1. **ADENOVIRUS**: A family of double stranded DNA-containing viruses, commonly known as adenoviruses that infect mammals and birds.

2. **AETIOLOGY**: The science and study of the causes of disease and their mode of operation.

3. **BENIGN**: Denoting the mild character of an illness or the non-malignant character of a neoplasm.

4. **BENZO(A)PYRENE**: $C_{20}H_{12}$. A Polynuclear (Five Ring) Aromatic Hydrocarbon. Found in Coal Tar, Cigarette Smoke, and in the Atmosphere as a product of Incomplete Combustion. Occurs as Benzo(a)pyrene and Benzo(e)pyrene. Benzo(a)pyrene is an Active Carcinogen. Toxic by Inhalation.

5. **CANCER**: A general term frequently used to indicate any of various types of malignant neoplasms, most of which invade surrounding tissues, may metastasize to several sites, and are likely to recur after attempted removal and to cause death of the patient unless adequately treated.

6. **CARCINOGENS**: Any cancer-producing substance. The most potent cancer-producing substances including those isolated from coal tar, are polycyclic aromatic hydrocarbons.
7. CARCINOMA: Any of the various types of malignant neoplasm derived from epithelial tissue in several sites, occurring more frequently in the skin and large intestine in both sexes, the bronchi, stomach and prostate gland in men, and the breast and cervix in women.

8. CHROMOSOME: One of the bodies (normally 46 in man) in the cell nucleus that is bearer of genes; it has the form of a delicate chromatin filament during interphase, contracts to form a compact cylinder segmented into two arms by the centromere during metaphase and anaphase stages of cell division, and is capable of reproducing its physical and chemical structure through cell division.

9. CYCLAMATE: A salt or ester of cyclamic acid. For example, Calcium cyclamate, Sodium cyclamate etc. .

10. DI-OXYRIBO NUCLEIC ACID (DNA): Any of the class of nucleic acids that contains deoxyribose, found chiefly in the nucleus of cells, and that functions in the transference of genetic characteristics and in the synthesis of protein.

11. ELASTIC COLLISION: Such collision that no change in the total energy or momentum takes place.

12. ENZYME: A protein, secreted by cells, that acts as a catalyst to induce chemical changes in other substances, itself remaining apparently unchanged by the process.
13. **EPIDEMIOLOGY**: The study of the prevalence and spread of disease in a community.

14. **EPIGENETIC**: Relating to epigenesis: that is, the theory that the offspring is developed as a result of the union of the ovum and sperm. It is an anti-thesis to the old preformation theory that a new individual existed in miniature encased in the ovum (as believed by ovists) or in the sperm (as believed by homunculists), and merely unfolded and enlarged in the body if the female parent.

15. **FRECKLE**: Yellowish or bronwish macules developing on the exposed parts of the skin, especially in persons of light complexion; the lesions increase in number on exposure to the Sun and the epidermis is microscopically normal except for increased melanin.

16. **GENOME**: (i) A complete set of chromosomes derived from one parent, the haploid number of a gamete.

(ii) The total gene complement of a set of chromosomes found in higher life forms, of the functionally similar but simpler linear arrangements found in bacteria and viruses.

17. **GLUCOSE 6-PHOSPHATE DEHYDROGENASE (G6PD)**: A pyridinoenzyme (NADP) as co-enzyme catalyzing the dehydrogenation (oxidation) of glucose 6-phosphate to 6-phosphogluconolactane, the reaction initiating the Dickens shunt.
18. HEREDITARY: Transmitted from parent to offspring; derived from ancestry; obtained by inheritance.

19. HISTOGENESIS: Histogens; the origin of tissue; the formation and development of the tissue of the body.

20. HOMEOSTATIC: Relating to homeostasis; that is,

   (i) The state of equilibrium (balancing between opposing pressures) in the body with respect to various functions and to the chemical composition of the fluids and tissues,

   (ii) The processes through which such bodily equilibrium is maintained.

21. HOMOLOGOUS: Corresponding or alike in certain critical attributes:

   (i) In Biology or Zoology, of organs or parts corresponding in evolutionary origin and similar to some extent in structure, but not necessarily in function;

   (ii) In Chemistry, of a single chemical series, differing by fixed increments;

   (iii) In Genetics, of chromosomes or chromosome parts identical with respect to genetic loci;

   (iv) In Immunology, of serum or tissue derived from members of a single species, of an antibody with respect to the antigen that produced it;

   (v) In Mathematics, of certain geometric properties.
22. **HORMONE**: A chemical substance, formed in one organ or part of the body and carried in the blood to another organ or part. Depending on the specificity of their effects, hormones can alter the functional activity, and some times the structure, of just one organ or various numbers of them. A number of hormones are formed by ductless glands, secretin and pancreozymin, formed in the gastrointestinal tract, by definition are also hormones.

23. **HYPERPLASTIC**: Relating to hyperplasia: Numerical or quantitative hypertrophy; an increase in number of cells in a tissue or organ, excluding tumor formation, whereby the bulk of the part or organ is increased.

24. **IN-ELASTIC COLLISION**: A collision in which, there is a change in the total energies of the particle concerned. This results from excitation or de-excitation of one (or both) of the particles involved.

25. **INFECTION**: Endoparasitism; multiplication of parasitic organisms within the body. Multiplication of bacteria of the 'normal' flora of the intestinal tract is not usually viewed as being an infection, whereas multiplication of other organisms, vibrio cholerae, is so viewed.

26. **INFILTRATION**: (i) The act of passing into or interpenetrating a substance, cell, or tissue; said of gases, fluids, or matters held in solution.
(ii) The gas, fluid, or dissolved matter that has entered any substance, cell or tissue.

27. **INTERPHASE**: Interkinesis; karyostasis; the stage between two successive divisions of a cell nucleus; the stage in which the biochemical and physiologic functions of the cell are performed. Replication of chromatin occurs at this phase.

28. **IONIZE**: To separate into ions; to dissociate atoms in molecules into electrically charged atoms or radicals.

29. **LATENT PERIOD**: (i) The period that elapses before the presence of a disease is manifested by symptoms.
(ii) The lag between stimulus and reaction.

30. **LESION**: A wound or injury; a pathologic change in the tissue; one of the individual points or patches of multifocal disease.

31. **LEUKAEMIA**: Leukocytic sarcoma; progressive proliferation of the abnormal leukocytes found in haemopoietic tissues, other organs, and usually in the blood in increased numbers. Leukaemia is classified by the dominant cell type, and by duration from onset to death. This occurs in acute leukaemia within a few months in most cases, and is associated with symptoms that suggest acute infection, with severe anaemia haemorrhages, and slight enlargement of lymphnodes or the spleen. The duration of chronic
leukaemia exceeds one year, with a gradual onset of symptoms of anaemia or marked enlargement of spleen, liver or lymphnodes.

32. LYMPHNODE: Lymphnode or gland; nodus lymphaticus; one of numerous round, oval or bean-shaped bodies located along the course of lymphatic vessels. They vary greatly in size (1 to 25 mm in diameter) and usually present a depressed area, the hilium, on one side through which blood vessels enter and efferent lymphatic vessels emerge. The structure consists of a fibrous capsules and internal trabeculae supporting lymphoid tissue and lymph sinuses. The lymphoid tissue is arranged in nodules in the cortex and cords in the medulla of a node. Afferent vessels enter a node at many points of its periphery.

33. MALIGNANT: (i) Resistant to treatment; occurring in severe form, and frequently fatal; tending to become worse and lead to an ingravescent course.

(ii) In reference to a neoplasm, having the property of locally invasive and destructive growth and metastasis.

34. MAMMARY: Relating to breasts.

35. METABOLISM: Tissue change; the sum of the chemical changes occurring in tissue, consisting of anabolism, or those reactions that convert small molecules into large (e.g. amino acids to proteins), and catabolism, or those
reactions that convert large molecules into small (e.g. glycogen to pyruvic acid), including both endogeneous large molecules as well as biodegradation of drugs and other xenobiotics.

36. METASTASIS: (i) The shifting of a disease, or its local manifestations, from one part of the body to another, as is seen in mumps when the symptoms referable to the parotid gland subside and the testis become affected.

(ii) In cancer, the appearance of neoplasms in parts of the body remote from the seat of the primary tumor; it results from the dissemination of tumor cells by the lymphatics or blood vessels or through serious cavities or subarachnoid or other spaces, and if widespread usually renders the cancer incurable by surgery alone.

37. METHYL CHOLANTHERENE: A polynuclear hydrocarbon with formula C_{21}H_{16} derived from bile acids via., 1,2-benzanthracene, one of the most powerful carcinogenic agent known.

38. MITOSIS: Karyokinesis; karymitosis; mitotic or indirect nuclear division; the usual process of cell reproduction consisting of a sequences of modifications of the nucleus (prophase prometaphase, metaphase, anaphase, telephase) that result in the formation of two daughter cells with
42. **NITROFURAN**: Antimicrobials (e.g. nitrofurazone) effective against Gram-positive and Gram-negative organisms.

43. **ONCOGENE**: Transforming gene; a viral retroviruses, that may transform the host cell to a neoplastic phenotype but is not required for viral replication.

44. **PATHOGENESIS**: Pathogens; nosogenesis, the mode of origin or development of any disease or morbid process.

45. **POLYCYCLIC AROMATIC HYDROCARBON DIBENZANTHRACENE (PAH)**: An organic compound with mutagenic property and is a known substance to cause carcinogenesis when exposed to it.

46. **PAPILLOMA**: Papillary tumor; villoma; a circumscribed benign epithelial tumor projecting from the surrounding surface; more precisely a benign epithelial neoplasm consisting of villous or arborescent outgrowths of fibrovascular stroma covered by neoplastic cells.

47. **PAPOVAVIRUS**: Any virus of the family Papoviridae; that is a family of small, antigenically distinct viruses that replicate in nuclei of infected cells; most have oncogenic properties. Virions are 45 to 55 nm in diameter, non-enveloped, ether-resistant; capsids are icosahedral with 72 capsomeres, and they contain double-stranded DNA.
(molecular weight 3 to 5 \times 10^6). The family comprises the genera Papilloma virus and Polyoma virus.

48. **PHENOL**: Phenyl alcohol; phenic acid; carabolic acid; C₆H₅OH; an antiseptic and disinfectant. It occurs in the form of colourless crystals, and is liquified by the addition of 10% of water; it is locally escharotic; in concentrated form and neurolytic in 3 to 4% solutions. Internally it is a powerful escharotic poison (Olive oil recommend as an antidote).

49. **PHENOBARBITAL**: Phenobarbitone; phenylethmalonylurea; phenylethylbarbituric acid; CO(NHCO)₂(C₂H₅)(C₆H₅); a long acting oral or parenteral sedative and hypnotic; slightly soluble in water.

50. **PHORBOL**: The parent alcohol of tumor-producing compounds in croton oil. A carcinogenic agent.

51. **PHYSIOLOGY**: The science concerned with living things, with the normal vital processes of animal and vegetable organisms.

52. **POLYPOSIS COLI**: Presence of multiple intestinal polyps. Polyposis of the colon characterized by polyps of the mucosa, with no associated lesions, which benign to form usually in late childhood, increase numbers, and may carpet the mucosal surface; there are symptoms of the chronic colitis, and carcinoma of the colon almost invariably
develops in untreated cases; autosomal; dominant inheritance.

53. **PRECURSOR**: Anything that precedes another or from which another is derived, applied especially to a physiologically inactive substance that is converted to an active enzyme, vitamin, hormone, etc. or to a chemical substance that is built into a larger structure in the course of synthesizing the latter.

54. **PROLIFERATION**: Growth and reproduction of similar cells.

55. **PROTEINS**: Proteid; protid; macromolecules consisting of long sequences of α-amino acids \([R-\text{CH(NH}_2\text{-COOH})]\) in peptide linkage (elimination of \(H_2O\) between the 2-\(\text{NH}_2\) and 1-\(\text{COOH}\) of successive residues). Proteins three-fourths of the dry weight of most cell matter, and various proteins involved are generally the 20 common α-amino acids. Cross-links yielding globular forms of proteins are often effected through the -SH groups of the sulfur-containing amino acids as well as by non-covalent forces (hydrogen bonds, lipophilic attractions, etc.).

56. **PULMONARY**: Pneumonic; pulmonic relating to lungs, to the pulmonary artery, or to the aperture leading from the right ventricle into the pulmonary artery.

57. **PYRIMIDINE**: One of a group of basic compounds found in living matter. They may be isolated following complete
hydrolysis of nucleic acids. They include uracil, thymine,
cytosine, and methylcytosine. Thiamine is also a
pyrimidine derivative. Other pyrimidines such as alloxan
and thiouracil are important in Medicine and Biochemical
research.

58. RADIATION: A process by which heat may be transferred from
a source to a receiver without heating of the intervening
medium or without the existence of a material medium,
e.g. heat received by the earth from the Sun. The sending
forth of light, short radio waves, ultraviolet or X-rays,
or any other rays for treatment or diagnosis or for other
purpose.

59. RADIO-ACTIVE DECAY: Relating to radio-active atom; that is
one which decays into another species by emission of an α-
or β-ray (or by electron capture). Activity may be natural
or induced.

60. RETROVIRUS: Any virus of the family Retroviridae;
characterized by the presence of reverse transcriptase. A
family of viruses resembling the orthomyxoviruses in size
and shape, but structurally more complex; they possess
RNA-dependent DNA polymerases (reverse transcriptases) and
are grouped in three subfamilies: Oncovirinae (RNA tumor
viruses), Spumavirinae (foamy viruses), and Lentivirinae
(visna and related agents). Virions are about 100 nm in
diameter, enveloped, and ether-resistant, and contain 
segmented, single-stranded RNA of high molecular weight 
(5 to 10 \times 10^6); they also contain traces of DNA.

61. **RIBO NUCLEIC ACID (RNA)**: A macromolecular consisting of 
ribonucleotide residue connected by phosphate from the 
3'hydroxyl of one to the 5'hydroxyl of the next nucleotide 
(thus a polynucleotide of biologic origin); found in all 
cells, in both the nuclei and cytoplasm and in particulate 
and non-particulate form, and also in many viruses. Various 
fractions are identified by location, form, or function as 
aminoacyl-transfer RNA, informational RNA, messenger RNA, 
nuclear RNA, ribosomal RNA, and soluble RNA.

62. **SACCHARIN**: Benzosulfimide; o-sulfobenzimide; 2,3-dihydro-
3-oxobenzisoslfonazole; in dilute aqueous solution it is 
300 to 500 times sweeter than sucrose; used as a sweetening 
agent (sugar substitute).

63. **SPECIES**: (i) A biological division between the genus and a 
variety or the individual; a group of organisms which 
generally bear a close resemblance to one another in the 
more essential features of their organization, and with 
sexual forms which produce fertile progeny. 

   (ii) A class of pharmaceutical preparations consisting 
of a mixture of dried plants not pulverized, but in
sufficiently fine division to be conveniently used in the making of extemporaneous decoctions or infusions; a tea.

64. STRAIN: (i) A race of stock; in bacteriology, the set of descendants that originates from a common ancestor and characteristics of the ancestor; members of a strain that subsequently differ from the original isolates are regarded as belonging either to a substrain of the original strain, or to a new strain.

(ii) The change in shape that a body undergoes when acted upon by an external force.

(iii) To filter; to percolate.

65. SUSCEPTIBLE: Capable of getting a disease; deficient in defences against a disease.

66. TISSUE: A collection of similar cells and the intercellular substances surrounding them. There are four basic tissues in the body. (i) epithelium; (ii) the connective tissues, including blood, bone and cartilage; (iii) muscle tissue; and (iv) nerve tissue.

67. TOXIC EFFECT: (i) Of the nature of a poison; poisonous

(ii) Caused or produced by a poison; due to poisoning

68. TUMOR: (i) any swelling or tumefaction; one or the four signs of inflammation (tumor, calor, dolor, rubor) enunciated by Celsius.

(ii) Neoplasm.
69. **ULTRAVIOLET**: denoting the electromagnetic rays beyond the violet and of the visible spectrum.

70. **XERODERMA PIGMENTOSUM**: A mild form of ichthyosis characterized by an excessive dryness of the skin due to a slight increase of the horny layer and diminished cutaneous secretion. Atrophoderma pigmentosum; angioma atrophicum; an eruption of exposed skin occurring in childhood and characterized by numerous pigmented spots resembling freckles, larger atrophic lesions eventually by telangiectases, and multiple solar keratoses which undergoes malignant change at an early age; the condition results from a single-gene autosomal recessive disorder in which DNA repair processes are defective, with consequent hypersensitivity to the carcinogenic effect of the ultraviolet light.
SOURCES

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