23. _____ of everything is bad
A. deficiency B. Moderation C. Excess D. None of these
24. A s the crow is so the _____ shall be.
A. Eggs B. Children C. Embryo D. None of these
25. Hard work is the _____ to success
A. Lock B. Key C. Door D. Window

PHYSICS

26) The device or circuit used to convert A.C. into D.C. is called:
(a) An amplifier (b) Rectifier (c) Filter circuit (d) Transistor
27) The work done by friction is:
(a) Positive (b) Negative (c) Zero (d) None of these
28) S.I unit of frequency is:
(a) Radian (b) ms^{-1} (c) Sine wave (d) Hertz
29) The time period of a second pendulum is:
(a) 2 seconds (b) 4 seconds (c) 6 seconds (d) None of these
30) When angle between force and displacement is zero, the work done on a body is:
(a) Zero (b) Maximum (c) Minimum (d) None of these
31) Simple harmonic motion is also called:
(a) Periodic motion (b) Random motion (c) Projectile motion (d) None of these
32) Holes can exist in:
(a) Conductors (b) Semiconductors (c) Insulators (d) All of these
33) An AND gate is used to:
(a) Add binary numbers (b) Subtract binary numbers
(c) Divide binary numbers (d) Multiply binary numbers
34) The direction of a vector in space is specified by:
(a) One angle (b) Two angles (c) Three angles (d) No angle
35) Mass attached to a spring executes:
(a) Simple harmonic motion (b) Rotational motion (c) Non-harmonic motion (d) None of these
36) The diameter of a lens is called:
(a) Focal Length (b) Principle axis (c) Aperture (d) Radius of lens
37) The least distance of distinct vision for a normal eye is:
(a) 15 cm (b) 25 cm (c) 30 cm (d) 40 cm
38) The current passing through a metallic conductor is due to the motion of:
(a) Atoms (b) Molecules (c) Ions (d) Electrons
39) A semiconductor works as:
(a) Good conductor (b) Good insulator
(c) Partially conductor and partially insulator (d) None of these
40) Energy required by an electron to move from ground state to higher energy state is called:
(a) Ionization potential (b) Excitation potential (c) Ionization energy (d) Excitation energy
41) Which of the following explains the particle nature of light?
(a) Interference (b) Diffraction (c) Polarization (d) Photoelectric effect
42) The energy of a photon is given by:
(a) $E = m_0c^2$ (b) $E = V_0e$ (c) $E = hf$ (d) $E = \frac{mv^2}{2}$
43) The fourth state of matter is called:
(a) Gas (b) Plasma (c) Vaporization (d) None of these
44) The ability of a body to return to its original shape is called:
(a) Elasticity (b) Elastic force (c) Stress (d) Plasticity
45) Which of the following are electromagnetic waves?
(a) Sound waves (b) Water waves (c) Matter waves (d) Light waves
46) Momentum of a photon is
(a) $\frac{h}{\lambda}$ (b) $\frac{\lambda}{h}$ (c) $\frac{h}{f}$ (d) $\frac{hc}{\lambda}$
47) In the equation PV= nRT, the constant of proportionality R is known as:
(a) Universal gas constant (b) Gas constant (c) Ideal gas factor (d) Gas index
48) Silicon is a:
(a) Semiconductor (b) Good conductor (c) Good insulator (d) None of these
49) An insulator has:
(a) Completely filled valence band (b) Half-filled valance band
(c) Empty valance band (d) None of these

Which of the following is the most suitable material for the core of a transformer?
(a) Soft iron (b) Alnico (c) Steel (d) Cobalt

CHEMISTRY

51) Values of Charle's law constant K depends upon
(a) mass of gas (b) pressure gas (c) no of moles of gas (d) all above
52) The force of attraction between the atoms of helium is
(a) hydrogen bonding (b) coordinate covalent bond (c) covalent bond (d) london dispersion force
53) Boiling point is low for liquid with
(a) high vapour pressure at given temperature (b) low vapour pressure at a given temperature
(c) very high vapour pressure (d) very low vapour pressure
54) Crystal lattice of substance can be catagorised into
(a) five types (b) seven types (c) six types (d) none of these
55) Orbitals having same energy are called
(a) hybrid orbitals (b) valence orbitals (c) degenerate orbitals (d) d orbitals
56) Alpha particles are identical to
(a) hydrogen atoms (b) helium atoms (c) helium nuclei (d) fast moving electrons
57) The number of atoms present in a molecule determine its
(a) molecularity (b) basicity (c) acidity (d) atomicity
58) Mass spectrometer separates different positive isotopic ions on the basis of their
(a) mass value (b) m/e value (c) e/m value (d) charge value
59) Percentage of oxygen in H_2O is
(a) 80% (b) 88.8% (c) 8.8% (d) 9.8%
60) The largest number of molecules are presenting
(a) 3.6 gram of H_2O (b) 4.8 gram of C_2H_5OH (c) 2.8 gm of CO (d) 5.4 gms of N_2O_5
61) Solvent extraction is an equilibrium process and it is controlled by
(a) law of mass action (b) the amount of solvent used (c) distribution law (d) the amount of solute
62) In the Bohr's model of atom the electron in an energy level emits or absorbs energy only when it
(a) remains in the same energy level (b) dies out (c) changes its energy level (d) jumps away
63) Which of the following colours has the shortest wavelength in the visible spectrum of light
(a) red (b) blue (c) violet (d) green
64) A dual character of matter particles in motion was postulated by
(a) De-Broglie (b) Planck (c) Einstein (d) Schrodinger
65) The IUPAC name of iso-octane is
(a) 2,4,4-Trimethyl pentane (b) 2,2,3- Trimethyl pentane
(c) 2,2,4- Trimethyl pentane (d) 2,3,3-Trimethyl pentane
66) The Raney nickel is prepared by treating _____ with NaOH
(a) Ni-Pb (b) Ni-Al (c) Ni-Ag (d) Ni-Cu
67) Which of the following compound reacts slower than benzene in electrophilic substitution?
(a) Phenol (b) Aniline (c) Nitro Benzene (d) Toluene
68) The group that deactivates the benzene ring for electrophilic substitution?
(a) Amino (b) Methyl (c) Chlorine (d) Hydroxy
69) Aldol Condensation occur between
(a) two aldehydes (b) two ketones (c) an aldehyde & an ketone (d) all of these
70) Which of the following quantum numbers describes shape of an electron in an atom
(a) principal quantum (b) azimuthal quantum (c) magnetic quantum (d) spin quantum
71) Most of the elements are
(a) Crystalloids (b) Metalloids (c) Metals (d) Non-Metals
72) The total number of elements in S-block is
(a) 24 (b) 14 (c) 34 (d) 04
73) Which of the following has highest melting point?
(a) Aluminium (b) Sulphur (c) Silicon (d) Phosphorus
74) Which nobel gas is present on the earth due to radioactive decay?
(a) Rn (b) Xe (c) Kr (d) Ar
75) Which part of the atmosphere is near to earth
(a) Mesosphere (b) Troposphere (c) Stratosphere (d) Thermosphere

BIOLOGY

76) The idea that new cells originate from pre-existing cells was proposed by
a) Robert Brown b) Rudolph Virchow c) Louis Pasteur d) August Weismann
77) The spherical or tubular membranes of Endoplasmic reticulum are called
a) Cristae b) Thylakoid c) Matrix d) Cisternae
78) The chromosome number in potato
a) 48 b) 46 c) 23 d) 50

79) In five kingdom classification, all unicellular prokaryotes are placed in the kingdom
a) Protista b) Plantae c) Monera d) Eukaryote

80) When bacteria divides in three plains producing a bundle of 8 cells, the structure so formed is called
a) Tetrad b) Sarcina c) Cocci d) Bacilli

81) The bacteria obtaining food by oxidizing inorganic compounds like ammonia
a) Photosynthetic b) Oxidative c) Chemosynthetic d) Anaerobic

82) The actinopods move by
a) Pseudopods b) Flagella c) Pilli d) Cilia

83) A plant body which is not differentiated into true root, stems and leaves
a) Protoplasma b) Filament c) Shoot d) Thallus

84) The formulation of hypothesis where we move from general reasoning to specific
a) Inductive reasoning b) Deductive reasoning c) Conducive reasoning d) Progressive reasoning

85) Removal of environmental pollutants or toxic metals by living organisms like bacteria and plants
a) Phytoremediation b) Bioreclamation c) Detoxification d) Bioremediation

86) A group of carbohydrates containing 3 to 10 monosaccharaides in straight or branch chains
a) Trisaccharides b) Polysaccharides c) Oligosaccharides d) Starches

87) According to Erwin Chargaff (1951) the ratio of A and T is
a) Adenine is double to Thiamine b) Thiamine is double to Adenine
c) Adenine equals to Thiamine d) None of these

88) The "Lock and Key Model" of enzyme activity was proposed by
a) Emil Fisher b) Koshland c) Erwin Chargaff d) Rosalind Franklin

89) In fungi, the nuclei are usually
a) Diploid b) Triploid c) Haploid d) Tetraploid

90) The outer part of a flower, consisting of the calyx and corolla
a) Bracket b) Perianth c) Sepals d) Androecium

91) The arrangement of flowers on floral axis is known as
a) Inflorescence b) Phyllotaxy c) Capitulum d) Panicle

92) The flagellated cells found in parazoans helping in digestion of food material
a) Oocytes b) Cilia c) Choanocytes d) Trichomes

93) The synthesis of ATP in the presence of oxygen is called
a) Oxidative phosphorylation b) Chemiosmosis c) Electron transport chain d) Reductive phosphorylation

94) Tiny thin walled ducts in the lungs of birds opened at both ends are called
a) Operculum b) Trachea c) Alveoli d) Para-bronchi

95) The pathway of water movement in plants through cell wall
a) Symplastic b) Vacuolar c) Apoplastic d) Trans-membrane

96) The exchange of parts of non-sister chromatids of homologues chromosomes during meiosis is called
a) Crossing over b) Recombinant DNA c) Plasmid d) Non-disjunction

97) The metabolic wastes in human body are detoxified in
a) Heart b) Pancreas c) Kidney d) Liver

98) The first carbon compound which enters Krebs' cycle is
a) Succinate b) Pyruvate c) Acetyl Co-A d) Malate

99) The ATP generation power-house of the cell through respiration is
a) Chloroplast b) Golgi Complex c) Lysosomes d) Mitochondria

100) Animals feeding on plants are called
a) Detritivores b) Herbivores c) Omnivores d) Carnivores

1.D
2.C
3.B
4.B
5.B
6.C
7.B
8.B
9.C
10.B
11.B
12.C
13.A
14.C
15.B
16.B
17.D
18.B
19.B
20.D
21.B
22.B
23.C
24.A
25.B
26.B
27.B
28.D
29.A
30.B
31.A
32.B
33.D
34.C
35.A
36.C
37.B
38.D
39.C
40.D
41.D
42.C
43.B
44.A
45.D
46.A
47.A
48.A
49.D
50.A
51.D
52.D
53.A
54.B
55.C
56.C
57.D
58.C
59.B
60.A
61.C
62.C
63.C
64.A
65.C
66.B
67.C
68.C
69.A
70.B
71.C
72.B
73.C
74.A
75.B
76.B
77.D
78.A
79.C
80.B
81.C
82.A
83.D
84.B
85.D
86.C
87.C
88.A
89.C
90.B
91.A
92.C
93.A
94.D
95.C
96.A
97.D
98.C
99.D
100.B