

20TH CENTURY'S DEFINING MOMENTS

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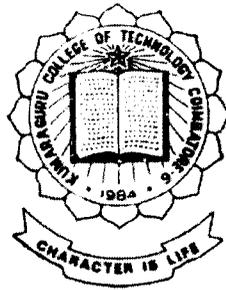
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BONAFIDE CERTIFICATE

This is to certificate that the project entitled 20th CENTURY'S DEFINING MOMENTS is a record of original studies carried out by this group under the guidance of Mr.Jiju Varghese Jacob, KUMARAGURU COLLEGE OF TECHNOLOGY and submitted to the Department of English in partial fulfillment of the requirement of the completion of I Year B.E. English paper during the year 1999-2000.

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A TRIBUTE PROJECT IN REMEMBERENCE OF
THE 'ANGEL OF MERCY'

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SCIENCE AND TECHNOLOGY

Science and Technology took astonishing steps to transform the world and the daily assumptions of human life. It is in this century that most of the inventions that define out present day life were devised.

The century opened on a bright note with the invention of electric powered lamp. Science then advanced at a Supersonic speed. The automobile rolled out, the airplane took and man, in a giant leap set to conquer the space. Information technology made possible a 'global village' and artificial intelligence opened new windows to cyberspace. Man played God - to create and to destroy : he split the atom to destroy his brothers and cloned living things to create a 'brave new world'.

MAJOR EVENTS

- 1900 Max Planck formulates Quantum Theory.
Airship was invented by G.F. Von Zeppelin of Germany.
Loud speakers was created by Horace Short of UK.
- 1901 Oil drilling first begins in Persia.
- 1903 Orville Wright and Wilbur Wright successfully fly a powered airplane.
Electro-Cardiograph (ECG) was invented by Willem Einthoren of of Netherland.
Henry Ford, with capital of \$ 1,00,000 found Ford Motor Company, first step into the automobile engineering.
- 1904 First Telegraphic transmission of photograph was achieved.
- 1907 Tissue culture technique in laboratory was developed by Dr. Ross Harrison.
- 1909 US Explorer Robert E. Peary reached the North Pole.
- 1911 Explorer Roald Amundsen reaches the south pole.
- 1913 Steel - Stainless was developed by Harry Brealey of UK.
- 1915 Albert Einstein postulates his General Theory of Relativity.
First trans-continental telephone call between Alexander Graham Bell in New York and Dr. Thomas A. Watson in San Fransisco was successfully done.
- 1921 Insulin for Diabetes was invented by Banting and Best of Canada.

- 1922 Self-winding wrist watch was invented by John Harwood.
Radar was created by A.H. Taylor and Leo C. Young of U.S.A.
Talking film was introduced by J. Engl, J. Mussolle and H. Vogt of Germany.
- 1924 Helicopter was constructed by Etienne Oehmichen of France.
For the first time insecticides were used in agriculture.
- 1925 Scottish inventor John Logie Baird transmits recognisable human features by T.V.
- 1926 Kodak produces the first 16mm movie film.
- 1928 Colour Television was demonstrated by J.L. Baird
Penicillin was discovered by Alexander Fleming of UK.
First colour motion picture was exhibited by George Eastman.
Indian physicist C.V. Raman discovers the Raman Effect.
- 1930 Planet Pluto the last and the farrest planet in the solar system was discovered.
- 1932 Neutrons was discovered by James Chadwick.
- 1933 Frequency modulation (FM) was invented by E.H. Armstrong of U.S.A.
- 1935 Radar equipment to detect aircraft was built by Robert Watson Watt.
- 1937 First Jet Engine was built by Sir Frank Whittle of U.K.
Nylon was discovered by Dr. Wallace H. Carothers of U.S.A.
- 1938 Ballpoint pen was invented by Lajos Bir of Hungary.

- 1939 D.D.T. (Dichloro-Diphenyl Trichloroethane) was synthesised by Paul Muller of Germany.
- 1941 Pencillin was isolated by Florey and Chain.
- 1942 First fission reaction was achieved by Enrico Fermi of U.S.A.
- 1945 Atom Bomb was created by J. Robert Oppenheimer of U.S.A.
- 1946 Xerography process was invented by Chester Carlson.
- 1947 Supersonic Bell XI plane breaks the sound barrier.
Holography was created by Denis Gason of U.K.
Microwave oven was invented by Percy L. Spenur of U.S.A.
- 1948 Transistor was created by Bardeens, Shockley and Brattain of U.S.A.
- 1952 Hydrogen bomb was created by Edward Teller of U.S.A.
- 1953 Open heart surgery was done by Walton Lillehel of U.S.A.
- 1954 First ever nuclear power reactor was constructed at Obrinsk near Moscow.
- 1955 Optical Fibre was invented by Narinder Kapany of Germany.
- 1956 Oral Polio vaccine was discovered by Albert Sabin.
- 1957 U.S.S.R. launch his first earth satellite Sputnik I and II.
- 1958 Neutron Bomb was developed by Samuel Cohen of U.S.A.
- 1960 LASER was created by T.H. Maiman of U.S.A.
- 1961 Yuri Gagarin of the erstwhile U.S.S.R. was the first man to fly into space on Volstok - I.

- 1966 Soviet Space Craft Luna 9 and US's Surveyor I mark landing on moon.
- 1967 South Africa Captown, Dr. Christian N. Barnard performed first human heart transplantation.
- 1969 21 July. Neil Armstrong and Edwin Aldrin step out on the moon.
- 1970 Venera 7, unmanned soviet spacecraft, lands on venus.
- 1971 Micro-processors was developed by Robert Noyce and Gordon Moore of U.S.A.
- 1976 Super computer was created by J.H. Van Tassel of U.S.A.
- 1981 AIDS is officially recognised for the first time in U.S.A.
- 1986 Soviet Union launched Mir Space Station achieving a spectacular space feat.
- 1987 Glass fiber cable is laid across the Atlantic ocean.
- 1997 US space craft Pathfinder lands on Mars.
Dolly the cloned sheep was born.
- 1998 Lunar prospector and Cassini, to outer planets were launched.
- 1999 Chandra, the world's most powerful x-ray telescope launched into space by the space shuttle Columbia.
Unnamed Planet located 55 light years away from earth.
Steam powered launches were designed.
Into the future storage system transparent adhesive tape will be a storage medium for computers.
Model of a space station in orbit at a height of about 300 to 480 km were been designed to install.
Giant Millenium Dome constructed in England will act as a rain water collector. It is a 8-hectare (20 acre) root of the Dome for serving 12 million customers in London and Thames valley region.

POLITICAL HISTORY

For one thing, it has been the century of democracy. The colonial empires that characterised the world throughout the 19th century were dissolved in course of 20th century. The three major alternatives to liberate democracy - Monarchy, Fascism and communism were all tried in course of the 20th century and found wanting.

The century saw the positive assertion of individual convictions. Racial discrimination and repressive regimes were no longer allowed to survive. Much blood was shed by this century to achieve this turning point. But people were no longer aliens in their own land. The collapse of apartheid gave birth to a new South Africa, and with the Berlin wall came down an ideology that has failed to sustain Eastern Europe. The changes gave rise to a new hope.

MAJOR EVENTS

- 1900 Boxer revolution started against Europeans.
King Umberto I of Italy murdered by anarchist.
The commonwealth of Australia created.
- 1901 Queen Victoria dies; succeeded by her son Edward VII.
Rabindranath Tagore founds his Santiniketan school.
- 1902 US acquires perpetual control over Panama Canal.
- 1903 The Russian Socialist Democratic Party splits into Mensheviks and Bolsheviks.
- 1904 Church and State separated in France.
- 1905 Port Arthur surrenders to Japan.
Demonstration in St. Petersburg brutally crushed by Police
Bloody Sunday.
First partition of Bengal.
- 1906 Theodore Roosevelt, on first trip outside U.S. by a president in Office.
- 1907 Baden-Powell founds boy Scout movement.
- 1908 Union of South Africa established. Earthquake in southern Calabria and Sicily, 1,50,000 killed.
- 1909 Girls guides established in Britain.
- 1910 Union of South Africa becomes a dominion within the British Empire with Botha as premier.
Revolution in Portugal.

1911 Chinese Republic proclaimed; Manchu dynasty falls in power since 1644, Sun Yat-sen elected president.

Delhi made capital of India.

1912 Sun Yat-sen founds Kuomintang (Chinese National Party)

1914 U.S. Court decides patent suit on airplanes in favor of Wright brothers against Glenn Curtiss.

Panama Canal opened.

1917 October Revolution in Petrograd.

The Allies execute dancer Mata Hari as a spy.

U.S. Government purchases Dutch West Indies.

1918 Woodrow Wilson propounds Fourteen points for world peace.

Women over 30 get the vote in Britain.

Worldwide influenza epidemic, 22 million dead.

1919 President Wilson presides over first League of Nations meeting in Paris.

Mussolini founds Fascist party.

Afghanistan became fully independent.

1920 League of Nations comes into being.

Earthquake in china claims 2,00,000 victims.

End of Russian Civil War.

1921 Takashi Hara, Premier of Japan assassinated.

1922 Mussolini founds Fascist government.

Mustapha Kemal proclaims Turkey a republic.

Soviet states form U.S.S.R.

- 1923 Centrs of Tokyo and Yokohama destroyed by earthquake, 1,20,000 dead.
Ankara replaces Istanbul as capital of Turkey.
- 1924 First elections in Italy under Fascist methods, 65 per cent favor Mussolini.
- 1925 Hitler recognises Nazi Party with 27,000 members and publishes vol. I of "Mein Kampf".
- 1926 General strike called in Britain.
Republic of Lebanon proclaimed.
- 1927 "Black Friday" in Germany - the economic system collapses.
- 1928 Brazil's economy collapses owing to over production of coffee.
- 1929 U.S. stock exchange collapses.
World Economic crisis begin.
Lateran Treaty established independent Vatican city.
Round Table conference between Viceroy and Indian leaders.
- 1930 Name of Constantinopple changed to Istanbul.
Salt Satyagraha became the powerful symbolism of freedom movement in India.
- 1931 Second Round Table Conference held in London.
- 1932 Franklin D. Roosevelt wins U.S. Presidential election in Democratic landslide.
- 1933 Adolf Hitler appointed as German Chancellor.
First concentration camps erected by the Nazis in Germany.
- 1934 Hitler and Mussolini meet in Venice.

- 1935 Persia changes its name to Iran.
- 1936 Mussolini and Hitler proclaim Rome-Berlin Axis.
Anti-Comintern Pact signed by Germany and Japan.
- 1937 Chiang Kai-shek unites with Communists, led by Mao Tse-tung and Chou-En-lai.
- 1938 Japanese enter Tsingtao, install Chinese puppet government in Nanking.
- 1939 World War II begins.
Germany invades Poland and annexes Danzig.
Britain and France declare war on Germany.
- 1940 Germans invade Russia.
Japanese bomb Pearl Harbor.
Germany and Italy declare war on U.S.
Germany begins exterminating jews.
- 1941 World War II reaches North Africa.
- 1942 Japanese capture Singapore and Rangoon.
Quit India Movement started by Gandhiji with the famous words 'Do or die'.
- 1943 Mussolini dismissed.
Churchill, Stalin and Roosevelt hold the Teheran conference.
- 1944 D-Day landings in Normandy.
First flying bomb dropped on London.

- 1945 Mussolini killed by Italian partisans.
Hitler commits suicides.
US drops atomic bombs on Hiroshima and Nagasaki.
World Bank was founded.
- 1946 UN General Assembly holds its first session in London.
Albania, Hungary and Bulgaria become independent states.
- 1947 India and Pakistan proclaimed independent.
- 1948 Mahatma Gandhi assassinated, (b. 1869)
The Jewish state of Israel comes into existence.
- 1949 Communist People's Republic of China proclaimed under Mao Tse-tung. North Atlantic treaty signed in Washington.
- 1950 India becomes a Republic.
North Korean forces invades South Korea and capture Seoul.
- 1951 King Abdullah of Jordan assassinated in Jerusalem.
- 1952 King George VI of England dies; succeeded by his daughter Queen Elizabeth II.
- 1953 U.S.S.R. explodes hydrogen bomb.
- 1954 Nasser seizes power in Egypt; becomes premier and head of state.
South East Asian Treaty organisation (SEATO) established.
- 1955 Italy, W. Germany and France establish European Union.
The Vienna Treaty restores Austria's independence.

- 1956 Sudan proclaimed independent republic.
Egypt seizes Suez Canal.
Nehru-Tito-Nasser conference in Yugoslavia.
- 1957 UN reopens Suez Canal.
- 1958 Egypt and Sudan join to form the United Arab Republic with Nasser as President.
- 1959 Fidel Castro becomes Premier of Cuba.
Bandaranaike, President of Ceylon assassinated.
- 1960 Cyprus becomes independent republic.
- 1961 Berlin Wall built
- 1962 Cuban missile crisis.
- 1963 US and USSR agree on 'hotline' from white house to the Kremlin.
President John F. Kennedy assassiated.
- 1964 Kenneth Kaunda becomes President Zambia. Kenya becomes republic.
- 1965 Winston Churchill dies (b. 1874)
- 1966 Indira Gandhi becomes prime minister.
- 1967 Hanoi attacked by U.S. bombers.
Six day war between Israel and Arab Nations begins.
- 1968 Martin Louter King. Jr. is assassinated.
- 1970 Assassination attempt on Pope Paul VI in the Philippines.
Cyclones and floods kill 5,00,000 in Pakistan.

- 1971 U.S. conducts large-scale bombing raids against North Vietnam.
- 1972 Bangladesh established as sovereign state, Sheik Mujibur Rahman named Prime Minister.
- 1973 Great Britain, Ireland and Denmark formally join the Common Market.
- 1974 India becomes the sixth nation to explode a nuclear device.
'Watergate' impeachment, Nixon resigns.
- 1975 Prime Minister Sheikh Mujibur Rahman of Bangladesh assassinated.
- 1976 The death of Zhou Enlai and Mao Zedong.
- 1977 Morarji Desai replaces Indira Gandhi as first non-congress prime minister of India.
- 1978 A Revolutionary council seizes power and establishes a new government based on Islamic principles in Afghanistan.
- 1979 Egyptian president Anwar Sadat and Israeli PM Begin sign a peace treaty.
Zulfikar Ali Bhutto is executed by Military rule in Pakistan.
- 1980 Vietnamese invade Thailand by way of Cambodia.
- 1981 President Anwar Sadat of Egypt is assassinated.
President Zia Ur Rahman of Bangladesh is shot dead.
- 1982 In Bangladesh a military coup by Lt. General Ershad.
The Vatican and U.K. reestablishes full diplomatic relations.
- 1983 Benigno Aquino of Philippines assassinated.
President Reagan announces the "Star Wars" programme

- 1984 Indian Prime Minister Indira Gandhi is assassinated, succeeded by her son Rajiv Gandhi.
- 1985 Death of Soviet Premier Chernenko, Mikhail Gorbachev succeeds him.
- 1986 Swedish PM Olaf Palme is assassinated.
Mikhail Gorbachev institutes his policy of Glasnost.
- 1987 In Czechoslovakia far-reaching political and economic reforms.
Worldwide stock exchange crash.
- 1988 Pakistan premier General Zia. killed in a plane crash, succeeded by the first women leader of a Muslim country, Benazir Bhutto.
Mikhail Gorbachev appointed President of USSR.
- 1989 In China 3000 students begin a hunger strike in Tiananmen Square in Beijing which was brutally crushed by the Govt.
The Berlin wall is opened.
Dictator Nicolae Ceaușescu's brutal regime is overthrown in Romania and he is executed.
- 1990 Armenia, Lithuania and Latvia becomes independent from USSR.
Benazir Bhutto is sacked by Pakistan president Gulam Ishaq Khan.
German reunification.
The coldwar officially ends when 22 heads of state of the NATO and Warsaw Pact countries sign a treaty which drastically reduces conventional weapons.
Nelson Mandela is released after 27 years of jail life.
- 1991 Georgia proclaims independence from Moscow.
Rajiv Gandhi, former Prime Minister of India is killed in a bomb attack.

Russia, Ukraine and Bellorussia create the commonwealth of independent states (CIS) to replace the USSR.

1992 Russian President Boris Yeltsin, announces his intention to turn Russia's nuclear missiles away from U.S.A.

U.S. President George Bush offers to cut strategic nuclear weapon by more than half.

In India fanatics destroy a disputed Babri Mosque in Ayodhya.

1994 Russia and United States agrees not to target nuclear weapons on each other.

Israeli PM Yitzhak Rabin and PLO leader Yasser Arafat sign historic accord giving Palastine self-rule in Gaza strip and Jericho.

China conducts nuclear tests.

Israel and Jordan sign Peace Treaty.

1995 World Trade organization comes into effect.

NPT made a permanent international arrangement, India refuses to sign the NPT.

Israeli PM Yitzhak Rabin assassinated.

1996 France's sixth nuclear test.

Ceasefire between Russian forces and Chechen rebels.

Taliban captures Kabul, hangs Najibullah and Afganistan is declared as full-fledged Muslim state.

1997 PLO flag raised in Herbon.

Hongkong becomes part of Chinese after 156 years of British rule.

1998 Northern Ireland Politicians agree on a historical deal to bring peace.

1999 Euro comes into effect. Kosovo crisis leads to Balkan war.

Military coup in Pakistan by Gen. Pervez Musharraf.

WAR

Wars are caused by powers to show their supremacy over the others and to acquire wealth. It has not only caused damages but also resulted in death and displacement of millions of people. The dire consequences of the wars are very large.

After the development of nuclear bombs, all the so called developed countries have invested in developing nuclear weapons for security and supremacy. India, a developing country, has also indulged in making of nuclear weapons.

The major wars of the 20th century, World War I and II, showed its bruited consequences. Now, most of the countries are going for peace programs to develop the mutual understanding through the globe.

MAJOR EVENTS

1904-1905 Russo-Japanese war

Port Arthur surrenders to Japanese. Japanese fleet defeated the Russian fleet.

It led to the wave of idea of Asian resurgence.

1906-1909 U.S troops invade Cuba and occupy it.

1914-1918 World War I

Britain and her allies-France, U.S.A and Belgium defeated Germany and her associated powers. It was set off by the assassination of Arch Duke Franz Ferdinand heir to the powerful Austro-Hungarian empire on June 18, 1914. It claimed 2 million lives.

1919 African War III begins.

The treaty of Rawalpinda signed by which Afghanistan was recognised as independent state.

1939 World War II begins.

On 1st Sept., 1939, the allied forces of France and Britain declared war on Germany and its allies, as Hitler's troops marched into Poland. The U.S.A and U.S.S.R entered the war later as a part of allied forces. The war ended in 1945, but not before 2 atom bombs dropped on Japan, exploring mankind to the horrors of a nuclear holocaust.

1975 South Vietnam surrenders to the North Vietnamese Communists.

1976 North and South Vietnam re-unites.

1979 Vietnamese troops and Cambodian rebels capture Phnom Penh and overthrow the Pol Pot regime.

China invades Vietnam.

- 1980 Vietnam invades Thailand by way of Cambodia.
War breaks out in Persian Gulf as Iraq invades Iran.
- 1990 Iraq invades Kuwait .
The Cold war officially ends when 22 heads of state of NATO and Warsaw Pact countries sign a treaty which drastically reduce conventional weapons.
- 1991 War breaks out in Gulf when U.S led allied forces launched an air strike on Baghdad.
- 1996 Ceasefire between Russian forces and Chechan rebels started.
Taliban capture Kabul, hangs Najbullah and established a full-fledged Muslim state.
- 1999 Kosovo crisis leads to Balkan war.
Kargil war starts in Kargil sector of India against the Pakistani Army regulars and their trained militants.

GENERAL EVENTS

The 20th century was an eventful century with noticable development in all walks of life. The life of common man has improved drastically and the introduction of computer has taken the world to a new height. People have been able to find the so called 'superstitious believes' by the olden days people. Man has also been able to utilise the resources available to the best of his abilities.

Men of great persanalities ruled the world in this century. Political hands have changed and different reforms have come into play. Man is moving in the right track of modernisation leaving behind a memorable 20th century.

100 PERSONALITIES OF THE CENTURY

1. ALI, MUHAMMED (b.1942): American pugilist famous for his unorthodox style and colourful personality. First boxer to win the heavy weight title 3 times.
2. ARAFAT, YASSER (b.1929) : Palestinian president, leader of PLO from 1968. Shared Nobel Peace Prize, 1994.
3. ARMSTRONG, NEIL (b.1930): American astronaut, the first man to set foot on the moon in Apollo XI, 21st July, 1969.
4. BANDARANAIKE, SOLOMON (1899-1959): Prime Minister of Ceylon from 1956 until assassinated.
5. BARNARD, CHRISTIAAN NEETHLING (b.1922): South African surgeon to perform the first human heart transplant operation at Cape town, Dec. 1967.
6. BEATLES, THE : Paul McCartney, John Lennon , Georgy Harrison, Ringo Starr - English vocal and instrumental rock'n roll of the 60's.
7. BELL, ALEXANDER GRAHAM (1847-1922): Inventor of telephone, audiometer , wax recorders for phonographs.
8. BORG, BJORN (b.1956): Swedish tennis player, top ranked in late 70's. His fifth consecutive Wimbledon was won in 1980.
9. BORLAUG, NORMAN ERNEST (b.1914): Scientist responsible for the 'Green Revolution'. Nobel Prize winner in 1970.
10. BOSE, NETAJI SUBHAS CHANDRA (1897-1945): Leader of India's freedom struggle. Formed Indian National Army.
11. BRANDO, MARLON (b.1924): American stage and film actor. Won the Best Actor Oscar in 1954.

12. BRAUNDTLAND,GRO HARLEN(b.1939):Norway's First woman PM.Director General of W.H.O.
13. CASTRO,FIDEL(b.1727):Cuban revolutionary and political leader.President of Cuba.
14. CHAPLIN,CHARLES SPENCER(1889-1977):Film star comedian, first international sreenstar, with more than 50 years of achievement.
15. CHRISTIE,AGATHA(1890-1976):world famous English writer of detective fictions.In sales ,Agatha's books comes only second to the bible.
16. CHURCHILL,SIR WINSTON(1874-1965):British PM ,Nobel Prize winner for Literature(1953).
17. CURIE,MARIE SKLODOWSKA(1867-1934):First great woman scientist.Jointly with Pierre Curie ,she won Nobel Prize in 1903 and later in1911.
18. LAMA,DALAI(b.1935):Spiritual leader of Tibet.
19. DINEY,WALTER(1901-1966):American film cartoonist,creator of Mickey Mouser and Donald Duck.
20. DUNANT,JEAN HENRI(1828-1910):Swiss philanthropist,promoted the establishment of Red Cross.Shared Nobel Prize in 1901.
21. EDISON,THOMAS ALVA(1947-1931):American,invented the transmitter and reciever of telegraphic system
22. EINSTEIN,ALBERT(1879-1955):Mathematical physicist,proposed theory of relativity and his works led to making of nuclear bomb.Won Nobel Prize in 1921.
23. ELIOT,THOMAS STEARNS(1888-1965):English poet ,won Nobel

Prize in 1948.

24. FLEMING,SIR ALEXANDER(1881-1955):British bacteriologist and discoveror of prncillin.Won Nobel Prize in 1945.

25. FORD,HENRY(1863-1947):Pioneer in motor car manufacturer an industrialist. Established Ford foundation.

26. FRANK,ANNE(1929-1945):Jewish girl fled Germany,autor of 'The diary of a young girl'-experience of her life in Amsterdam ware-house.

27. FREUD,SIGMUNT(1856-1939):Ausrian psyochiatrist and founder of Psychoanalysis.

28. GADDAFI,MUAMMAR ALI(b.1942):Libyan leader and took power in a coup in 1969 and became president in 1977.

29. GAGARIN,YURI (1934-1968):Soviet ,the first man to be launched into space in sattellite Vostok in 1961.

30. GANDHI,MOHANDAS KARAMCHAND(1869-1948):Father of Indian nation,led India to independence.

31. GATES,BILL(b.1956):World's richest man.Partner of Michrosoft Corp.

32. GAULLE ,CHARLS DE(1890-1970):French general.First president of fifth republic,1958-1969.

33. GAVASKAR,SUNIL(b.1949):Indian cricketer,scored 1000 runs in a year,34 centuries in Test.

34. GOLDING,SIR WILLIAM(1911-1993):English novelist,won Nobel Prize in literature in 1983.

35. GORBACHEV, MIKHAIL(b.1931):Soviet leader,introduced policy of 'glasnost' and 'perestroika'.Nobel Prize winner for peace in 1990.

36. GUEVAR,ERNESTO(1928-1967):Famous Latin Ameican revolutionary

leader.

37. HAWKING,STEPHEN(b.1942):British astrophysist,the most prolific scientist of this generation.
38. HEMINGWAY,.ERNEST(1898-1961):Eminent American novelist,won Nobel Prize for literature in 1954.
39. HILLARY ,EDMUND(b.1919):First man to climb the Mount Everest .
40. HITLER,ADOLF(1889-1945):German dictator ,who persecuted and murdered his opponents .
41. HO CHI MINH(1890-1969):Vientmanese revolutionary leader and the first president of North Vietnam.
42. JACKSON,MICHAEL JOE(b.1968):American pop song singer.
43. JINNAH,MOHAMMAD ALI(1876-1948):Responsible for Indo-Pak Partision.
44. JOYCE,JAMES(1882-1941):Irish author published 'Ulysses'in 1922.
45. KAPOOR,RAJ(1924-1988):Indian film maker,director,producer and a good entertainer.
46. KASPAROV,GARRY(b.1963):World number I chess master from Russia.
47. KELLER,HELEN(1880-1968):American author and educator of blind.
48. KENYATTA,JOMO(1894-1978):African leader,first president of independent India.
49. KENNEDY,JOHN FITZGERALD(1917-1963):U.S president and a man of vision and courage.
50. KEYNES,JOHN MAYNARD(1883-1946):British economist who influence economist all over the world.
51. KHRUSHCHEV,NIKIT SERGEYEVICH(1894-1971):Leader of Soviet

Union after the death of Stalin .

52. KING, MARTIN LUTHER, JR. (1929-1968): Non-violent civil rights leader and Negro intergration leader; Nobel Prize for Peace in 1964.
53. KUROSAWA, AKIRA (b. 1910-1998): Japanese film maker of all times.
54. LEAKEY, LOUIS SEYMOUR BAZETT (1903-1972): Made several discoveries on the origin of the homo sapiens.
55. LE CORBUSIER (1887-1965): He widely influenced the ideas of town planning. Architect of Chandigarh (India).
56. LENIN (1870-1924): Russian revolutionary leader and statesman; he liberated the country from Tsars; he led the Bolshevik overthrow of the Kerensky government.
57. LEWIS, CARL (b. 1961): American winner of 8 Olympic gold medals.
58. MADONNA (b. 1959): World famous female pop song singer of all times. She is the first woman to top both singles and album charts.
59. MANDELA, NELSON ROLIHLELA (b. 1918): First black prime minister of South Africa. Lawyer and politician. Was imprisoned for 27 years in jail.
60. MARCONI, GUGLIELMO (1874-1937): Italian inventor who developed the use of radio waves as a practical means of communication. Won the Nobel Prize in 1909.
61. MARQUEZ, GABRIEL GARCIA (b. 1928): Colombian writer and poet. Won Nobel Prize in 1982.
62. MAO ZEDONG (1893-1976): Architect of the Chinese Revolution and the founder of the People's Republic of China. Has written ideas of revolutionary type.
63. MENUHIN, YEHUDI (1916-1999): World famous violinist. First appeared as soloist at the age of seven.

64. MUSSOLINI, BENITO (1883-1945): Fascist dictator of Italy. Entered the World War II in 1940 and was on the side of Hitler.
65. MURDOCH, RUPERT (b. 1931): Australian-turned -American media baron Controls 30% of News Co-operation.
66. NASSAR, GAMAL ABDEL (1918-1970): Egyptian statesman and leader of the Arab world. One of the founders of the Non-alignment Movement. Nationalised the Suez Canal.
67. NAVRATILOVA, MARTINA (b. 1956): One of the greatest of the female tennis players . Has won many tournaments.
68. NEHRU, PANDIT JAWAHERLAL (1889-1964): Indian national leader and statesman. First Prime Minister and architect of modern India. With Nasser and Tito, founded the NAM.
69. NIGHTINGALE, FLORENCE (1820-1910): English nurse and founder of modern nursing. She is known as 'The lady with Lamp'.
70. NYERERE, JULIUS (1922-1999): Former Tanzanian president and popular African leader
71. PAULING, LINUS CAR (1901-1994): American scientist who won Noble Prize for Chemistry in 1954 and Peace in 1962.
72. PELE (b. 1940): Brazilian soccer player, world star at 17 and played in all 4 world cups from 1958-1970.
73. PERON , JUAN DOMINGO (1895-1974): President and dictator of Argentina, gave reforms based on nationalism and socialism.
74. PICASSO, PABLO RUIZ (1881-1973): Spanish painter and sculpture, described as centuries most prolific and versatile artist.
75. RAHMAN, SHEIKH MUJIBUR (1920-1975): Father of Bangladesh , killed in a coup on Aug. 15 th, 1975.
76. RAMAN, Dr. CHANDRASEKHARA VENKATA (1888-1970): Indian

physicist, discover of Raman effect. Won Nobel Prize in 1930.

77. RAMANUJAM, SRINIVASA (1887-1920): One of the greatest mathematicians of India. He showed interest in theory of numbers.
78. RAY, SATYAJIT (1921-1992): Indian film director, won the Oscar award and Bharatratna.
79. ROOSEVELT, FRANKLIN DELANO (1882-1945): American statesman elected for 4 times.
80. RUSSELL, BERTAN (1872-1970): English philosopher, mathematician and essayist. He won Nobel Prize in 1950.
81. SALK, JONAS (1915-1995): US Micro biologist who developed successful vaccine against polio.
82. SCHWEITZER, ALBERT (1875-1965): German medical missionary, humanitarian, musician and philosopher. Won Nobel Prize in 1952.
83. SHAW, GEORGE BERNARD (1856-1950): Irish dramatist and the greatest critic of his age who conquered England by his wit. Won Nobel Prize in 1925.
84. SPIELBERG, STEVEN (b. 1947): One of the most famous directors of all times. He has won Oscar Awards.
85. GURU, SRI NARAYANA (1855-1928): Social reformer and religious leader of India.
86. STALIN, JOSEPH (1879-1953): Soviet statesman, leader of Russian people and has done remarkable modernisation in agriculture.
87. SUN YAT-SEN (1867-1925): Chinese nationalist leader, became the first president of Republic of China.
88. SUU KYI, AUNG SAN (b. 1945): 1991 Nobel Peace laureate from Burma. Founder of Myanmar's National League for democracy.

89. TAGORE, RABINDRANATH (1861-1841): Indian poet and philosopher, won the Noble Prize for Literature in 1913.
90. TATA, JAHANGIRJI RATANJI DADABHAI (1904-1993): One of the India's great industrialist and recieved Bharatratna in 1992.
91. TERESA, MOTHER (1910-1997): The 'angle of mercy' conquered the world by serving poorest of the poor. Won Nobel Price in 1979.
92. THATCHAR, MARGARET (b.1925): British Prime Minister and descibed as the 'Iron Lady'.
93. TITO, MARSHAL (1892-1980): Father of moder Yougoslavia and co-founder of NAM.
94. TOLSTOY, LEO (1828-1910): Russian novelist and witer on ethinic and religion.
95. TOYNBEE, ARNOLD JOSEPH (1889-1975): English historian and reformer. He attempted to analysis the rise and fall of civilization.
96. TUNKU, ABDUL REHMAN (1903-1990): Malaysian polition and PM of independent Malaya.
97. VIVEKANANDA, SWAMI (1863-1902): A saint philosopher who made India's greatness known to the world. He worked to uplift the Hindu society.
98. WALESIA, LECH (b.1943) Polish trade union leader , president in 1990. He won Nobel Price in 1983.
99. WRIGHT, ORVILLE AND WILBUR: American inventors and pioneers in aviation.
100. YEW, LEE KUAN (b.1923): First PM of Singapore , helped expansion of economic base of the country.

NOBEL PRIZE WINNERS

PHYSICS

- 1901 Wilhelm C. Roentgen, Ger.
- 1902 Hendrik A. Lorentz, Pieter Zeeman, both Dutch.
- 1903 Antoine Henri Becquerel, Pierre Curie, both Fr. ; Marie Curie, Pol.-Fr.
- 1904 John W. Strutt, Lord Rayleigh, Br.
- 1905 Philipp E.A. Von Lenard, Ger.
- 1906 Sir Joseph J. Thomson, Br.
- 1907 Albert A. Michelson, U.S.
- 1908 Gabriel Lippmann, Fr.
- 1909 Carl F. Braun, Ger., Guglielmo Marconi, It.
- 1910 Johannes D. Van der Waals, Dutch
- 1911 Wilhelm Wien, Ger.
- 1912 Nils G. Dalen, Swed.
- 1913 Heike Kamerlingh Onnes, Dutch
- 1914 Max Von Laue, Ger.
- 1915 Sir William H. Bragg, Sir William L. Bragg, both Br.
- 1917 Charles G. Barkla, Br.
- 1918 Max K.E.L. Planck, Ger.
- 1919 Johannes Stark, Ger.
- 1920 Charles E. Guillaume, Fr.
- 1921 Albert Einstein, Ger. - U.S.
- 1922 Niels Bohr, Danish
- 1923 Robert A. Millikan, U.S.
- 1924 Karl M.G. Siegbahn, Swed.
- 1925 James Franck, Gustav Hertz, both Ger.
- 1926 Jean B. Perrin, Fr.
- 1927 Arthur H. Compton, U.S., Charles T.R. Wilson, Br.
- 1928 Owen W. Richardson, Br.
- 1929 Prince Louis-Victor de Broglie, Fr.
- 1930 Sir Chandrasekhara V. Raman, Indian
- 1932 Werner Heisenberg, Ger.

- 1933 Paul A.M. Dirac, Br.; Erwin Schrodinger, Aus.
- 1935 Sir James Chadwick, Br.
- 1936 Carl D. Anderson, U.S.; Victor F. Hess, Aus.
- 1937 Clinton J. Davidson U.S.; Sir George P. Thomson, Br.
- 1938 Enrico Fermi, It.-US.
- 1939 Ernest O. Lawrence, U.S.
- 1943 Otto Stern, U.S.
- 1944 Isidor Issac Rabi, U.S.
- 1945 Wolfgang Pauli, U.S.
- 1946 Percy Williams Bridgman, U.S.
- 1947 Sir Edward V. Appleton, Br.
- 1948 Patrick M.S. Blackett, Br.
- 1949 Hideki Yukawa, Jpn.
- 1950 Cecil F. Powell, Br.
- 1951 Sir JohnD. Cockroft, Br, Ernest T.S. Walton, Ir.
- 1952 Felix Bloch, Edward M. Purcell, both U.S.
- 1953 Frits Zernike, Dutch
- 1954 Max Born, Br.; Walter Bothe, Ger.
- 1955 Polykarp Kusch, Willis E. Lamp, both U.S.
- 1956 John Bardeen, Walter H. Brattain, William Shockley, all U.S.
- 1957 Tsung-dao-Lee, Chen Ning Yang, Both U.S.
- 1958 Pavel Cherenkov, Ilya Frank, Igor Y. Tamm, all USSR
- 1959 Owen Chamberlain, Emilio G. Segre, both U.S.
- 1960 Donald A. Glaser, U.S.
- 1961 Rober Hofstadter, U.S. Rudolf L. Mossbauer, Ger.
- 1962 Lev. D. Landau, USSR
- 1963 Maria Goeppert-Mayer, Eugene P. Wigner, both U.S.: J. Hans D. Jensen, Ger.
- 1964 Nikolai G. Basov, Aleksander M. Prochorov, both USSR; Charles H. Townes U.S.
- 1965 Richard P. Feynman, Julian S.Schwinger, both U.S.: Shinichiro Tomonaga, Jpn.
- 1966 Alfred Kastler, Fr.
- 1967 Hans A. Bethe, U.S.

- 1968 Luis. W. Alvarez, U.S.
- 1969 Murray Gell-mann, U.S.
- 1970 Louis Neel, Fr.; Hannes Alfven, Swed.
- 1971 Dennis Gabor, Br.
- 1972 John Bardeen, Leon N. Cooper, John R. Schrieffer, all U.S.
- 1973 Ivar Glaever, U.S.; Leo Esaki, Jpn.; Brian D. Josephson, Br.
- 1974 Martin Ryle, Antony Hewish, both Br.
- 1975 James Rainwater, U.S. Ben Mottelson, U.S. Danish; Aage Bohr, Danish.
- 1976 Burton Richter, Samuel C.C. Ting, both U.S.
- 1977 John H. Van Vleck, Phillip. W. Anderson both U.S. Nevill F. Mott. Br.
- 1978 Pyotr Kapitsa, USSR Arno Penzias, Robert Wilson, both U.S.
- 1979 Steven Weinberg, sheldon L. Glashow, both U.S.;Abdus Salam, Pakistani.
- 1980 James W. Cronin, Val L. Fitch, both U.S.
- 1981 Nicolaas Bioembergen, Arthur Schaalow, both U.S.; Kai M. Stegbahn Swed.
- 1982 Kenneth G. Wilson, U.S.
- 1983 Subrahmanyam Chandrasekar (Indian US Citizen) William A. Fowler, U.S.
- 1984 Carlo Rubbia, It. ; Simon Var der Meer, Dutch
- 1985 Klaus Von Klitzing, W. Ger.
- 1986 Ernest Ruska, Ger.; GerdBinnig, W.Ger; Heinrich Rohrer, Swiss.
- 1987 K. Alex Muller, Swiss; J. Georg Bednorz, W. Ger.
- 1988 Leon M. Lederman, Melvin Schwartz, Jack Steinberger, all U.S.
- 1989 Norman F. Ramsey, U.S.; Hans G. Dehmelt, Ger. U.S.; Wolfgang Paul, Ger.
- 1990 Richard E. Taylor, Can.; Jerome I. Friedman, Henry W. Kendall, both U.S.
- 1991 Pierre-Giles de Gennes, Fr.
- 1992 Georges Charpak, Pol. Fr.
- 1993 Joseph H. Taylor, Russell A. Hulse, both U.S.
- 1994 Bertram N. Brockhouse, Can.; Clifford G. Shull, U.S.
- 1995 Martin L. Perl of Stanfrod University and Frederick Reins of the University of California-Irvine both US.
- 1996 David M. Lee, Douglas D. Osheroff and Robert C. Richardson, America
- 1997 Steven Chu. William D. Phillips, both U.S.; Claude Cohen Tannoudji, Fr.
- 1998 Prof. Robert B. Laughlin, Prof. Horst L. Stormer, and Prof. Daniel C. Tsui. All

U.S.

CHEMISTRY

- 1901 Jacobus H. Van't Hoff, Dutch
- 1902 Emil Fischer, Ger.
- 1903 Svante A. Arrhenius, Swed.
- 1904 Sir William Ramsay, Br.
- 1905 Adolf Von Baeyer, Ger.
- 1906 Henri Moissan, Fr.
- 1907 Eduard Buchner, Ger.
- 1908 Ernest Rutherford, Ger.
- 1909 Wilhelm Ostwald, Ger.
- 1910 Otto Wallach, Ger.
- 1911 Marie Curie, Pol. Fr.
- 1912 Victor Grignard, Paul Sabatier, both Fr.
- 1913 Alfred Werner, Swiss
- 1914 Theodore W. Richards, U.S.
- 1915 Richard M. Willstätter, Ger.
- 1918 Fritz Haber, Ger.
- 1920 Walther H. Nernst, Ger.
- 1921 Frederick Soddy, Br.
- 1922 Francis W. Aston, Br.
- 1923 Fritz Pregl, Aus.
- 1925 Richard A. Zsigmondy, Ger.
- 1926 Theoder Svedberg, Swed.
- 1927 Heinrich O. Wieland, Ger.
- 1928 Adolf O.R. Windaus, Ger.
- 1929 Sir Arthur Harden, Br.; Hans Von Euler-Chelpin, Swed.
- 1930 Hans Fischer, Ger.
- 1931 Friedrich Berguis, Kari Bosch, both Ger.
- 1932 Irving Langmuir, U.S.
- 1934 Harold C. Urey, U.S.

- 1935 Frederic Joliot-Curie, Irene Joliot Curie, both Fr.
- 1936 Peter J.W. Debye, Dutch
- 1937 Walter N. Haworth, Br.; Paul Karrer, Swiss.
- 1938 Richard Kuhn, Ger.
- 1939 Adolf F.J. Butenandt. Ger.; Leopold Ruzicka, Swiss
- 1943 George de Hevesy, Hung.
- 1944 Otto Hahn. Ger.
- 1945 Artturi I. Virtanen, Finnish
- 1946 James B. Sumner, John H. Northrop, Wendell M. Stanley, all U.S.
- 1947 sir Robert Robinson, Br.
- 1948 Arne W.K. Tiselius, Swed.
- 1949 William F. GIAUQUE, U.S.
- 1950 Kurt Alder, Otto P.H. Diels, both Ger.
- 1951 Edwin M. Mcmillan, Glenn T. Seaborg, both U.S.
- 1952 Archer J.P. Martin, Richard L.M. Synge, both Br.
- 1953 Hermann Staudinger, Ger.
- 1954 Linus C. Pauling, U.S.
- 1955 Vincent du Vigneaud, U.S.
- 1956 Sir Cyril N. Hinshelwood, Br.; Nikolai N. Semenov, USSR.
- 1957 Sir Alexander R. Todd, Br.
- 1958 Frederick Sanger, Br.
- 1959 Jaroslav Heyrovsky,
- 1960 Willard F. Libby, U.S.
- 1961 Melvin Calvin, U.S.
- 1962 John C. Kendrew, Max F. Perutz, both Br.
- 1963 Glulio Natta, It.; Karl Ziegler, Ger.
- 1964 Dorothy C. Hodgkin, Br.
- 1965 Robert B. Woodward, U.S.
- 1966 Rober S. Muliken, U.S.
- 1967 Manfred Elgen, Ger.; Ronald G. W. Norrish, George Porter, both Br.
- 1968 Lars Onsager, U.S.
- 1969 Derek H.R. Barton, Br.; Odd Hassel,, Nor.

- 1970 Luis F. Leloir, Arg.
- 1971 Gerhard Herzberg, Can.
- 1972 Christian B. Anfinsen, Standard Moore, William H. Stein, all U.S.
- 1973 Ernst Otto Fischer, W. Ger; Geoffrey Wilkinson, Br.
- 1974 Paul J. Flory, U.S.
- 1975 John Cornforth, Austral.-Br.; Vladimir Prelog, Yugo.-Swiss.
- 1976 William N. Lipscomb, U.S.
- 1977 Ilya Prigogine, Belg.
- 1978 Peter Mitchell, Br.
- 1979 Herbet C. Brown, U.S.; George Witting, Ger.
- 1980 Paul Berg, Walter Gilbert, both U.S.; Frederick Sanger, U.K.
- 1981 Kenichi Fukui, Jpn.; Roald Haffmann, U.S.
- 1982 Aaron Klug. S.A.
- 1983 Henry Taube, Can
- 1985 Herbert A. Hauptman, Jerome Karle, both U.S.
- 1986 Dudley Herschbach, Yuan T. Lee, both U.S.; John C. Polanyi, Can.
- 1987 Donal J. Cram, Charles J. Pedersen, both U.S.; Jean-Marie Lehn, Fr.
- 1988 Johann Drenth, Robert Huber, Hartmut Michel, all W.Ger.
- 1989 Thomas R. Cech, Sidney Altman both U.S.
- 1990 Elias James Corey, U.S.
- 1991 Richard R. Ernst, Swiss
- 1992 Rudolph A. Marcus, Can.- U.S.
- 1993 Kary B. Mullis, U.S.; Michael Smith. Br.-Can.
- 1994 George A. Olah, U.S.
- 1995 Paul Crutzen, Neth; Mario Molina, F. Sherwood Rowland, both U.S.
- 1996 Robert Curl Jr., Richard Smalley, both U.S.; Sir. Harold Kroto, Br.
- 1997 Paul Boyer, U.S. John Walker, Br.,; Dane Jens Skou, D. Mark.
- 1998 Dr. Walter Kohn, Austria-U.S.; Dr. John A. Pople, Br.-U.S.

MEDICINE & PHYSIOLOGY

- 1901 Emil A. Von Behring, Ger.
- 1902 Sir Ronald Ross. Br.
- 1903 Niels R. Finsen, Dan.

- 1904 Ivan P. Pavlov, Russ.
- 1905 Robert Koch, Ger.
- 1906 Camillo Golgi, It.; Santiago Ramon Y Cajal, Spn.
- 1907 Charles L.A. Laveran, Fr.
- 1908 Paul Ehrlich, Ger.; Elie Metchnikoff, Fr.
- 1909 Emil T. Kocher, Swiss
- 1910 Albrecht Kossel, Ger.
- 1911 Allvar Gullstrand, Swed.
- 1912 Alexis Carrel, fr.
- 1913 Charles R. Richet, Fr.
- 1914 Robert Barany, Aus.
- 1919 Jules Bordet, Belg.
- 1920 Schack A.S. Krogh, Dan.
- 1922 Archibald V. Hill, Br.; Otta F. Meyerhof, Ger.
- 1923 Frederick G. Banting, Can.; John J.R. Macleod, Scot.
- 1924 Willem Eilnthoven, Dutch
- 1926 Johannes A.G. Fibiger, Dan.
- 1927 Julius Wagner-Jauregg, Aus.
- 1928 Charles J.H. Nicolle, Fr.
- 1929 Christiaan Eijkman, Dutch; Sir Frederick G. Hopkins, Br.
- 1930 Karl Landsteiner, U.S.
- 1931 Otto H. Warburg, Ger.
- 1932 Edgar D. Adrian, Sir Charles S. Sherrington, both Br.
- 1933 Thomas H. Morgan, U.S.
- 1934 George R. Minot, William P. Murphy, G.H. Whipple, all U.S.
- 1935 Hans Spemann, Ger.
- 1936 Sir Henry H. Dale Br.; Otto Lowei, U.S.
- 1937 Albert Szent-Gyorgyi, Hung.-U.S.
- 1938 Corneille J.F. Heymans, Helg.
- 1939 Gerhard Domagk, Ger.
- 1943 Henrik C.P. Dam, Dan.; Edward A. Doisy, U.S.
- 1944 Joseph Erlanger, Herbet S. Gasser, both U.S.

- 1945 Ernst B. Chain, Sir Alexander, Fleming, Sir Howard W. Florey, all Br.
- 1946 Hermann J. Muller, U.S.
- 1947 Carl F. Cori, Gerty T. Cori, both U.S.; Bernardo A. Houssay, Arg.
- 1948 Paul H. Muller, Swiss
- 1949 Walter R. Hess, Swiss; Antonio Moniz, Port.
- 1950 Philip S. Hench, Edward C. Kendall, both U.S.; Tadeus Reichstein, Swiss
- 1951 Max Theiler, U.S.
- 1952 Selman A. Waksman, U.S.
- 1953 Hans A. Krebs, Br.; Fritz A. Lipmann, U.S.
- 1954 John F. Enders, Frederick C. Robbins, Thomas H. Weller, all U.S.
- 1955 Alex H.T. Theorell, Swed.
- 1956 Andre F. Coumand, Dickinson W. Richards Jr., both U.S.; Werner Forssmann, Ger.
- 1957 Daniel Bovet, It.
- 1958 George W. Beadle, Edward L. Tatum, Joshua Lederberg, all U.S.
- 1959 Arthur Kornberg, Severo Ochoa, both U.S.
- 1960 Sir F. MacFarlane Burnet, Aus; Peter B. Medawar, Br.
- 1961 Georg Von Bekesy, U.S.
- 1962 Francis H.C. Crick, Maurice H.F. Wilkins, both Br.; James D. Watson, U.S.
- 1963 Sir John C. Eccles, Aus.; Alan L. Hodgkin, Andrew F. Huxley, both Br.
- 1964 Konard E. Bloch, U.S.; Feodor Leynen, Ger.
- 1965 Francois Jacob, Andre Lwoff, Jacques Monod, all Fr.
- 1966 Charles B. Huggins, Francis Peyton Rous, both U.S.
- 1967 Ragnar Granitt, Swed.; Haldan Keffer Hartline, George Wald, both U.S.
- 1968 Robert W. Holley, Marshall W. Nirenberg, U.S. H. Gobind Khorana (Indian, US Citizen)
- 1969 Max Delbruck, Alfred D. Hershey, Salvador Luria, all U.S.
- 1970 Julius Axelrod, U.S. Sir Bernard Katz, Br.; Ulf von Euler, Swed.
- 1971 Earl W. Sutherland Jr., U.S.
- 1972 Gerald M. Edelman, U.S. Rodney R. Porter, Br.
- 1973 Karl Von Frisch, Ger. Konrad Lorenz, Ger. Aus.; Nikolaas Tinbergen, Br.
- 1974 Albert Claude, Lux.-U.S. George Emil Palade, Rom.-U.S. Christian Rene de Duve,

Belg.

- 1975 David Baltimore, Howard Temin, both U.S.; Renato Dulbecco, It.-U.S.
- 1976 Baruch S. Blumberg Daniel Carleton Gaj.-dusek, both U.S.
- 1977 Rosalyn A. Yalow, Roger C.L. Guillemin, Andrew V. Schally, all U.S.
- 1978 Daniel Nathans, Hamilton O. Smith, both U.S. Werner Arber, Swiss
- 1979 Alian M. Cormack, U.S. Geoffrey N. Hounsfield, Br.
- 1980 Baruj Benacerraf, George Snell, btoh U.S.; Jean Dausset, Fr.
- 1981 Roger W. Sperry, David H. Hubel, Tosten N. Wiesel, all U.S.
- 1982 Sune Bergstrom, Bengt Samuelsson, both Swed. John R. Vane, Br.
- 1983 Barbara McClintock U.S.
- 1984 Cesar Milstein, Brit.-Arg. Georges J.F. Koehler, Ger.; Niels K. Jerne, Brit. Dan.
- 1985 Michael S. Brown, Joseph L. Goldstein, both U.S.
- 1986 Rita Levi-Montalcini, It.-U.S. Stanley Cohen, U.S.
- 1987 Susumu Tonegawa, Jpn.
- 1988 Gertrude B. Elion, George H. Hitchings, both U.S. Sir James Black, Br.
- 1989 J. Michael Bishop, Harold E. Varmus both U.S.
- 1990 Joesph E. Murray, E. Donnall Thomas, both U.S.
- 1991 Edwin Neher, Bert Sakmann, both Ger.
- 1992 Edmond H. Fisher, Edwin G. Krebs, both U.S.
- 1993 Philip A. Sharp, U.S.; Richard J. Roberts, Br.
- 1994 Alfred Q. Gilman, Martin Rodbell, both U.S.
- 1995 Edward Lewis, Eric Wieschaus, both U.S. Christiane Nusslein-Volhard, Ger.
- 1996 Peter Doherty, Aus.; Rolf Zinkernagel, Switz.
- 1997 Stanley Prusiner, U.S.
- 1998 Rober F. Furchgott, Louis J. Ignarro, Ferid Murad, all U.S.

LITERATURE

- 1901 Rene F.A. Sully Prudhomme, Fr.
- 1902 Theodor Mommsen, Ger.
- 1903 Bjornsterne Bjornson, Nor.
- 1904 Frederic Mistral, Fr.; Jose Echegaray, Span.
- 1905 Henryk Sienkiewicz, Pol.
- 1906 Giosue Carducci, It.

1907 Rudyard Kipling, Br.
1908 Rudolf C. Eucken, Ger.
1909 Selma Lagerlof, Swed.
1910 Paul J. L. Heyse, ger.
1911 Mauric Maeterlinck, Belg.
1912 Gerhart Hauptmann, Ger.
1913 Rabindranath Tagore, Indian
1915 Romain Rolland, Fr.
1916 Verner Von Heidenstam, Swed.
1917 Karl A. Gjellerup, Henrik Pontoppidan, btoh Dan.
1919 Carl F.G. Spitteler, Swiss
1920 Knut Hamsun, Nor.
1921 Anatole France, Fr.
1922 Jacinto Benavente, Spanish
1923 William Butler Yeats, Ir.
1924 Wladyslaw S. Reymont, Pol.
1925 George Bernard Shar, Ir.-Br.
1926 Grazia Deledda, Italian
1927 Henri Bergson, Fr.
1928 Sigrid Undset, Nor.
1929 Thomas Mann, Ger.
1930 Sinclair Lewis, U.S.
1931 Erik A. Karlfeldt, Swed.
1932 John Galsworthy, Br.
1933 Ivan A. Bunin, USSR
1934 Luigi Pirandello, It.
1936 Eugene O'Neill, U.S.
1937 Roger Martin du Gard, Fr.
1938 Pearl S. Buck, U.S.
1939 Frans E. Sillanpaa, Finnish
1944 Johannes V. Jensen, Dan.
1945 Gabriela Mistral, Chilean

1946 Hermann Hesse, Swiss
1947 Andre Gide, Fr.
1948 T.S. Eliot, Br.
1949 William Faulkner, U.S.
1950 Bertrand Russell, Br.
1951 Par F. Lagerkvist, Swed.
1953 Sir Winston Churchill. Br.
1954 Ernest Hemingway, U.S.
1955 Halldor K. Laxness, Ice-landic
1956 Juan Ramon Jimenez, Span.
1957 Albert Camus, Fr.
1958 Boris L. Pasternak, USSR
1959 Salvatore Quasimodo, it.
1960 Saint John Perse, Fr.
1961 Ivo Andric, Yugo.
1962 John Steinbeck, U.S.
1963 Giorgos Seferis, GK.
1964 Jean Paul Sartre, Fr.
1965 Mikhail Sholokhov, USSR
1966 Samuel Joseph Agnon, Isr.; Nelly Sachs, Swed.
1967 Mugal Angel Asturias, Guate
1968 Yasunari Kawabata, Jpn.
1969 Samuel Beckett, Ir.
1970 Aleksandar I, Solzhenitsyn, USSR
1971 Pablo Neruda, Chilean
1972 Heinrich Boll, W.Ger.
1973 Patrick White, Austral.
1974 Eyvind Johnson, Harry Edmund Martinson, btoh Swd.
1975 Eugenio Montale, It.
1976 Saul Bellow, U.S.
1977 Vicente Alexandre, Span.
1978 Issac Bashevis Singer, U.S.

- 1979 Odysseus Elytis, Gk.
- 1980 Czesla Milosz, Pol. - U.S.
- 1981 Elias Canetti, Bulg. - Br.
- 1982 Gabriel Garcia Marquez, Colombian-Mex.
- 1983 William Golding, Br.
- 1984 Jaroslav Siefert, Czech
- 1985 Claude Simon, Fr.
- 1986 Wole Soyinka, Nigerian
- 1987 Joseph Brodsky, USSR-U.S.
- 1988 Naguib Mahfouz, Eg.
- 1989 Camilo Jose Cela, Span.
- 1990 Octavio Paz., Mex.
- 1991 Nadine Gordimer, S. African
- 1992 Derek Walcott, West Indian
- 1993 Toni Morrison, U.S.
- 1994 Kenzaburo Oe, Jpn.
- 1995 Seamus Heaney, Ir.
- 1996 Wislawa Szymborska, Pol.
- 1997 Dario Fo, It.
- 1998 Jose Saramago, Por.

A Select Bibliography

BOOKS:

Mathew. K.M; MANAROMA Year book2000

Ramalingam.T.S.; HISTORY OF INDIA

NEWSPAPERS:

Mathew,Mammen; The Week

Ravi.N; The Hindu

WEBSITES:

www.askjeeves.com

www.yahoo.com

www.historyplace.com

www.about.com

www.washingtonpost.com