) 1

25. Given $P = 0.0030m$, $Q = 2.40m$, $R = 3000m$, Significant figures in P, Q and R are respectively
(a) 2, 2, 1 (b) 2, 3, 4
(c) 4, 2, 1 (d) 4, 2, 3

26. The number of significant figures in 60.0001 is
(a) 5 (b) 6
(c) 3 (d) 2

27. A sample was weighted using two different balances. The result's were (i) 3.929 *g* (ii) 4.0 *g*. How would the weight of the sample be reported
(a) 3.929 *g* (b) 3 *g*
(c) 3.9 *g* (d) 3.93 *g*