1. **A precise instrument is one which has**
   A. Less fractional uncertainty
   B. Less absolute uncertainty ✓✓✓
   C. Less uncertainty
   D. Less percentage uncertainty
2. **Conducting an experiment once using a faulty instrument is likely to be affected by which type of error**
   A. Random error
   B. Systematic error
   C. Both of them ✓✓✓
   D. NOA
3. **While using measurements instrument student are asked to repeat experiment over and over again to reduce effect of which type of error**
   A. Parallax error
   B. Random error ✓✓✓
   C. Systematic error
   D. All of the above
4. **A precise instrument is the one which has**
   A. Less fractional uncertainty
   B. Less absolute uncertainty✓✓✓
   C. Less certainty
   D. Less percentage uncertainty
5. **An observer notes reading of scale from reading of angles (parallax) while measuring the length of wire what type of error this may be classified**
   A. Systematic error
   B. Random error✓✓✓
   C. Zero error
   D. Precise error
6. **Which of the following reading is more accurate (1) 0.04CM from Vernier caliper (2) 0.002Cm from screw gauge**
   A. Both have the same accuracy
   B. Not enough info
   C. 1✓✓✓
   D. 2
7. **Human error may be mostly accurately defined as**
   A. Random error ✓✓✓
   B. Systematic error
   C. Absolute error
   D. Zero error
8. **Smallest division on a rule is of**
   A. 1 cm
   B. 1 m
   C. 1 mm ✓✓✓
   D. 10 cm
9. **Most appropriate instrument for measurement of internal and external diameter of a tube is**
   A. Vernier calipers ✓✓✓

B. micrometer screw gauge
C. meter rule
D. measuring tape

10. Least count of screw gauge is

A. 0.01 cm
B. 0.5 cm
C. 0.1 cm
D. 0.01 mm ✓✓✓

11. An instrument commonly used for the measurement of atmospheric pressure is known as

A. Manometer
B. Barometer ✓✓✓
C. Calorimeter
D. Potentiometer

12. Barrel of screw gauge has

A. 100 divisions
B. 50 divisions ✓✓✓
C. 10 divisions
D. 45 divisions

13. Precision of micrometer screw gauge is

A. 0.1Cm
B. 0.01mm✓✓✓
C. 0.1mm
D. 0.1m

14. Range of measuring tape is

A. 1m
B. Several meters ✓✓✓
C. Two meters
D. Half meters

15. Digital stop watches show readings up to

A. 2 decimal places ✓✓✓
B. 3. Decimal. Places
C. 1 decimal. Places
D. 4 decimal. Places

16. The error due to manually stopping a watch is termed as

A. Climax error
B. Human reaction error
C. Human reaction time ✓✓✓
D. Ratability error

17. A mere rule can measure a maximum length of

A. 0.5m
B. 1m✓✓✓
C. 1.5m
D. 2m

18. in pendulum the heavy metal bob is called

A. Thong
B. Gong
C. Hook

D. Bob✓✓✓

19. The precision of most stop watches is

A. 0.01s✓✓✓
B. 1S
C. 0.1S
D. 0.0001s

20. Most of the watches and wall clocks have precisions of

A. Minutes ✓✓✓
B. Seconds
C. Hours
D. Microsecond

21. In physics a common a common instrument used in measuring the diameter of a circle is known as

A. Rule
B. Measuring tape
C. Calipers ✓✓✓
D. Tape rule

22. The range of Vernier calipers is

A. 1Cm --10cm✓✓✓
B. 1cm -5cm
C. 2cm-5cm
D. 0cm --7cm

23. Minimum length and instrument can measure is called its

A. Precision ✓✓✓
B. Accuracy
C. Limitation
D. Estimate

24. One oscillation completes when the bob moves from

A. A to B
B. B to A
C. A to B and them back to A✓✓✓
D. A to B and then back to the center

25. On heating, the amplitude of vibration of the atoms or molecules of an object

A. increases ✓✓✓
B. decreases
C. remains constant
D. remain same

26. The melting point of water is

A. 323 °C
B. 100 °C
C. 273 °C
D. 0 °C ✓✓✓

27. Melting point is also known as

A. fusion point ✓✓✓
B. constant point
C. boiling point

D. freezing point

28. The coefficient of volume expansion of solids is

A. greater than liquids
B. equal to gases
C. less than liquids ✓✓✓
D. equal to liquids

29. The temperature of land rises more quickly than that of the sea because the specific heat of soil is

A. more than water
B. less than water ✓✓✓
C. equal to water
D. neutral

30. The error due to eye vision is termed

A. Parallax error✓✓✓
B. Zero error
C. Vertical scatter
D. Visional error

31. Time is calibrated using the oscillation of

A. Cesium atom ✓✓✓
B. Strontium atom
C. Uranium atom
D. Rubidium atom

32. Among the following substances which one has highest specific heat capacity

A. Water ✓✓✓
B. Kerosene
C. Oil
D. ICE

33. A device in which heat measurement can be made is called

A. Joule meter
B. Calorimeter ✓✓✓
C. Thermal meter
D. Gauge meter

34. According to the law of calorimetry which of the given relation is true

A. Heat gain ≥heat lost
B. Heat gain ≤heat lost
C. Heat gain > heat lost
D. Heat gain =heat lost✓✓✓

35. Three students measured the length of a needle and recorded as (I) 0.21m (ii) 0.2145m(iii) 0.214m (which one is correct

A. iii✓✓✓
B. I
C. Ii
D. NOA

36. Zero error in the Instrument is a type of error

A. Systematic error ✓✓✓
B. parallax error
C. Personal error

D. Classified error

37. In multiplication and division of measurement which of the following is true

A. Percentage uncertainty are added ✓✓✓
B. Absolute uncertainty are added
C. Percentage uncertainty are divided
D. NOA

38. To reduce the timing uncertainty in the timing experiment which of the following is true

A. Highly precise instrument
B. Conduct at room temperature
C. Count more number of vibration
D. B&C✓✓✓