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## GS SPECIAL MOCK TEST-18 (ANSWER KEY)

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

Note: If your opinion differ regarding any answer, please message the mock test and Question number to 8860330003

Note : If you face any problem regarding result or marks scored, please contact: 9313111777

## GS SPECIAL MOCK TEST- 18 (SOLUTION)

1. (D) The Aryans success can partly be attributed to the superiority of their technology, particularly weapon technology, over the people they conquered, namely the Dravidian people in South Asia. Te Aryans had advanced bronze weapons, later iron weapons and horse drawn bronze weapons, later iron weapons and horse drawn chariots with light spoked wheels. The native people the conquered at best had oxcarts and often only stone-age weapons.
2. (C) Metal currency was minted in India well before the Mauryan empire ( $322-185$ BC). The first India coins were minted around the 6th century BC by the Mahajanpadas of the Indo Gangetic plain. The coins of this period were punch marked Plain. The coins of this period were punch marked coins called Puranas, Karshapanas or Pana. Early coins of India (400 BC - 100 A.D.) were made of silver and copper, and bore animal and plant symbols on them.
3. (C) The earliest application to the formal division into four social classes appears in the late Rigvedic Purusha Sukta Which has the Brahman, Rajanya (Kshatriya), Vaishya and Shudra classes emerging from the mouth, arms, thighs and feet of the cosmic being, Purusha, respectively. It can be inferred that the barrier between castes was not impassable during this period for deserving cases, as can be seen from the example of Vishvamitra. The Varna system was, thus, merely based on occupations.
4. (C) Diagambara "sky-clad" is one of the two main sects of Jainism, the other being Svetambara. Generally, Digambara monks wear no clothes whereas Svetambara "White-Clad" monks usually wear white clothes.
5. (B) The first sermon Buddha gave to the five monks was called the Dhammacakkapavattana Sutta. It is also called the setting in Motion of the Wheel of Dharma.
6. (C) Some of the dynasties to have ruled Magadha were: Haryanka Kingdom (684424 BC); Shishunaga Kingdom (413-345 BC); Nanda Empire (424-321 BC); and Maurya Empire (321-184 BC).
7. (D) The Ajanta Caves in Aurangabad district of Maharashtra are about 30 rock-cut Buddhist cave monuments which data from the 2nd century BCE to about 480 or 650 A.D. The caves include paintings and seculptures are masterpices of Buddhist religious art, with figures of the Buddha and depictions of the Jataka tales. Most of the paintings belong to the VakatakaGupta Period.
8. (A) Firoz shah Tughlaq instituted economic policies to increase material welfare of his people. Many rest houses (sarai), gardens and tombs were built. A number of Madrasas were opened to encourage literacy. He set up hospitals for the free treatment of the poor
9. (B) Gandhi went to South Africa in 1893 but he was shocked to see raclsm. Prejudice and inequality against India citizens in South Africa and he established the natal Indian congress in 1894 and formed an Indian community in South Africa promulgated a new Act compelling registration of the colony's India population. At a mass protest meeting held in jonannesburg on 11 September that year, Gandhi adopted his still evolving methodology of Satyagraha (devotion to the truth), or non-violent protests, for the first time. In June 1907, he organized Satyagraha against compulsory registration of Asiatics (The Black Act). In 1908, Gandhiji had to stand trial for instigating the Satyagraha. He was sentenced to two months in jail (the first time), however after a compromise with General smuts he was released.
10. (C) Lord Dufferin was as eighth Viceroy of India in 1884. Among other things, the India National congress was founded during his term in 1885, and he laid the foundations for the modern Indian Army by establishing the Imperial Service Corps, officered by Indians.
11. (B) The Government of India Act 1935 made provision for the establishment of a "Federation of India" to be made up of both British India and some or all of the "princely states".
12. (A) Annie Besant was a prominent British socialist, Theosophist, women's rights activist, writer and orator and supporter of Irish and India self-rule who became
the president of the India National congress in late 1917.
13. (*) The Government of India Act, 1858 was an Act of the parliament of the United kingdom passed on August 2, 1858. Its provisions called for the Liquidation of the British East India company (who had up to this point been ruling British India under the aurpices of Parliament) and the transference of its functions to the British crown. The Act provided that the company's territories in India were to be vested in the Queen, the company ceasing to exercise its power and control over these territories. India was to be governed in the Queen's name.
14. (A) Lavani is a genre of music popular in Maharashtra and southern Madhya Pradesh, Karnataka and Tamil Nadu. Lavani is a combination of traditional song and dance, which particularly performed to the beats of Dholak, a percussion instrument. Lavani is noted for its powerful rhythm and erotic sentiment. Lavani has contributed substantially to the development of Marathi folk theater. In Maharashtra and southern Madhya Pradesh. it is performed by the female performers wearing nine-yard long saris.
15. (B) Quality is that characteristic of a musical sound which enables us to distinguish between the sounds produced by two different musical instruments or two different persons although their pitch and loudness may be same. It is because of this characteristic that we are able to recognize the voice of a known person over the telephone or to distinguish between the sounds produced by different musical instruments in an orchestra. The quality depends primarily on the waveform of the sound.
16. (A) Thomas Lauren Friedman is an American journalist, columnist and author. HE writes a twice-weekly column for The New York Times. Zubin Mehta; is an Indian Parsi conductor of western classical music. He is the Music conductor of western classical music. He is the Music Director for Life of the Israel Philharmonic Orchestra. Ismat Chugtai was an eminent Indian writer in Urdu, known for her indomitable spirit and a fierce feminist ideology. Jamini Roy was an Indian painter whose work has been exhibited extensively in international exhibitions and can be found in many
private and public collections such as the victoria and Albert Museum, London.
17. (A) Amrita Sher-Gil, was an eminent India painter born to a punjabi sikh father and a Hungarian mother. sometimes known as India's Frida Kahlo. and today considered an important woman painter of 20th century. T.N. Swaminathan Pillai was a flautist who revolutionized the style of flute-playing. Kalamandalam Krishnan Nair was one of the most renowned Kathakali artist of my time, and arguably the greatest in the history of the four-century-old classical dance-drama from Kerala in southern India. Padma Subrahmanyam is an Indian classical Bharathnrithyma dancer. She is also a research, choregrapher, music composer, musician teacher and author.
18. (D)
19. (C) The division of powers the federal nature of Indian Constitution.
20. (D) Under Indian parliamentary system, the nominal and the real executive powers are vested in two separate individuals.
21. (C)
22. (A) To deal with the situation under emergency, Indian constitution has provision of extra-ordinary powers to be bestowed upon the President.
23. (C) 5th Schedule - Provisions regarding the control and administration of scheduled and tribal regions.
6th Schedule - Provisions regarding the administration of the tribal regions of Assam, Meghalaya, Tripura and Mizoram.
24. (D) Article 31(b) is directly related to ninth schedule, Article 344 and 351 are related to the eighth schedule.
25. (A)
26. (C)
27. (D) The president (or the parliament) is not bound to obey the state legislature's opinion, it can accept or reject the opinion even if the opinion comes back within the prescribed time limit.
28. (D)
29. (B) The fundamental rights are aimed at establishing democratic political system in the country. While it is the aim of the Directive principles of the state policy to establish social and econoic democracy in this country.


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30. (B) Article 19(1) (b) - Right to assemble peacefully and without arms.
31. (A) The surface of the sun is called the photosphere. The photosphere is 340 miles thick and it's temperature is range from $5.500^{\circ} \mathrm{C}$ to $6,000^{\circ} \mathrm{C}$. It has dark spots called sunspots which are the only solar activity observable by the naked eye.
32. (D) One of the nicknames of Venus is "the Morning star" It is also known as the Evening star. Venus is called so because it appears brightest shortly before sunrise and shortly after sunset.
33. (A) An ecosystem is a community of living organisms (Plants, animals and microbes) in conjunction with the nonliving components of their environment (things like air, water and mineral soil). interacting as a system. These components are regarded as linked together through nutrient cycles and energy flows. They are biological system in the sense in that they represent recurring groups of biological communities that are found in similar physical environments and are influenced by similar dynamic ecological processess, such as fire or flooding.
34. (C) There are different types of interactions in the biotic community. Frog feed for snakes. Snakes are the main predators of frogs. The control over a prey is determined the level of competition faced from other predators. If the same prey is a prey of other predators. the control is considered to be lesser.
35. (C) Shipki la is a mountain pass and border post on the India-china border. The river Sutluj enters India through this pass. It is an offshoot of the ancient silk Road. It is located in Kinnapur district in the state of Himachal pradesh, India and Tibet Autonomous Region in People's Republic of China. The Pass is India's third border post for trade with china after Nathu La in Sikkim, and Lipulekh in Uttarakhand. The pass is close to town of Khab.
36. (B) The Panjshir Valley is a valley in northcentral Afghanistan, 150 km north of Kabul, near the Hindu Kush mountain range. Located in the Panjshir province it is divided by the Panjshir River. The valley is home to more than 140,000 people, including Afganistan's largest concertration of ethnic Tajiks. It literally mean 'Valley of the Five Lions.'
37. (A) The Ten Degree Channel is a channel
that separates the Andaman Islands from the Nicobar Islands in the Bay of Bengal. The two sets of islands together form the Indian Union Territory of Andaman and Nicrobar Islands. The Channel is approximately 150 km wide, running essentially along an east-west orientation. It is so named as it lies on the 10-degree line of latitude, north of equator.
38. (C) Length of coastline of India including the coastlines of Andaman and Nicobar Islands in the Bay of Bengal and Lakshadeep Islands in the Arabina sea is 7517 km . Length of Coastline of Indian mainland is 6100 km .
39. (C) K2 is th second-highest mountain of Earth, after Mount Everest. With a peak elevation of $8,611 \mathrm{~m}, \mathrm{k} 2$ is part of the Karakoram Range, and is located on the border between Baltistan, in the GiligitBaltistan, in the Gilgit-Baltistan region of Pakistan, and the Taxkorgan Tajik Autonomous Country of Xinhiang, China, K2 is known as the savage Moutain due to the difficulty of ascent and the secondhighest fatality rate among the "eight thousanders" for those who climb it.
40. (B) Konkan Railway runs from Mangalore in Karnataka to Roha in Maharashtra through Goa. along the west coast of India and western Ghats. Its Line length is 738 km ; and Track length is 738 km . The route is a single-line track, and is not electrified. Although it has been designed for high-speed traffic of 160 kilometres per hour, the fastest train on the route, the Trivandrum Rajdhani Express, at present runs at a maximum speed of 110 Kilometres per hour. The route is open to both freight and passenger traffic. The line, which runs parallel to the Arabian Sea coast-line offers some of the most spectacular views of and Indian rail journey. The Konkan railway route intersects national highway NH-17 at many places.
41. (C) A mushroom rock, also called rock pedestal or a pedestal rock, is naturally occurring rock whose shape, as its name imples, strikingly resembles a mushroom. Usually found in deseart area, these rocks are formed over thousands of years when wind erosion of an isolated rocky outcrop progesses at a different rate at its bottom to that at its top. Such rocks are found in Thar Desert of India.
42. (A) Badlands are area of severe erosion. Usually found in semiarid climates and charaterized by countless gullies, steep ridges, and spare vegatation. Badland topography is formed on poorly cemeted sediments that have dw deep-rooted plants because short, heavy showers seep away surface soil and small plants, Depressions gradually deepen into gullies. Badland topography is a characteistic feature of the Chambal valley, whereas Kankar has extensively developed in the older alluvium.
43. (C) The Tethys Ocean was an ocean that existed between the continents of Godwana and Laurasia during much of the Mesozoic era, before the opening of the Indian and Atlantic oceans during the Cretaceous period. Today, India, pakistan, Indonesia, and the Indian Ocean cover the area once occupied by the Tethys Ocean, and Turkey, Iraq, and Tibet sit on Cimmeria. What was once the Tethys Sea has become the Mediterranean Sea. Geologists have found fossils of ocean cretures in rocks in the Himalayas, Indicating that those rocks were once underwater, before the India continental shelf began pushing upward as it smashed into Cimmeria.
44. (D) The Channel Tunnel is a 50.5 -Kilometre (undersea rail tunnel linking Folkestone, Kent, in the United Kingdom with Coquelles, Pas-de-calais, near calais in northern France beneath the English Channel at the strait of Dover. At its lowest point, it is $75 \mathrm{~m}(250 \mathrm{ft})$ deep. At 37.9 Kilometres, the Channel Tunnel posesses the longest undersea portion of any tunnel in the world, although the seikan Tunnel in Japan is both longer overall at 53.85 kilometres.
45. (A) Belgium is usually called as th cockpit of Europe. Belgium, officially the kingdom of Beguim, is a state in Western Europe. Belgium is so called because it has been the site of more European battles than any other country: for example, Oudenarde, Ramilies, Fontenoy, Fleurus, Jemmapes, Ligny, Quartre Bras, waterloo.
46. (B) The Garden of Eden is the biblical "garden of God", described most notably in the Book of Genesis (Genesis 2-3), but also mentioned, directly or indirectly, in Ezekiel, Isaiah and elsewhere in the Old testament, The Eden of Genesis has been variously located at the headwaters of the

Tigris and Euphrate in northern Iraq, in Africa, and in the Persian Gulf. The Eden in Ezekiel, however, is unequivocally translated as Ethiopia, which was also known as cush, but in this case thought to be referring to Cossaea, a Greek name for Elam, immediately to the east of ancient Babylon, which, unlike Ethiopia, does lie within the region being described.
47. (C) Currenly, the tallest dam in the world is the Nurek Dam, an embankment dam in Tajikstan at 300 m high. The tallest arch dam is the recently completed 292 m high Xiaowan Dam in China. For gravity dams, the tallest is the 285 m high Grande Dixence Dam in Switzerland. When completed, a 335 m tall Rogun Dam also in Tajikistan could be the tallest, depending on the choose design. Next in line is the 312 m shuangjiangkon Dam currently under construction in china. Natural landslide dams are also quite competitive in height but not listed here. In particular, the highest existing manmade one. The Bhakra Dam is a concrete gravity dam across the sutlej River, and is near the border between Punjab and Himachal Pradesh in northern India. The dam at ( 226 m ), is one of the highest gravity dams in the world (compared to USA's largest Hoover Dam at 743 ft ).
48. (A) The Sahara is the world's hottest desert, the third largest desert after Antarctica and the Arctic. At over 9,400,000 square kilometres, it covers most of North Africa, making it almost as large as China or the United states. The Sahara stretches from the Red Sea, including parts of the Maditeranean coasts, to the outskirts of the Atlantic Ocean. To the south, it is delimited by the sahel, a belt of semi-arid tropical savanna that composes the northern region of central and western sub-saharan Africa.
49. (B) This Statement is about the Central Asian Steppes. Central Asia is the core region of the Asian continent and stretches from the caspian Sea in the west to China in the east and from Afghanistan in the west to China in the east and from Afghanistan in the south to Russia in the north. It is also sometimes referred to as Middle Asia, and, colloquially, "the stans" (as the five countries generally considered to be within the region all have names ending with the persian suffix "stan", meaning
"land of) and is within the scope of the wider Eurasian continent. Central Asia has historically been closely tied to its normadic peoples and the silk Road. Central Asia has the following geographic extremes: world's northermost desert (sand dunes), at Buurug Deliin Els. Mongolia; the Northern Hemisphere's southernmost permafrost: 770 km ; and the Eurasion pole of inaccessibility. A majority of the people earn a living by herding livestock, Industrial activity centers in the region's cities.
50. (A) The main cause of total clearance are agriculture and in drier areas, fuelwood collection. The main cause of forest degradation is logging. Mining, industrial development and large dams also have a serious impact. tourism is becoming a larger threat to the forest. The United Nation's Food and Agriculture Organisation estimates that '1.5 billion of the 2 billion people worldwide who rely on fuelwood for cooking and heating are overcutting forest'. This problem is worst in drier regions of the tropics.
51. (B) In terms of Section 22 of the Reserve Bank of India Act, the RBI has been given the statutory function of note issue on a monopoly basis. The note issue in India was originally based upon "Proportional Reserve System". The Government of India issue rupee coins in teh denomination of Rs. 1, 2 and 5 to public. These coins are required to be circulated to public only through Reserve Bank under Section 38 of the RBI Act.
52. (C) Open Market Operations (OMO) is the buying and selling of government securities in the open market in order to expand or contract the amount of money in the banking system. Purchases inject money into the banking system and stimulate growth while sales of securities do the opposite. OMOs are the market operations conducted by the Reserve Bank of India by way of sale/purchase of Government securities to/from the market with an objective to adjust the rupees liquidity conditions in the market on a durable basis.
53. (D) Damodar Valley Corporation is a thermal and hydro power generating public organization of India. It emerged as a culmunation of attempts made over a whole century to control the wild and erratic Damodar River, By April 1947, full
agreement was practically reached between the three Government of Central. Bengal and Bihar on the implementation of the scheme and in March 1948, the Damodar Valley Corporation Act (Act No. XIV of 1948) was passed by the Central Legislature, requiring the three government - the Central Government and the state Government of West Bengal and BIhar (now Jharkhand) to participate jointly for th purpose of building the Damodar Valley Corporation. The Corporation came into existence on 7July, 1948 as the first multipurpose river valley project and the first Public Sector Corporation of independent India.
54. (C) Navratna was the title given originally to nine Public Sector Enterprises (PSEs) identified by the Government of India in 1997 as "Public sector companies that have comparative advantages". giving them greater autonomy to complete in the global market so as to "support (them) in their drive to become global giants". The number of PSEs having Navratna status has been raised to 16 , the most recent addition being Oil India Limited. The list of such companies is: Bharat Heavy Electricals Limited; Hindustan Petroleum Corporation Limited; Mahanagar Telephone Nigam Limited: National Aluminium Company Limited; Neyveli Lignite Corporation Limited; Power Grid Corporation of India Limited; Rashtriya Ispat Nigam Limited: Rural Electrification Corporation Limited; Shipping Corporation of India Limited; GAIL (India) Limited.
55. (C) A country devalues its currency in order to promote exportts. A key effect of devaluation is that it makes the domestic currency cheaper relative to other currencies. There are two implications of devaluation. First. devaluation makes the country's exports relatively less expensive for foreigners. second, the devaluation makes foreigners. Second, the devaluation makes foreign products relatively more expensive for domiestic consumers, thus discouraging imports. This may help to increase the country's exports and decrease imports, and may therfore help to reduce the current account deficit. One typical example is Thailand in 1998 Asian financial Crisis. The baht was pegged at 25 to the US doller

before the crisis. During the crisis, the slowdown in export growth caused Thiland to abandon the dollar peg and devalue its currency in order in order to promote exports.
56. (B) The Central Statistics Organization, established in 1951, is respoinsible for coordination of statistical activities in the country, and evolving and maintaining statistical standards. Its activities include National Income Accounting; conduct of Annual Survey of Industries, Economic Censuses and its follow up surveys, compilation of Index of Industrial production, as well as consumer price indices for Urban Non-Manual Employees, Human Development Statistics, Gender statistics, imparting training in Official statistics, Five year plan work relating to Development of Statistics in the states and Union Terriories; dissemination of statistical information, work relating to trade, energy, construction, and environment statistics, revision of National Industrial Classification, etc.
57. (D) Planning and control are two basic and interrelated managerial functions. They are so interrelated that they can be and often are considered as being one function. Planing is the preparation activity while control is the post-operation function. Both of them are so closely related that they are treated as Siamese twins. Planning sets the objectives, goals, targets, on the basis of available resources with their given constraints. control is the integral part of effective planning. Similary control involves assessment of the performance only when some standard of are set in advance.
58. (A) National Income is defined as the sum total of all the goods and services produced in a country, in a particular period of time. Normally this period consists of one year duration, as a year is neither too short nor long a period. National product is usually used synonymous with National income. The Central statistic Organization defines National income as "National Income is the sum of factor income earned by the normal resident of a country in the form of wages, rent, interest and profit in an accounting year."
59. (B) Some of the taxes of the central government are: Taxes on income than agricultural income; Duties of Customs including export duties; Duties of excise
on tobacco and other good manufactured or produced in India except (i) alcoholic liquor for human consumption, and (ii) opium, Indian hemp and other narcotic drugs and narcotics, but including medicinal and toilet preparations containing alcohol or any substance; Corporation Tax; Taxes on capital value of assets, exclusive of agricultural land, of individuals and companies, taxes on capital of companies; Estate duty in respect of property other than agricultural land; etc. Central tax means taxes that are levied and collected by the cetral government.
60. (D) The fiscal deficit is the difference between the government's total expenditure and its total receiptes (excluding borrowing). The elements of the fiscal deficit are (a) the revenue deficit, which is the difference between the government's current for revenue) expenditure and total current receipts (that is, excluding borrowing) and (b) capital expenditure. The fiscal deficit can be financed by borrowing from the Reserve Bank of India (which is also called deficit financing or money creation) and market borrowing (from the money market that is mainly from banks).
61. (D) In the Fifth Five-year Plan (1974-1979), stress was by laid on employment, Poverty alleviation, and justice. The plan also focused on self-reliance in agricultural production and defence. For achieving economic self relaince, the Plan aimed at elimination of special forms of external assistance, particulary food and fertilizer imports.
62. (B)
63. (A) A commercial bank is a profit-seeking business ferm, dealing in money and cedit. It is a financial insitution dealing in money in the sense that it accepts deposits of money from the public to keep them in its curtody for safety. So also, it deals in credit, i.e., it creates credit by making advances out of the funds received as the deposits to needy people. So it creates credit from the cash deposits with it.
64. (A) Desired savings are kept equal to desired investment by responses to interest rate changes. Saving identity or the savings investment identity is a concept in National Income Accounting stating that the amount saved (S) in an economy will be amount invested (I)...

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This identity only holds true because investment here is defined as including inventories. Thus, should consumers decide to save more, and spend less, the fall in demand would lead to an increase in business inventories. The change in inventories brings savings and investment into balance without any intention by business to increase investment.
65. (C) Gross National product (GNP) is the market value of all products and services proudced in one year by labour and property supplied by the residents of a country. basaically, GNP is th total value of all final goods and services produced within a nation in a particular year, plus income earned by its citizens (including income of those located abroad), minus income of non-residents located in that country. GNP measures the value of goods and services that the country's citizen produced regardless of their location.
66. (A) Per capita income or average income or income per person is a measure of mean income within an economic aggregate, such as a country or city. It is calculated by taking a measure of all sources of income in the aggregate (such as GDP or Gross National Income) and dividing it by the total population.
67. (B) Gresham's law is an economic principle that states "When a government compulsority overvalues one type of money and undervalues another, the undervalueed money will leave the country or disappear from circulation into hoards, while the overvalued money will flood into circulation. " It is commonly stated as: "Bad money drives out good." More exactly, if coins containing metal of different value have the same value as legal tender, the coins composed of the cheaper metal will be used for payment, while those made of more expensive metal will be hoarded or exported and thus tend to disappear from circulation.
68. (D) Both the terms are related to stock market. Investors who take a bull approach purchase securities under the assumption that they can be sold later at a higher price. A "bear" is considered to be the opposite of a bull. Bear investors believe that the value of a specific security or an industry is likely to decline in the future.
69. (C) A bear market is a market condition in
which the prices of securities are falling, and widespread pessimism causes the negative sentiment to be self-sustaining. As investors anticipate losses in a bear market and selling continues, pessimis only grows.
70. (B) The break-even point (BEP) is the point at which cost expenses and revenue are equal: A profit or a loss or gain, and one has "broken even" A profit or a loss has not been made, although opportunity costs have been "paid", and capital has received the rist-adjusted, expected returun.
71. (B) Laissez Faire is an economic theory from the 18 th century that is strongly opposed to any goernment intervention in business affairs. sometimes it is referred to as "let it be economics." It is an economic environment in which transactions between private parties are free from tariffs, government subsidies, and enforced monopolies, with only enogh government regualtions suffcient to protect rights against theft and aggression.
72. (D) L
73. (C) L
74. (A) An isoneph is a line indicating equal cloud cover or equal cloudiness. Variations in the degrees of slope, tempresented, occurrence of rainfall, may be represented by drawing the lines of equal values on a map. All such maps are termed as Isophet Map. The word Isopleth is derived from 'Iso' meaning equal and 'pleth' means lines. Thus, an imaginary line, which joins the places of equal values, is included Isotherm (equal temperature), Isobar (equal pressure), Isohyets (equal rainfall), Isonephs (equal cloudness), Isohels (equal sunshine), contours (equal heights), Isobaths (equal depths), Isohaline (equal salinity), etc.
75. (B) The ionosphere is a part of the upper atmosphere, from about 85 km to 600 km altitude, comprising portions of the mesosphere, thermosphere and exosphere, distinguished because it is ionized by solor radiation. It plays an important part in atmospheric electricity and forms the inner edge of the magnetophere. It has practical importance because, among other functions, it influences radio propagation to distant places on the Earth. The ionosphere is a shell of electrons and electrically charged atoms and moelcules

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that surrounds the Earth, stretching from a height of about 50 km to more than 1000 km . It owes its existence primarily to ultraviolet radiation from the sun.
76. (B) Cryogenics isthe study of how to get to low temperatures and of how materials behave when they get there. Besides the familiar temperature scales of Fahrenheit and Celsius (centigrade), Cryogenicsts use other temperature scales, the Kelvin and Rankine temperature scales. One of the more modern processes being used to treat metals (as well as other materials) is cryogenic tempering. While the science of heat treatment is well known and widely understood, the principles of cryogenic tempering remain a mystery to most people in industry.
77. (D) Special theory of relativity postulates that the speed of lights is a universal constant. We cannot reach speeds greater than the speed of light by the relativistic addition of velocities. The equation is how to reconcile with this result of special relativity with Newton's second Law, $\mathrm{F}=\mathrm{ma}$. It would be seen that any constant force, no matter how small, applied for a considerably very long time, should continously accelarate any mass ' m ' at a rate $\mathrm{a}=\mathrm{f} / \mathrm{m}$ until the speed was arbitrarily very large. Einstein, concluded that energy has inertia i.e. the more energy a body possess, the more inertia that body will display, Since, inertia is a property of matter, which is associated with mass. Thus from Einstein's argument mass is simply a property attributed to the total energy of the body and only the total energy is required, to know the total mass of the body.
78. (A)
79. (C) A rectifier is an electrical device that converts alternating current (AC), which periodically reverses direction, to direct current (DC), which flows in only one direction. The process is known as rectification. Physically, rectifiers take a number of forms, including vaccum tube diodes, mercury-arc valves, solidcontrolled rectifiers and other siliconbased semiconductor switches. Rectifiers have many uses. but are often found serving as components of DC power supplies and high-voltage direct current power transmission systems. Rectifications may serve in roles other
than to generate direct current for use as a source of power. As noted, detectors of ratio signals serve as rectifiers.
80. (A) The knot (pronounced not) is a unit of speed equal approximately 1.151 mph . There is no standard abbreviation but km is commonly used. The knot is a non-SI unit accepted for use with the International System of Unit (SI). Worldwide, the knot is used in meteorology, and in maritime and air navigation-for example, a vessel travelling at 1 knot along a maridian travels one minute of geographic latitude in one hour. The speeds of vessels relative to the fluids in which they travel (boat speeds and air speeds) are measured in knot.
81. (C)
82. (C) According to Bohr, when an electron from its intial stationary orbit jumps to another (lower) stationary orbit, it emits energy equal to the different between the energy of the two stationary orbits in the form of small packets of light known as photons. For every transition of the electron, there is a line in the spectrum and there are different types of spectral series formed. He gave the spectrum of Hydrogen ion which has one electron only, so this spectrum cannot be applied for atom with more than one electron.
83. (D)
84. (D)
85. (A) Red Blood cells contain haemoglobin which is what the oxygen binds with to form oxyhaemoglobin which is then transported to the different cells around the body. Oxygen bonds with the haemoglobin when it is al high patial pressure and then is released when it is at high partial pressure and then is released when there is a lower partial pressure of oxygen. At high altitudes there is lower atmospheric pressure of oxygen. This means that the current number of red blood cells in the body cannot meet the cells demands for oxygen. Due to the lower partial pressure of oxygen a process called polycythemia occurs. which is an increase in th bodies red blood cell count. The body increases its red blood cell count because this mean there is more haemoglobin available to bond with oxygen molecules meaning more oxygen can be transported to the cells in the body, therefore helping to meet the oxygen
demands of the the body even with less oxygen in the air.
86. (D)
87. (C)
88. (C) Insulim storagevesicles in humans and many other species contain concentrations of $\mathrm{Zn}^{2+}$ and $\mathrm{Ca}^{2+}$ ions. Zinc plays an important role in insulin hexamerisation, which is closely related to some of the processes in insulin biosynthesis and storage.
89. (D) Roundworms, or nematodes, are a group of invertebrates (animals having no backbone) with long, round bodies. Most parasitic roundworm eggs or larvae (immature form) are found in the soil and enter the human body when a person picks them up on the hands and then trasfers them to the mouth. The eggs or larvae also can enter the human body directly through the skin. With the exception of the parasitic roundworm that causes trichinosis, mature adult roundworms eventually end up or live in human large intestines and cause infection and disease.
90. (B) Vitamin $\mathrm{B}_{12}$ also called cobalamin, is a water soluble vitamin with a key role in the normal functioning of the brain and nervous system, and for the formation of blood. Vitamin $B_{12}$ is found in foods that come from animals, including fish and shellfish, meat (especially liver), popultry, eggs, milk, and milk products. while lacto-ovo vegetarians usually get enough $\mathrm{B}_{12}$ through consuming dairy products, vegans will lack $B_{12}$ unless they consume $B_{12}$ containing dietary supplements of $B_{12}$ fortified foods.
91. (A) Xerophthalmia is a medical condition in which the eye fail to produce tears. It may be cause by a deficiency in vitamin A and is sometimes used to describe that lack, although there may be other causes. Xerophthalmia caused by a severe vitamin A deficiency and cornea. The conjunctiva becomes dry, thick and wrinkled. If unteadted, it an lead to corneal ulceration and ultimately to blindness as a result of corneal damage.
92. (C)
93. (D) Antibiotics, also known as antimicrobial drugs, are drugs that fight infections caused by bacteria. Alexander Fleming discovered the first antibiotic, penicillin, in 1927. The term "antibiotic" originally
reffered to a natural compound produced by a fungus or another microorganism that kills bacteria which cause disease in humans or animals. Some antibiotics may be synthetic compound (not produced by microorganisms) that can also kill or inhibit the growth of microbes.
94. (A) The electrocardiogram (ECG or EKG) is a diagnostic tool that measures and records the electrical activity of the heart in exquisite detail. The heart is a two stage electrical pump and the heart's electrical activity can be measured by electrodes placed on the skin. The electrocardiogram can measure the rate and rhythm of the heartbeat, as well as provide indirect evidence of blood flow to the heart muscle.
95. (A)
96. (A) The placenta is an organ that connects the developing fetus to the uterine wall to allow nutrient uptake, waste eliminition, and gas exchange via the mother's blood supply. "True" placentas are a defining characteristic of eutherian or "placental" mammals.
97. (C)
98. (C)
99. (A) Chlorophyll is a green pigment found in cyanobacteria and the choloroplasts of algae and plants. Chlorophyll is an extremely important biomolecule, critical in photosythesis, which allows plants to absorbs energy from light. Cholorophyll absorbs light most strongly in the blue portion of the electromagnetic spectrum, followed by the red portion. However, it is a poor absorber of green and near-green portions of the spectrum, hence the green color of clorophyll-containing tissues.
100. (C) Ginger is a modified stem. A rhizome to be exact. A rhizome is a thick horizontally growing stem which usually stores food material. It has nodes and internodes, scale leaves, bud, Scale leaves enclosing the axillary buds are seen arising from the nodal points of the stem. Some of the axillary buds develop into branches which grow upwards into the air and then produce normal green foliage leaves. Usually the growing points of the rhizome continue to remain, underground causing an elongation of the rhizome. Roots develop from the lower surface of the rhizome Eg. Ginger, Turmeric.

