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1) **Interphase is actually a period of:**
A) Non-apparent cell division
B) Apparent cell division
C) Non-apparent rest
D) Non-apparent inactivity

○ A ○ B ○ C ○ D

2) **After cell division the cell visibly undergoes:**
A) Metabolic phase
B) Resting phase
C) Active phase
D) Proliferative phase

○ A ○ B ○ C ○ D

3) **Between two consecutive cell divisions there is a period of:**
A) Great chromosomal movement
B) Rapid movement of centrioles
C) Great biochemical activity
D) Sluggish biochemical activity

○ A ○ B ○ C ○ D

4) **Amount of DNA is duplicared in:**
A) G_1 phase of cell cycle
B) G_2 phase of cell cycle
C) S phase of cell cycle
D) G_o phase of cell cycle

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5) **Post mitotic cell can exit the cell cycle during:**

A) G_1 C) S

B) G_2 D) G_o

○ A ○ B ○ C ○ D

6) **The cell gets prepared for division in:**

A) G_1 C) G_2

B) G_o D) S phase

○ A ○ B ○ C ○ D

7) **Post mitotic phase of cell cycle is:**

A) G_1 C) G_2

B) G_o D) S phase

○ A ○ B ○ C ○ D

8) **RNA and microtubule subunits are synthesized in:**

A) G_1 phase of cell cycle C) S phase of cell cycle

B) G_0 phase of cell cycle D) G_2 phase of cell cycle

○ A ○ B ○ C ○ D

9) **Mitosis specific proteins are synthesized in:**

A) G_1 phase of cell cycle C) S phase of cell cycle

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9) **Mitosis specific proteins are synthesized in:**

A) G_1 phase of cell cycle
B) G_0 phase of cell cycle
C) S phase of cell cycle
D) G_2 phase of cell cycle

○ A ○ B ○ C ○ D

10) **In case of human cells, average cell cycle is about:**

A) 24 hours
B) 12 hours
C) 1240 minutes
D) 24 minutes

○ A ○ B ○ C ○ D

11) **In cell cycle of human cell, G_2 phase lasts for:**

A) 9 hours
B) 0.5 hour
C) 4.5 hours
D) 30 minutes

○ A ○ B ○ C ○ D

12) **In cell cycle chromosome number is reduced during _____ phase of cell cycle which is again doubled in _____ phase:**

A) G_1, S
B) G_1, G_0
C) G_1, G_2
D) M, S

○ A ○ B ○ C ○ D

13) **In case of human cell, the second longest phase is:**

A) G_1 phase
C) G_2 phase

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13) **In case of human cell, the second longest phase is:**

A) G_1 phase
B) S phase
C) G_2 phase
D) M phase

○ A ○ B ○ C ○ D

14) **In case of human cell, interphase takes:**

A) 19.5 hours
B) 20.5 hours
C) 22.5 hours
D) 23.5 hours

○ A ○ B ○ C ○ D

15) **Chromosomes become more and more thick during:**

A) Interphase
B) Anaphase
C) Prophase
D) Metaphase

○ A ○ B ○ C ○ D

16) **Centromere have a special area called:**

A) Primary constriction
B) Kinetochore
C) Centrosome
D) Secondary constriction

○ A ○ B ○ C ○ D

17) **During cytokinesis of plant cells:**

A) Phragmoplast is formed

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17) **During cytokinesis of plant cells:**
A) Phragmoplast is formed
B) Contractile ring is formed
C) Cell constricts in centre
D) Cell membrane moves towards centre

○ A ○ B ○ C ○ D

18) **Cancer is caused mainly by:**
A) Mutation in somatic cells C) Mitosis in somatic cells
B) Mutation in germ cells D) Mitosis in germ cells

○ A ○ B ○ C ○ D

19) **The size of nucleus increases and homologous chromosomes start getting closer to each other in:**
A) Leptotene C) Pachytene
B) Zygotene D) Diplotene

○ A ○ B ○ C ○ D

20) **Each bivalent of chromosome has:**
A) Four chromatids C) Two chromatids
B) Three chromatids D) One chromatid

○ A ○ B ○ C ○ D

Homologous chromosomes remain united by:

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21) **Homologous chromosomes remain united by their point of interchange only during:**

A) Diakinesis
B) Diplotene
C) Pachytene
D) Zygotene

○ A ○ B ○ C ○ D

22) **Nucleoli disappears in:**

A) Leptotene
B) Zygotene
C) Pachytene
D) Diakinesis

○ A ○ B ○ C ○ D

23) **Spindle fibers originate and the kinetochore fibers attach to the kinetochore of homologous chromosomes from each pole in:**

A) Metaphase I
B) Metaphase II
C) Anaphase I
D) Anaphase II

○ A ○ B ○ C ○ D

24) **The actual reduction phase of meiosis is:**

A) Metaphase I
B) Metaphase II
C) Anaphase I
D) Anaphase II

○ A ○ B ○ C ○ D

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25) **Nuclear membrane reorganizes around each set of chromosomes at two poles in:**

A) Telophase I
B) Anaphase I
C) Metaphase I
D) Prophase I

○ A ○ B ○ C ○ D

26) **Two nuclei, each with half number of chromosomes are formed in:**

A) Prophase I
B) Metaphase I
C) Anaphase I
D) Telophase I

○ A ○ B ○ C ○ D

27) **Meiosis usually takes place at the time of:**

A) Sexual cell formation
B) Somatic cell formation
C) Asexual cell formation
D) Vegetative cell formation

○ A ○ B ○ C ○ D

28) **Maximum tendency of tumor formation is found in:**

A) Infancy
B) Young age
C) Old age
D) Juvenile age

○ A ○ B ○ C ○ D

29) **The importance of controlling cell division is shown by:**

A) Renal enlargement
B) Cardiomegaly
C) Cancer
D) Oedema

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30) **In prophase I diplotene is preceded by:**

A) Leptotene
B) Diakinesis
C) Pachytene
D) Zygotene

○ A ○ B ○ C ○ D

31) **At any given time, most of the cells in an animal's body are in:**

A) S phase
B) G_1 phase
C) G_0 phase
D) G_2 phase

○ A ○ B ○ C ○ D

32) **The phase in which the cell is getting prepared for mitosis is:**

A) S phase
B) G_1 phase
C) G_0 phase
D) G_2 phase

○ A ○ B ○ C ○ D

33) **Of all stages of mitosis the shortest and most beautiful to watch is:**

A) Prophase
B) Metaphase
C) Anaphase
D) Telophase

○ A ○ B ○ C ○ D

The spindle forming microtubules are composed of:

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34) **The spindle forming microtubules are composed of:**

A) Protein
B) RNA
C) Protein and RNA
D) Protein and DNA

○ A ○ B ○ C ○ D

35) **Kinetochore fibers, asters, polar fibers and centrioles give rise to:**

A) Contractile ring
B) Metaphase plate
C) Separation plate
D) Mitotic apparatus

○ A ○ B ○ C ○ D

36) **Cell cycle does not involve:**

A) G_1 phase
B) M phase
C) S phase
D) G_o phase

○ A ○ B ○ C ○ D

37) **If there are 40 centromeres in a cell at late anaphase, how many chromosomes will be there in each daughter cells following cytokinesis:**

A) 10
B) 20
C) 40
D) 30

○ A ○ B ○ C ○ D

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38) **Meiosis _____ the parental chromosomes number:**

A) Doubles
B) Halves
C) Maintains
D) Mixes up

○ A ○ B ○ C ○ D

39) **Sister chromatids of each duplicated chromosome separate during:**

A) Prophase I
B) Prophase II
C) Anaphase I
D) Anaphase II

○ A ○ B ○ C ○ D

40) **If there are 20 chromatids in a cell, how many centromeres are there?**

A) 10
B) 20
C) 30
D) 40

○ A ○ B ○ C ○ D

41) **The longest phase of cell cycle is:**

A) Mitotic phase
B) Interphase
C) Dividing phase
D) Prophase

○ A ○ B ○ C ○ D

42) **Energy storage for chromosome movements occurs in:**

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42) **Energy storage for chromosome movements occurs in:**

A) Interphase
B) Mitotic phase
C) Post mitotic phase
D) Premitotic phase

○ A ○ B ○ C ○ D

43) **At post mitotic stage daughter cells:**

A) Enter the G_1 phase
B) Enter the G_0 phase
C) Have two options
D) Enter the new cycle

○ A ○ B ○ C ○ D

44) **Cell cycle includes how many preparatory phases:**

A) Two
B) Three
C) Four
D) Five

○ A ○ B ○ C ○ D

45) **In case of human cell, average cell cycle is about:**

A) 2440 minutes
B) 1440 minutes
C) 1240 minutes
D) 1040 minutes

○ A ○ B ○ C ○ D

46) **Telophase is indicated by:**

A) Condensation of chromosomes

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46) **Telophase is indicated by:**

A) Condensation of chromosomes
B) Decondensation of chromosomes
C) Disintegration of nuclear envelope
D) Disintegration of nucleoli

○ A ○ B ○ C ○ D

47) **Duplication of centriole occurs during:**

A) Mitotic phase
B) Interphase
C) Karyokinesis
D) Cytokinesis

○ A ○ B ○ C ○ D

48) **_____ is larger than the nucleus:**

A) Nucleolus
B) Centrosome
C) Mitotic apparatus
D) Chromosome

○ A ○ B ○ C ○ D

49) **Late prophase coincides with:**

A) Late metaphase
B) Early metaphase
C) Late anaphase
D) Early anaphase

○ A ○ B ○ C ○ D

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48) _____ **is larger than the nucleus:**

A) Nucleolus
B) Centrosome
C) Mitotic apparatus
D) Chromosome

○ A ○ B ○ C ○ D

49) **Late prophase coincides with:**

A) Late metaphase
B) Early metaphase
C) Late anaphase
D) Early anaphase

○ A ○ B ○ C ○ D

50) **Secondary areas of growth are established in:**

A) Invasion
B) Benign tumor
C) Malignancy
D) Metastasis

○ A ○ B ○ C ○ D

PREVIOUS FINISH TEST NEXT

3 KB/s HI-FI 97% 2:03 AM

51) **Which one of the following informations about molecular formula of nitric acid is incorrect?**

A) It indicates one molecule of nitric acid
B) One H-atoms, one N-atom and three O-atoms combine to form one molecule of HNO_3
C) One mole of H-atoms, one mole of N-atom and three moles of O-atoms form one mole of nitric acid
D) 1 mole of nitric acid = 63.0 amu

○ A ○ B ○ C ○ D

52) **The mass of chlorine (Cl) element is 35.5 amu. Which of the following terms is not used for this mass:**

A) Fractional atomic mass
B) Mass number
C) Relative atomic mass
D) Average atomic mass

○ A ○ B ○ C ○ D

53) **An organic compound has empirical formula C_3H_3O if molar mass of the compound is 110 molecular formula of this organic compound is:**

(A_r, of C = 12, H = 1.008 and O = 16)

A) $C_6H_6O_2$
B) C_2H_2O
C) $C_8H_9O_3$
D) $C_6H_6O_3$

○ A ○ B ○ C ○ D

54) **How many moles are there in 0.44 g of CO_2 (M_r = 44 amu)**

A) 0.01 mol
B) 0.1 mol
C) 0.001 mol
D) 0.00001 mol

○ A ○ B ○ C ○ D

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55) **Identify the incorrect the statement about isotope:**

A) At present above 280 different isotopes occur in nature

B) 300 unstable radioactive isotopes have been produced through artificial disintegration

C) O, Mg, C, Ca and Fe from nearly 50% earth current

D) 154 isotopes have even mass number and even atomic number

○ A ○ B ○ C ○ D

56) **Calculate percentage by (W/W) of potassium hydroxide if 2g potassium hydroxide (KOH) is dissolved in 23g of water:**

A) 8% (W/W) C) 16% (W/W)

B) 12% (W/W) D) 10% (W/W)

○ A ○ B ○ C ○ D

57) **The mass of one mole of electrons is:**

A) $5.50\times10^{2}\,g$ C) $1.84\times10^{2}\,g$

B) $1.008\times10^{3}\,g$ D) $1.673\times10^{3}\,g$

○ A ○ B ○ C ○ D

58) **Consider the following statements about atom:**

I. **It is made up of more than 100 sub-atomic particles**

II. **Its diameter is of the order** $0.02\,nm$

III. **Its mass falls in the range of** 10^{-27} **to** 10^{-25} **kg**

IV. **A full stope may have two million atoms**

Which of the above statements is/are correct.

A) I only C) III and IV

C) II only D) I, II, III and IV

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59) **2.4 x 10^{24} number of ethanol molecules has number of moles of ethanol (N_A = 6.0 x 10^{23}):**

A) 2.0 moles of ethanol
C) 4.0 moles of ethanol
B) 3.0 moles of ethanol
D) 5.0 moles of ethanol

○ A ○ B ○ C ○ D

60) **Actual yield of a chemical reaction is always less than its theoretical yield. The is because of all of the following reasons EXCEPT:**

A) Formation of by-products due to side reactions
B) Loss of product during its separation and purification
C) Lack of proper application of technique
D) The irreversible reactions are never completed

○ A ○ B ○ C ○ D

61) **27g of Al will react completely with how much mass of O_2 to produce Al_2O_3.**

A) 8g of oxygen
C) 16g of oxygen
B) 24g of oxygen
D) 32g of oxygen

○ A ○ B ○ C ○ D

62) **Which of the following statements is incorrect about isotopes of an elements?**

A) They have different mass number
B) They have different physical properties
C) They have different chemical properties
D) They have different half-life (if radioactive)

○ A ○ B ○ C ○ D

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63) **If we know the mass of one substance, we can calculate the volume of other substance and vice versa with the help of chemical equation which is called:**

A) Mass-mass relationship C) Mass-volume relationship
B) Mole-volume relationship D) Mass-mole relationship

○ A ○ B ○ C ○ D

64) **4g of sodium hydroxide has been dissolved in 250cm^3 of solution, the molarity of the solution is:**

A) 0.1M C) 0.2M
B) 0.4M D) 0.3M

○ A ○ B ○ C ○ D

65) **Select the most suitable answer from the given ones in each question:**

A) Isotopes with even atomic masses are comparatively abundant
B) Isotopes with odd atomic masses are comparatively abundant
C) Isotopes with even atomic masses and even atomic numbers are comparatively abundant
D) Isotopes with even atomic masses and odd atomic numbers are comparatively abundant

○ A ○ B ○ C ○ D

66) **All of the following statements are correct EXCEPT:**

A) Number of atoms of an element $= \frac{\text{Mass of the element}}{\text{Relative atomic mass}} \times N_A$

B) Number of formula units $= \frac{\text{Mass of the covalant compound}}{\text{Formula mass}} \times N_A$

C) Number of ions of ionic species$= \frac{\text{Mass of the ions}}{\text{Ionic mass}} \times N_A$

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B) Number of formula units $= \frac{\text{Mass of the covalant compound}}{\text{Formula mass}} \times N_A$

C) Number of ions of ionic species$= \frac{\text{Mass of the ions}}{\text{Ionic mass}} \times N_A$

D) Number of molecules of covalent compound$= \frac{\text{Mass of the covalant compound}}{\text{Molecular mass}} \times N_A$

○ A ○ B ○ C ○ D

67) **What mass of KOH is present in 0.5 mole of KOH (A_r values K = 39, O = 16 and H = 1):**

A) 28.0g
B) 26.0g
C) 24.0g
D) 30.0g

○ A ○ B ○ C ○ D

68) **Stoichiometric calculations in stoichiometry depend on all of the following assumptions EXCEPT:**

A) All the reactants are completely converted into the product
B) No side reaction occurs
C) Law of conservation of mass and law of definite proportion must be obeyed
D) Are applicable to both reversible and irreversible reactions

○ A ○ B ○ C ○ D

69) **Which one of the following samples contains the same number of atoms as 1g of hydrogen gas (M_r of H_2 = 2g)?**

A) 22g of carbon dioxide (M_r of CO_2 = 44g)
B) 8g of methane (M_r of CH_4 = 16g)

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69) **Which one of the following samples contains the same number of atoms as 1g of hydrogen gas (M_r of H_2 = 2g)?**

A) 22g of carbon dioxide (M_r of CO_2 = 44g)
B) 8g of methane (M_r of CH_4 = 16g)
C) 20g of neon (M_r of Ne = 20g)
D) 8g of ozone (M_r of O_3 = 48g)

○ A ○ B ○ C ○ D

70) **Calculate the grams of H_2O formed when 8g of CH_4 burns in excess of oxygen:**

A) 21grams
B) 19grams
C) 18grams
D) 15grams

○ A ○ B ○ C ○ D

71) **Which of the following is fundamental unit for amount of substance in SI units?**

A) Gram
B) Mole
C) Kilogram
D) Milligram

○ A ○ B ○ C ○ D

72) **One mole of SO_2 contains**

A) 6.02×10^{23} atoms of oxygen
B) 18.1×10^{23} molecules of SO_2
C) 6.02×10^{23} atoms of Sulphur
D) 4 gram atoms of SO_2

○ A ○ B ○ C ○ D

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73) **The least number of molecules are present in:**

A) 1.0g of H_2O_2
B) 1.0g of CH_3OH
C) 1.0g of CO_2
D) 1.0g of NO

○ A ○ B ○ C ○ D

74) **Given solution contains 16.0 g of CH_3OH, 92.0g of C_2H_5OH and 36g of water.**
Which statement about mole fraction of the components is true?

A) Mole fraction of CH_3OH is highest among all components
B) Mole fraction of C_2H_5OH and H_2O is the same
C) Mole fraction of CH_3OH and C_2H_5OH is the same
D) Mole fraction of H_2O is the lowest among all

○ A ○ B ○ C ○ D

75) **Mole fraction of any component is the ratio of moles of all components in a:**

A) Compounds
B) Molecule
C) Solution
D) Solid

○ A ○ B ○ C ○ D

76) **The octane present in gasoline burns according to the following equation:**

$$2C_8H_{18} + 25O_2 \longrightarrow 16CO_2 + 18H_2O$$

How many moles of CO_2 can be produced from one mole of octane?

A) 2
B) 8
C) 4
D) 16

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77) **The reaction of H_2S with SO_2 give sulphur as one of the product?**

$$H_2S + SO_2 \xrightarrow{H_2O} S + H_2O$$

How many moles of H_2S are needed to react with sulphur dioxide to produce one mole of sulphur?

A) $\frac{1}{3}$ moles

B) $\frac{3}{2}$ moles

C) $\frac{2}{3}$ moles

D) 2 moles

○ A ○ B ○ C ○ D

78) **Which of the following units of concentration of solution is affected by temperature?**

A) Percentage composition (W/W)
B) Mole fraction
C) ppm (W/W)
D) Molarity (n/V)

○ A ○ B ○ C ○ D

79) **Combustion anyalsis of organic compound is done is order to determine:**

A) Empiricial formula
B) Moleculear formula
C) Both A and B
D) Neither A nor B

○ A ○ B ○ C ○ D

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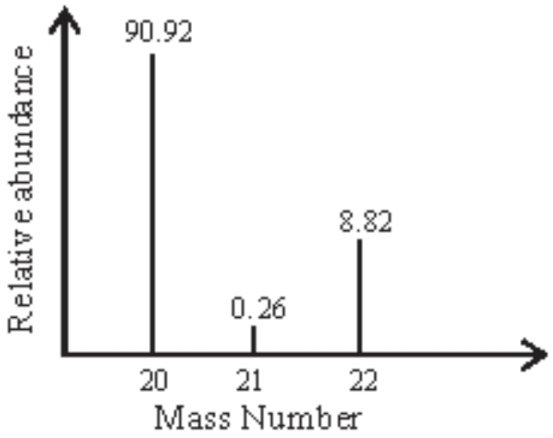
80) **A sample of Neon is found to exist as $^{20}_{10}Ne$, $^{21}_{10}Ne$ and $^{22}_{10}Ne$. Mass spectrum of 'Ne' is as follows:**



What is the relative atomic mass (A_r value) of Neon?

A) 20.18 amu
C) 20.10 amu
B) 20.28 amu
D) 20.22 amu

○ A ○ B ○ C ○ D

81) **How many oxygen atoms are in 2 moles of oxygen (O_2) gas?**

A) $2 \times 6.022 \times 10^{23} \times 2$ atoms
B) $2 \times 6.02 \times 10^{22}$ atoms
C) $2 \times 6.022 \times 10^{22} \times 2$ atoms
D) 2×10^{23} atoms

○ A ○ B ○ C ○ D

82) **The volume occupied by 1.4g of N_2 at STP is:**

A) $2.24dm^3$
B) $22.4dm^3$
C) $1.12dm^3$
D) $112cm^3$

○ A ○ B ○ C ○ D

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83) **The number of moles of CO_2 which contains 16g of oxygen is:**

A) 0.25
B) 0.5
C) 1.0
D) 1.5

○ A ○ B ○ C ○ D

84) **The deflection of positive ions in Dempster's mass spectrometer depends on all of the following factors EXCEPT:**

A) Strength of electric field
B) Strength of magnetic field
C) The ions of definite e/m value
D) The ions of definite m/e value

○ A ○ B ○ C ○ D

85) **Total number of atoms present in 49.0g H_3PO_4 are (A_r H = 1, P = 31, O = 16):**

A) 4 N_A atoms
B) 2 N_A atoms
C) It contains 1g molecules of H_3PO_4
D) It contains 0.6g atoms of H_3PO_4

○ A ○ B ○ C ○ D

PREVIOUS FINISH TEST NEXT

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86) **Which of following are base units of angular momentum?**

A) kg m s^{-1}
B) kg m^2 s^{-1}
C) kg m^{-1} s^{-2}
D) kg m^{-2} s^{-1}

○ A ○ B ○ C ○ D

87) **Which one is the correct representation of the unit of pressure?**

A) $Newton/Meter^2$
B) $Newton/meter^2$
C) $newton/meter^2$
D) $newton/Meter^2$

○ A ○ B ○ C ○ D

88) **The formula for electric field strength is E = F/Q, where E is electric field strength and F is force and Q is charge. Which one of the following options gives the correct base units for electric field strength?**

A) kg m s^{-3} A^{-1}
B) kg^2 m^{-2} s^{-3} A
C) kg s^{-2} A^{-3}
D) m s^{-1} A^{-3}

○ A ○ B ○ C ○ D

89) **How many atto meters are there in one millimeter?**

A) 10^9
B) 10^{-15}
C) 10^{15}
D) 10^{12}

○ A ○ B ○ C ○ D

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90) **Which of the following is not a unit of power?**

A) watt
B) kg m^2 s^{-3}
C) kW
D) kWh

○ A ○ B ○ C ○ D

91) **Which of the following is not having units of time period?**

A) RC
B) $\frac{L}{R}$
C) $\sqrt{LC}$
D) $\frac{C}{L}$

○ A ○ B ○ C ○ D

92) **Which of following quantity can be expressed in kg m^{-1} s^{-1}?**

A) Viscosity
B) Surface tension
C) Spring constant
D) Angular momentum

○ A ○ B ○ C ○ D

93) **If P is a pressure and δ is a density, then δ/P has units:**

A) m^2/s^2
B) kg/m^2
C) N/m^2
D) s^2/m^2

○ A ○ B ○ C ○ D

94) **In SI base units, gravitational constant 'G' is expressed in:**

A) N m^{-2} kg
B) kg^2 m^{-3} s^2
C) kg^{-1} m^3 s^{-2}
D) N m^2 kg^2

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95) **The S.I unit of work in terms of base unit are:**

A) kg m^{-1} s^{-2}
B) kg m s^{-2}
C) kg m^{-2} s^{-2}
D) kg m^2 s^{-3}

○ A ○ B ○ C ○ D

96) **What is the correct unit for the quantity shown?**

	Quantity	Unit
A)	Electromotive force (emf)	J
B)	Viscosity	Pa s^{-1}
C)	Entropy	kg m^2 s^{-1} K^{-1}
D)	Capacitance	J^{-1} C^2

○ A ○ B ○ C ○ D

97) **Of the following which one has the units different from the remaining three:**

A) Energy per unit volume
B) Force per unit area
C) Product of charge and voltage per unit volume
D) Energy per unit area

○ A ○ B ○ C ○ D

98) **In given equation** $f = \frac{1}{2l}\sqrt{\frac{F}{m}}$ **, fundamental frequency of stretched string, the units of 'm' is:**

A) kg m^{-1}
B) kg m s^{-1}
C) kg m^{-1} s
D) No units

○ A ○ B ○ C ○ D

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99) **Systematic error may occur due to:**

A) Zero error of instrument
B) Incorrect marking
C) Poor calibration of instrument
D) All of them

○ A ○ B ○ C ○ D

100) **Which experimental technique reduces the systematic error of the quantity being investigated?**

A) Adjusting an ammeter to remove its zero error before measuring a current
B) Timing a large number of oscillations to find a period
C) Measuring the diameter of a wire repeatedly & calculating the average
D) Any of these

○ A ○ B ○ C ○ D

101) **A student performs an experiment to measure value of current passing through a resistor. He takes ten readings which are given as follows; 1.2 A, 1.0 A, 1.1 A, 1.3 A, 0.99 A, 1.4 A, 1.1 A, 1.3 A, 0.98 A, 0.97 A. Which kind of error would you suggest these readings have?**

A) Random error
B) Systematic error
C) Both "A" & "B"
D) Zero error

○ A ○ B ○ C ○ D

102) **In an experiment, the uncertainty in the value of a frequency is 7.5%. Furthermore, the uncertainty in the wavelength of wave is 3.5%. The uncertainty in wave speed is:**

A) 13.5%
B) 18.5%
C) 11%
D) 4%

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103) **The least count of a stop watch is 1/5 seconds. The time of 20 oscillations of a pendulum is measured to be 25 s. The uncertainty in time period is:**

A) 10^{-1} s
B) 10^{-2} s
C) 10^{-3} s
D) 10^{-4} s

○ A ○ B ○ C ○ D

104) **An instrument gives a numerical reading of 0.00160 ± 0.00005. Which statement is correct?**

A) The fractional uncertainty is 5×10^{-5}
B) The percentage uncertainty is 3%
C) The absolute uncertainty is 5
D) The fractional uncertainty is 5/16

○ A ○ B ○ C ○ D

105) **The power loss P in resistor is calculated using the formula $P=V^2/R$. The uncertainty in the potential difference V is 4% and the uncertainty in the resistance R is 3%, what is the uncertainty in P?**

A) 4%
B) 8%
C) 7%
D) 11%

○ A ○ B ○ C ○ D

106) **The errors in the measurements of side and mass of a cubical body are 6% and 9% respectively. Then the maximum possible error in calculating the density is:**

A) 17%
B) 15%
C) 33%
D) 27%

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106) **The errors in the measurements of side and mass of a cubical body are 6% and 9% respectively. Then the maximum possible error in calculating the density is:**

A) 17%
B) 15%
C) 33%
D) 27%

○ A ○ B ○ C ○ D

107) **The least count is called:**

A) Percentage uncertainty
B) Absolute uncertainty
C) Fractional uncertainty
D) All of these

○ A ○ B ○ C ○ D

108) **The diameter d of a wire is determined by finding the mass m of a length l of the wire. If its density D is determined to within 3%, mass m to within 0.5% and length l to within 0.5%, what would be the maximum percentage uncertainty of the diameter d?**

A) 1%
B) 3%
C) 2%
D) 4%

○ A ○ B ○ C ○ D

109) **The percentage uncertainties in mass and spring constant while measuring time period of spring mass system respectively are 2.5% and 3.5%. The percent uncertainty in its time period will be:**

A) 3%
B) 6%
C) 12%
D) 9%

○ A ○ B ○ C ○ D

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110) **Which of the following is the smallest one in magnitude?**

A) One metre
B) One fermi
C) One millimetre
D) One angstrom

○ A ○ B ○ C ○ D

111) **The percentage error in the measurement of time period "T" and length "L" of a simple pendulum are 0.2% and 2% respectively, the maximum % age error in LT^2 is:**

A) 4.2%
B) 1.8%
C) 2.2%
D) 2.4%

○ A ○ B ○ C ○ D

112) **Which one of the following is not a unit of length?**

A) Angstrom
B) Micron
C) Radian
D) Light year

○ A ○ B ○ C ○ D

113) **What is the SI base unit of constant k in the equation F = k r v (where symbols have their usual meanings)?**

A) kg m^{-1} s^{-1}
B) kg m s
C) kg^{-1} m^2 s
D) kg m^2 s^2

○ A ○ B ○ C ○ D

114) **Which of the following is a smallest value?**

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○ A ○ B ○ C ○ D

114) **Which of the following is a smallest value?**

A) 1 mm × 1 pm
B) 1 Gm × 1 Em
C) 1 cm × 1 km
D) 1 nm × 1 m

○ A ○ B ○ C ○ D

115) **A mass m has acceleration a, it moves through a distance s in time t. The power used in accelerating the mass is equal to the product of force and velocity. The percentage uncertainties are 0.1% in m, 1% in a, 1.5% in s, 0.5% in t. What is the percentage uncertainty in power?**

A) 2.1%
B) 2.6%
C) 3.1%
D) 4.1%

○ A ○ B ○ C ○ D

PREVIOUS FINISH TEST NEXT

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116) **Directions: Read each sentence and determine the meaning of the word using cross sentence clues or your prior knowledge.**

I thought his conscience was alive, but it turned out that he had no <u>qualms</u> about morality.

A) Homogeneity
B) Peculiarity
C) Commencement
D) Compunction

○ A ○ B ○ C ○ D

117) **The entire family spent the next several weeks making daily <u>excursions</u> to the nearby attraction.**

A) Expeditions
B) Detriments
C) Surveillances
D) Retrievals

○ A ○ B ○ C ○ D

118) **The dinghy <u>sailed</u> smoothly across the lake.**

A) Propelled
B) Flew
C) Navigated
D) Puffed

○ A ○ B ○ C ○ D

119) **Directions: Choose the most suitable answer that identifies the homophones in the sentence.**

A successful worker knows the art of maintaining coordination and _____ with his or her colleagues.

A) Amity
B) Enmity
C) Enormity
D) Anonymity

○ A ○ B ○ C ○ D

120) **The comic titbits of my friend energized the _____ aura of the gathering into joviality.**

A) Funeral
B) Collateral
C) Funereal
D) Unilateral

○ A ○ B ○ C ○ D

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121) **Alarms were heard just before the _____ depot started resounding with explosions.**

A) Ordnance
B) Ordinance
C) Assonance
D) Consonance

○ A ○ B ○ C ○ D

122) **Direction: Choose the word that is most nearly SIMILAR in the meaning of the following word.**

ALAS
A) Woe
B) Wow
C) Wove
D) Hurrah

○ A ○ B ○ C ○ D

123) **CAPTIVATED**
A) Disenchanted
B) Meadow
C) Mesmerized
D) Isomerized

○ A ○ B ○ C ○ D

124) **DISPUTE**
A) Equity
B) Amicability
C) Altercation
D) Indulgence

○ A ○ B ○ C ○ D

125) **HEARSAY**
A) Benediction
B) Heresy
C) Tattle
D) Rattle

○ A ○ B ○ C ○ D

126) **JUBILANT**

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126) **JUBILANT**
A) Exultant
B) Resultant
C) Centennial
D) Euphemistic

○ A ○ B ○ C ○ D

127) **SAGGED OFF**
A) Decomposed
B) Extolled
C) Languished
D) Lionized

○ A ○ B ○ C ○ D

128) **ZEST**
A) Fest
B) Gusto
C) Behest
D) Conquest

○ A ○ B ○ C ○ D

129) **Directions: Choose the word that is most <u>OPPOSITE</u> in the meaning of the following word.**

GLISTENING
A) Glorifying
B) Listening
C) Glimmering
D) Murky

○ A ○ B ○ C ○ D

130) **HAGGARD**
A) Plush
B) Ebullient
C) Faggot
D) Braggart

○ A ○ B ○ C ○ D

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131) **JUVENILE**
A) Jovial
B) Uncouth
C) Withering
D) Exuberant

○ A ○ B ○ C ○ D

132) **MINIATURE**
A) Dim
B) Gargantuan
C) Unkempt
D) Raggedy

○ A ○ B ○ C ○ D

133) **SUBSEQUENTLY**
A) Uninterruptedly
B) Later
C) Formerly
D) After

○ A ○ B ○ C ○ D

134) **SUCCULENT**
A) Moist
B) Indulgent
C) Parched
D) Delicious

○ A ○ B ○ C ○ D

135) **VULNERABLE**
A) Proposed
B) Defenseless
C) Impervious
D) Exposed

○ A ○ B ○ C ○ D