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MOTTO: BRINGING KNOWLEDGE TO YOUR DOORSTEP
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MAINLAND LECTURE CENTER

GST105: HISTORY AND PHILOSOPHY OF SCIENCE

The word **'science'** is derived from the_____word
Latin

the word **scientia** means_____
Knowledge

science generally is regarded in main ways
three

science generally is regarded in three main ways as_____
A body of knowledge.

A method for acquiring knowledge or studying and understanding the world.
An institution.

The two branches of science are empirical and_____sciences
formal

____science utilises concepts, rules and theories, and expresses them in quantitative and statistical manner.
Formal

____sciences include mathematics (which comprise geometry, algebra, trigonometry, arithmetic), logic, theoretical physics, and statistics.
Formal

Formal sciences have a formal and_____character.
deductive

Science is said to be **formal** if its contents, arguments and_____obey certain rules.
procedures

____science include physics, chemistry, biology, psychology, botany, zoology, biochemistry, microbiology, geology, medical
empirical

The second way of grouping scientific disciplines is according to _____
the class of objects

the second way of grouping scientific disciples involves the followingways_____
Natural sciences
Physical sciences
Biological sciences.

Medical sciences
Pharmaceutical sciences

what disciplines are concerned with drugs and drug contents of plants and other objects?
Pharmaceutical sciences

___science deal with physical and inanimate objects such as rocks, rivers, and mountains.
physical science

what science deal with living bodies such as human beings, animals, insects and plants.
biological science

what disciplines deal with objects and problems that affect human and animal health?
medical science

an example of formal science is
medicine
economics
biology
mathematics

objects which can be perceived by senses include_____
human body
goats
weather
all of the above

Religion relies on the principle that the universe is governed by _____
spiritual laws.

_seeks knowledge that is objective, certain, systematic, provable and supported by evidence.
Science

_____is a collection of 'facts' (body of knowledge) that describe and explain the workings of nature.
science

The process is characterised by a sequence of steps, which enable scientists to approach objective truth as closely as possible which are_____
Observation Problem
definition
Hypothesis formulation
Experimentation Conclusion
Theory formulation

Knowledge comes from noticing resemblances and recurrences in the events that happen around us, this was said by _____
Wilfred Trotter

_____is the first step of the scientific method.
Observation

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Observations can also be classified into _____
Spontaneous or passive observations and Induced or activeobservations

____is a most difficult art acquired only after long experience and manyerrors.
Correct observation

the second step of scientific method iscalled_____
problem definition

the third step of scientific method iscalled_____
Hypothesis formulation

The main function of a hypothesis isto _____
predict new experiments or new observations.

who was a german scientist who went to bed one night after fairly getting drunk and in his sleep, he dreamt of six monkeys Kekulé went chasing one another in a circle, the tail of one held in the teeth of the other.
Kekulé

who concluded that benzene has six carbon atoms 'chasing' one another in a circle(structure of benzene)
kekule

The German chemist called ———————————— discovered the structure of benzene.
kekule

The final step of the scientific methodis _____
theory formulation.

A scientific_____is an explanation about the cause or causes of a broad range of related phenomena.
theory

A_____is usually proposed when a hypothesis has been supported by really convincing evidence.
theory

A principle characteristic of scientific thinking is that the sequence of observing, hypothesising, experimenting, concluding and _____
interpreting

__may be defined as the formation of possible solutions to a problem or possible explanations of a phenomenon.
Creative thinking

In_____, it was generally believed that organisms originatedspontaneously from non-livingmatter.
ancient times

who believed that rats came from garbage?
ancient Egyptians

acteria was a microorganisms discovered in _____
1676

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who clearly declared his belief that each kind of animal and plant had remained unchanged from the day it was created?
john ray

The study of fossils which was begun in the **eighteenth century**by _____
Georges

in what year was Charles Darwin born?
1809

____proposed that all species, including human beings were descended from other species
Jean Baptiste de Lamarck

____believed that life changed progressively from the simple to the morecomplex.
Jean Baptiste de Lamarck

_____theory states that 'changes acquired during an individual's life are brought about by environmental pressure and internal "desires" and that offspring inherit the desired changes'
theory of inheritance

At the age of eight,_____interest in observing the natural world was manifested**.** -
Charles Robert Darwin

Darwin's theory of evolution provides an explanation for three main sets of facts aboutlife on earth, which we observe and these are_____
The incredible display of different types of living things we see about us.
The different degrees of likeness among the living things. The likeness could be anatomical or molecular.
The fossil record that shows a sequence in the kinds of organisms that have lived on earth over billions of years.

in what year was archaeopteryx discovered?
1861

Discoveries of microscopic fossils by paleontologists have extended back the known history of life on earth to more than _____
3.5 billion years.

_____is the science of inheritance.
Genetics

___is the science that examines the chemical processes and substances that occur in livingthings.
Biochemistry

The pattern and regularity of these changes can be expressed as rules or laws. These laws are called_
_____
natural laws

____defined laws of nature as 'nothing but the uniformities, which exist among natural phenomena'.
Nwala (1997)

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laws of nature refer to, that is, encompass thefollowing_____
Those uniformities found in nature (that is uniformities in behaviour, function, relations and properties of things).
Established connection of successive events which make up the order of the universe. Established theories through scientific research

Examples of laws of nature are_____
Law of the uniformity of nature Law of causation
The law of gravitation
The law of natural selection

_____is the force which pulls every object in the universe toward every other objectin the universe
Gravitation

The law of gravitation first started as a theory ofuniversal _____
gravitation.

theory of universal gravitation was first postulated by_____
Sir Isaac Newton (1642-1727)

Albert Einstein's theory of relativity was formulatedin _____
1905

_____law of universal gravitation states that 'any two bodies attract each other with a force directly proportional to the productof their masses and inversely proportional to the square of the distance between them'.
Newton's

The origin of science is often traced to the **Egyptians** andthe _____
Babylonians.

at the time of the Egyptians and Babylonians, people who studied plants, animals, stars and other heavenly bodies, rocks, soils, etc were allcalled _____
philosophers.

'philosophy' was taken from two Greek words, namely: **'philos'** which means_____and **'sophia'** which means_____
love/wisdom

The kingdom of Egypt was divided into three religious centres, which were Memphis, Heliopolisand_____
Thebes or Hermopolis.

Astronomy originated with the_____through their study of the heavens
Egyptians

Credit is also given to the_____for the origination of mathematics.
Egyptians

The sciences of mathematics, astronomy and engineering (irrigation and canal construction) also developed in_____about 1800-1600 BC.

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Babylonia

The first accurate astronomical observation they recorded was the rising and setting of the _____
planet Venus

The Babylonians also realised the importance of fixed units of physical measurement. Their unit of length was the _____
finger

in the physical measurement of Babylonians, thefoot contained_____fingers
twenty

in the physical measurement of Babylonians, thecubit contained_____fingers
thirty

the medium of exchange for the Babylonians wasthe _____
barley

The world's first philosopher in history wascalled_____
Ptah-Hotep

who was the world's first social philosopher?
Ipuwar

The black Egyptian **Imhotep** who lived **2000 years** before Hippocrates, was calledby the Greeks _____
'the god of medicine'

The world's first woman philosopher iscalled_____
Hypathia

who was the great mathematician who laid the foundation for the science of mechanics.
Archimedes

_____people were known as natural philosophers because they engaged themselves with the studyof nature and the origin of the world.
Pre-socratics

who was usually referred to as the father of Western philosophy?
Thales of Miletus

who taught that water was the source of all things in the universe?
Thales of Miletus

____was the first among the Greeks to represent the earth on a map, though the science ofmap making (cartography) was known in Egypt and Babylonia.
Anaximander

____believed that the universe was composed of numbers in various shapes -squares, cubes, oblong, triangular,
Pythagoras

____was the first Greek to advance the principle of change as a universallaw.

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Heraclitus

According to_____, 'From life comes death; from death comes life; sleep changes into wakefulness and wakefulness changes into sleep'. Everything in the universe, he says, has its ownopposite
Heraclitus

_____was a disciple of Leucippus who is credited with the founding of the atomic theory or the doctrine of matter.
Democritus

___proposed that matter is made up of atoms and they are infinite in number and too small to be perceived by the senses.
Democritus

According to_____, everything new is produced from a combination of atoms and that deathor cessation takes place when atoms separate.
Democritus

The Socratics includes Socrates, Platoand _____
Aristotle.

who was the teacher of Plato and was born in Athens?
Socrates

who was the philosopher that loved mathematics and he formulated the idea of negative numbers?
Plato

__suggested that the earth rotates on its own axis once in every 24 hours and that Mercury and Venus circle round the sun like satellites
Heracleides

___enriched science with universal definitions and inductive reasoning.
Socrates

___wrote books on almost all the areas of knowledge - biology, zoology, physics, astronomy,etc.
Aristotle

Scientific innovation began to decline in the **Roman Empire**.

The calendar invented by the Egyptians was modified further by **Julius Caesar**and _____
Pope Gregory III.

Julius Caesar, one of emperors gave the world its present calendarcalled the _____
Julian calendar in 46 BC.

Science originated in _____
Egypt and Babylonia

Egyptian priest-scholars established a kind of school knownas the_____Schools where every known discipline was taught by the priests.
Egyptian Mystery System

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Evidence for the Egyptian origins of mathematics and medicine can be found in the _____ and the _____ respectively.
Rind Mathematical Papyrus/Edwin Papyrus

who developed the most descriptive astronomy of the ancient world?
Babylonians

___were the first to divide the day into hours, minutes and seconds and also divided the circle into 360 degrees.
Babylonians

____philosophy is the origin of Western philosophy.
Egyptian

the period from about AD 450 to 800 is sometimes called the _____
'Dark Ages'.

All through the Middle Ages, there was only one Christian church (Roman Catholic) in Western Europe. It became a symbol of unity, such that the united Christian world was called '_____'.
Christendom

Aristotle were assimilated in Islam, by the end of the _____century.
9th

In the field of science were two very influential theologians and philosophers: Albert 'the Great'(1193 - 1280 AD), a Bavarian Dominican priest, and **Thomas Aquinas (1225 - 1274 AD), an Italian monk.**

_____was an English philosopher who determined the main direction of the physical science in the 13th and 14th centuries and had knowledge of the workings of mirrors and of the nature of lenses
Robert Grosseteste (1175 -1253).

Renaissance period is the second half of the Middle Ages of Western Europe and it started from the _____century.
9th to 15th

This spirit of questioning old beliefs and forming new opinions generally came to be described as the _____
'Renaissance'

_____was the first man in Europe, during the renaissance period, approached in scientific spirit, the great Arabians who preceded him
Roger Bacon

_____was an Italian and he could stand as the incarnation of the true spirit of scientific thought of the renaissance
Leonardo da Vinci (1452 - 1519)

___was a painter, a sculptor, an engineer, an architect, a physicist, a biologist and a philosopher
Leonardo da Vinci (1452 - 1519)

According to_____, 'those sciences which do not begin with experiments, the mother of all certainties and which do not end with one clear experiment are vain and full of errors'

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Leonardo da Vinci (1452 - 1519)

The Middle Ages of Western Europe comprise two phases which are: **the Dark Ages (450 to 800 AD)** and **the Renaissance (9th to 15th century AD).**

In the_____, knowledge of nature was valued only as a means of edification or as an illustration of the passages of scripture
Dark Ages

In_____ages, the monks in monasteries translated ancient works into Latin and thus kept alive some amount of learning
Dark

While Europe was in the_____, Islamic learning started to flourish
Dark Ages

Islamic scholars translated Greek writings into their language because _____
they treasured ancient science

Islamic thinkers also created the science of algebra and thestudy of_____functions
algebraic

____also borrowed the idea of zero from the Hindu mathematicians and invented the Arabicnumerals.
Islamic thinkers

The_____period was characterised by an increasing desire for knowledge such that critical power resurfaced
Renaissance

The Renaissance in science was started by two theologians: **Albert the Great (1193 -1280 AD)** and **Thomas Aquinas (1225 - 1274 AD)**

_____was an Italian, provided a most beautiful evidence, to justify that ancient authorities should no longer be accepted without criticisms
Galileo

_____is regarded as the first person to attempt to arrange the steps of the scientific method in a logical manner.
Francis Bacon (1561 - 1626 AD)

_____discovered that it was a gas, which he named oxygen that enables combustion (burning) and respiration to take place
Laurent L avoisier (1743 - 1794 AD

In human beings also, the cells which aid reproduction are called _____
gametes

The gametes from fathers are called **sperms**, while those from mothers arecalled _____
eggs or ova

The statement that 'cells are the building blocks of living things' is calledthe _____

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cell theory.

in_____, two scientists, **Theodor Schwann and Matthias Schleiden** made this general statementor proposed a theory that 'cells are of universal occurrence and are the basic building blocks of an organism and that cells come from pre-existingcells'
1839

Another fundamental theory of Biology proposedin the_____century was the theory of Evolution
19th

who was called the 'Newton of Biology'
Charles Darwin

There was a complete change in scientific outlook from late 15th century up to _____
17th century

The first great change in scientific outlook was madeby _____
Nicolaus Copernicus (1473 -1543)

_____disproved the Ptolemaic system or Geocentric theory, which stated that 'the earthwas the centre of the universe and all other heavenly bodies move round it incircles'
Nicolaus Copernicus (1473 -1543)

who discovered the laws that govern movements of the heavenly bodies?
Johannes Kepler(1571 -1630)

____proposed a theory of gravitational attraction to answer these questions. Gravitation is the force that pulls every object in the universe towards ever y other object in the universe.
Isaac Newton

The classic ages of science were the_____centuries
18th and 19th

The explosion in Chemistry was startedby _____
Antoine Laurent Lavoisier (1743 - 1794).

who discovered that it was a gas, which he called oxygen that enables combustion and respiration to take place.?
Francis Bacon

In_____, the German Physicist, Wilhelm Röntgen discovered the xrays
December 1895

___is therefore defined as the techniques that make use of living organisms or parts of organismssuch as cells, to make or roducts, to improve plants and animals, or to develop microorganisms for specific applications
Biotechnology

Some of the techniques of biotechnology are as follows:
1. cell and tissue culture technique
2. fermentation technology

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3. cell fusion
4. embryo transfer
5. recombinant DNA (r DNA) technology (or genetic engineering).

_____engineering is the hard core of biotechnology
Genetic

A_____is the basic unit of heredity
gene

In agriculture, applications of genetic engineering include the following_____
Herbicide resistance
Insect resistance

Aeroplanes with jet engines were built during the late _____
1930's

the 20th century was called_____
space age

who was the first person to be in space?
Yuri Gagarin

The first American in space is called _____
Allan Shepard

The first communication satellite called **Echo I**, was launched by the United States in _____
1960

A communication_____is a transportation vehicle launched into space to transport existing forms of communication devices, such as camer as, radios, television Etc
satellite

The first electronic digital computer was built in **1946**, and was called ____
ENIAC (Electronic Numerical Integrator and Computer)

The Internet is another invention of the 20th century. It began in the early ___
1970's

Cellular phones were introduced in _____
1979.

The first petrol-engined aeroplane was built in **1903** by _____
Orville and Wilbur Wright

Genetic engineering is also used in human _____
cloning

In_____genetic engineering is used to confer herbicide resistance to plants, such as soyabean and cotton plants.
Agriculture

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In_____, genetically- engineered proteins include, human insulin human interferon, tissue plasminogen activator and atrial peptides
pharmaceuticals

Genetic Engineering, which is the hard core of Biotechnology, startedin _____
1980

____is a collection of various computer networks, linked together and communicating by a common protocol known as TCP/IP (that is Transmission Control Protocol/Internet Protocol)
internet

Some of the facilities and services which the Internet can provideinclude _____
(a) E-mail
(b) File Transfer Protocol (ftp)
(c) Telnet

In 1978,_____A very both of Brown University, USA, announced that between 1,500 - 2,000 years ago, Africans who lived on the western shores of Lake Victoria in Tanzania had produced carbon steel **Peter Schmidt and Donald**

The_____people are the present occupants of the western shores of Lake Victoria
haya

_____excavated iron crystals from the site where the Haya people said that one of their ancient kings had climbed a pillar of iron to ascend to the heavens
Peter Schmidt

who persuaded some Haya blacksmiths to carry out a smelting experiment?
Peter Schmidt

The_____people introduced a process in their smelting that was very original and in advance oftheir time
Haya

The_____people of Mali incorporated the rising and setting of certain stars or groups of stars into their various calendar.
Dogon

what star is the brightest star in the sky?
Sirius

The___extensive knowledge of the heavenly bodies, especially 'Sirius B' sent shock waves aroundthe scientific world
Dogon's

Two French anthropologists called_____and_____were the people that revealed this information onthe Dogon people
Marcel Griaule and Germaine Dieterlen

who studied the Dogon people form 1931 to 956 and Their ambition was to fully understand the Dogon especially their religion

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Marcel Griaule and Germaine Dieterlen

Among the earliest evidence of the use of numbers in Africa is called_____
carved bone

The Yorubas have a complex number system, which is basedon _____
twenty

The subtractive principle in the Yoruba number system originated becauseof _____
the practice of counting cowries by fives

_____is both the process and product of investigation and research
Science

Curiosity motivates scientists to carry out investigations and research, while the desire to know how to translate ideas and_____into concrete products or processes, is what motivatestechnologist
plans

what began when man-made and used tools, in his desire to provide for his basic needs of food, clothing and shelter.
Technology

Technology can be subdivided into **classical - low technology** such as fabrication of iron, steel etc, and **science - based** high technology such as space technologies, Nuclear energy etc

____is concerned with human reasoning or thought
logic

there are_____types of logic
two(deductive logic and inductive logic)

when move from a set of premises, which we assume to be true to a conclusion then we say it's a _____logic
Deductive logic

the method of reasoning is also called_____
Deductive logic or inductive logic

_____is the type of reasoning in which we go from some particular statements to a general conclusion
Inductive logic

The inductive method is also called the_____method
Baconian

the Various views on the origin of man are_____
The religious view The scientific view

The religious view is upheld bythe _____
creationists.

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what view is held by the evolutionists?
The scientific view

The theory of_____developed from the perspective of science states that man, like all other living things (animals and plants) have evolved from simpler forms of life by a process of slow and gradual change (evolution).
evolution

Australopithecus africanus was discovered in **1924** in **South Africa** by _____
Raymond Dart.

Australopithecus boisei and Australopithecus robustus appeared in East Africa about_____years ago
2.5-3 million

The **Neanderthals** lived in Europe and Western Asia from 70,000to about_____years ago
32,000

The evolutionary development of man from an ape-like primate was marked by four important factors, namely _____

1. the growth and elaboration of the brain
2. the perfection of erect posture
3. a slowing down of postnatal development
4. the growth in human popula

Two views on the origin of man are the religious or **creationist** view and the scientific or the **evolutionist view**

The first Hominids emerged_____million years ago
5 to 10

The earliest known hominids were the members of thegenus _____
Australopithecus

___were the first known representative of the humanlineage.
Homo - H. habilis

____were the first humans to use fire and to live at times incaves
Homo erectus

what is the cell responsible for the birth of new organisms.
reproductive cell

_____is the protein substance, which controls the form and function of the cells and tissues of each particular individual so that they harmonize with his hereditary pattern
DNA

DNA stands for _____
deoxyribonucleic acid

there are estimated ___ billion different combinations chromosomes possible when the sex cellsfrom husband and wife unite at the time of conception

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One chromosome in each pair of chromosomes is sex chromosome while the rest of the 22 cells are _____
autosomes

In the case of_____, it means that the mother released two female sex cells at one time for the particular month in which conception occurred, each being joined or fertilized by separate male sex cell **fraternaltwins**

Fraternal twins make up_____of all twin pregnancies
75%

identical twins make up_____of all twin pregnancies
25%

What distinguishes man and places him high above all other earthly and visible creatures is his infinite capacity to _____
create

Six kinds of specialised cells in man which are_____
(a) skin cells called epithelium tissues
(b) bone or connective tissue cells
(c) muscle cells
(d) blood cells
(d) nervous tissue cells
(f) reproductive cells

The_____are the carriers of the hereditary materials
chromosomes

The hereditary materials or determinants of heredity are called the _____
genes

___is the world or the universe, regarded as one orderly system with a structure, whose parts are linked together in an orderly manner
cosmos

The branch of philosophy, which studies the structure of the universe iscalled_____
cosmos

_____is a branch of astronomy, which deals with the general structure and evolution of theuniverse.
Cosmology

The branch of philosophy which deals with the evolution and origin of the universe iscalled _____
cosmogony

____takes the earth approximately 24 hours (around the equator) to rotate or turn on itsaxis.
Rotation of the earth

____takes the earth about365 days (i.e. one year) to complete one revolution around the sun
Revolution of the earth

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The earth is_____million miles away from the sun
93

The earth has a surface area of_____square miles
196,550,000

what is the part of the earth's crust, water and atmosphere where living organisms can subsist?
biosphere

what is the gaseous envelope (or air) surrounding the earth?
atmosphere

there are_____sublayer of the atmosphere
three(troposphere,strastosphere and ionosphere)

___is the sublayer of the atmosphere from the sea level to about 5 miles high at the North Pole and 11 miles at the equator
The troposphere

___layer in the atmosphere is a protective layer important for the sustenance of life onearth.
ozone

_____is a sublayer of the atmosphere that is high up to 50miles
ozone

_____is a sublayer of the atmosphere that ranges from 50 miles t0 300 miles.
The ionosphere

The various layers of the atmosphere differ mainly intheir _____
temperature

For the_____, temperature drops to about 30F for every 100 feetheight
troposphere

For_____, temperature rises to 900 F in the ozone layer and falls to about 1000 F at the top of the layer
strato sphere

For the_____, temperature rises to about 4,0000 F at the 300 miles up
ionosphere

The smallest planet in the solar system is called _____
mercury(has no satellite)

the most brilliant planet in the solar system is called ___
venus

how many satellite or moon does earth have?
one

how many satellite or moon does mars have?
two

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how many satellite or moon does jupiter have?
12

what is the largest planet in the solar system?
Jupiter

what planet is the second largest in the solar system?
Saturn

how many satellite or moon does saturn have?
10

how many satellite does Uranus have?
5

how many satellite does neptune have?
2

the outermost planet in the entire solar system is called?
pluto

The sun, plus its nine planets and their satellites formthe _____
solar system

The solar system along with other stars and their satellites form a collection or group called the _____
Galaxy

_____are a large system of stars held together by mutual gravitation and isolated by similar systems by vast regions of space
Galaxies

The Milky Way Galaxy contains about_____million stars
100,000

a_____is a unit of measurement of distant objects such as stellar (i.e. star) distances
light year

A_____is the distance traversed by light in one mean solaryear
light year

One light year is about_____miles
5,880,000,000,000

The unit of measurement which is used to measure astronomical distances is called_____
light year

__is the main source of energy needed by plants and animals
carbohydrate

The three main types of carbohydrates are sugar, starchand _____
cellulose

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____means the plant life of a region
Vegetation

natural resources could be classified in two ways, which are:living resources and_____
non-living resources

___are resources that can reproduce or renew themselves
renewable resources

____are those resources which do not usually replace themselves once they are used
non-renewable

____is the process of care whereby a resource that occurs in an uneconomical formation is upgraded or improved, i.e. rendered economically viable.
Beneficiation

____is the sum of those measures that make for the avoidance of waste and which also increase the production of a resource
Maximisation

____is the utilisation of readily available resources in place of a rare one
Substitution

____involves the determination of the best use of a particular resource and the scheduling of such a resource for that use
Allocation

____is the gathering of waste or used materials, reprocessing them, and using them again in place of fresh materials
Recycling

Philip Emeagwali was born on_____in Akure
August 23, 1954

the father of Philip emeagwali was ?
james emeagwali

the mother of Philip emeagwali was ?
Agatha

james emeagwali worked out a theoretical scheme for using **64,000 far-flung processors** that willbe evenly distributed around the Earth, to forecast the weather which he called_____
Hyper Ball International Network of computers

an International Network of Computers is called the _____
Internet.

There are_____chromosones within the nucleus of a productive cell Ans:
46

All living beings are said tocompose of _____
Ans: **cells**

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____distinguishes him from other living things
Ans: **Capacty create**

The first known hominids were the _____
Ans: **Southern apes**

The use of language first evolved among _____
Ans: **homo habilis**

The evolutionists believe that man evolved directly from _____
Ans: **apes**

Current evolutionists put forward the belief that man and primates originated from _____
Ans: **Africa**

Scientists who try to prove the theory of evolution rely heavily on _____
Ans: **fossils**

The belief that God created the universe is called _____
Ans: **creationism**

____type of logic is also regarded as Baconian logic
Ans: **inductive**

Branches of philosophy do not include _____
Ans: **science**

The beleief in a existence of external reality independent of our belief or knowledge of it is called _____
Ans: **objectivity**

Whch of these is not a characteristic of scientific knowledge? Ans:
relativity

____is not among the similarities between science and philosophy Ans:
both employ empirical method of investigation

Which of these is not among the commitment of British Society for Social Responsibility in Science? make scientists aware of social significance of science
make them aware of their social responsibility
Ans: **make them aware of the need to bridge scince gap among countries**
help create an informed public that can exercise a choice in scientific matters

Scientists and Engineers for Social and Political Action was formed in _____
Ans: **1969**

Technological progress is not responsible for _____
Ans: **purification of air**

We owe the discovery of electricity to _____
Ans: **Faraday**

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____is not method of technology acquisition
Ans: **apprenticed technology**

The discovery of_____is the most important discovery of stone age
Ans: **fire**

Man's technical progress is governed by_____and_____
Ans: **discovery and invention**

____drives scientific inventions
Ans: **curiousity**

The advantage of email over regular mail is _____
Ans: **speed**

___was the first person to fly into the space
Ans: **Yuri Gagarin**

The aeroplane is an example of invention of the_____century
Ans: **20th**

Genetic engineering emerged in the _____
Ans: **1980s**

The basic unit of heredity is called _____
Ans: **gene**

The first man to walk on the moon with his partner was _____
Ans: **Armstrong**

____was the number of scientists able to understand the relativity theory of Albert Einstein Ans: **12**

Wilhelm Röntgen discovered the _____
Ans: **xrays**

____confirmed that atoms and molecules were the building blocs ofmatter Ans:
Dalton

We credit the invention of telescope to _____
Ans: **Galileo**

The idea that the sun is the centre of the universe was first held by _____
Ans: **Copernicus**

The author of "Al Magest" is _____
Ans: **Ptolemy**

Leonardo da Vinci held that true knowledge must begin with _____
Ans: **observation**

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Renaissance means_____
Ans: **rebirth**

The_____were responsible for te development of primitive alchemy into modern Chemistry Ans:
Arabs

The dark age of history was marked by _____
Ans: **halt in the advancement of knowledge**

The fixing of leap year to any year whose number is exactly divisible by four is attributed to _____
Ans: **Pope Gregory III**

Greek science was more_____and_____
Ans: **speculative and theoretical**

___is regarded as the most accomplished of Plato's pupils Ans:
Aristotle

___formulated the idea of negative numbers
Ans: **Plato**

The practice of definition in scientific discourse isowed to _____
Ans: **Socrates**

According to Democritus, separation of atomsleads to _____
Ans: **death**

____first advanced the principle of change as a universal law Ans:
Heraclitus

___believed that the universe is composed of numbers Ans:
Pythagoras

Thales regrded_____as the source of all things
Ans: **water**

The world's first woman philosopher is _____
Ans: **Hypathia**

God of medicine is the name given by the Greeks to _____
Ans: **Imhotep**

Ptah-Hotep is reputed the world's first _____
Ans: **philosopher**

The Egyptians and the Babylonians regrded all knowledge as _____
Ans: **revelation from the gods**

The Babylonians divided the circle into_____degrees
Ans: **360**

The two great rivers of the ancient Babylonians were_____and ____

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Ans: **Tigris and Euphrates**

In Babylonian system of measurement one cubit consisted of _____
Ans: **30 fingers**

The Babylonians engaged in astronomy in order to _____
Ans: **pacify the gods**

The greatest physician of the ancient time is an Egyptian known as _____
Ans: **Imhotep**

Astronomy has its origin in _____
Ans: **Egypt**

____is not among the religious centres of ancient kingdom of Egypt Ans:
Miletus

Love of wisdom is etymological meaning of _____
Ans: **philosophy**

Philos, the Greek word that is a component of the term philosophy means _____
Ans: **love**

Science is said to have its origin in the_____age
Ans: **Neolithic**

We trace the origin of science to_____and __
Ans: **Egyptians and Babylonians**

The theory of relativity was formulated by ___
Ans: **Einstein**

The theory of universal gravitation was intended to explain the phenomenon of _____
Ans: **falling objects**

____does not capture the character of scientific explanation of realities Ans:
meditation

The view that developments occur because of the purpose or design they serve isknown as _____
Ans: **teleology**

Theories that have proved to be so universally valid or true, that is, they are true anywhere in theworld and have such a high degree of probability, are called _____
Ans: **natural laws**

The science that examines the chemical processes and substances that occur in living things is called _____
Ans: **Biochemistry**

The observation that any population tends to outgrow its resources and its members must compete for what is available was first made by _____
Ans: **Malthus**

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The ship whose expedition to America that Charles Darwin was a member is known as _____
Ans: **H.M.S. Beagle**

An explanation about the cause or causes of a broad range of related phenomena isknown as _____
Ans: **theory**

The second step in scientific method is known as Ans: __
definition of problem

When observations are unexpected we regard it as ___
Ans: **passive**

Scientific observation can be_____and_____
Ans: **direct and indirect**

Characters of science does not include_____
Ans: **speculative**

____is not anexample of empirical science
Ans: **mathematics**

A branch of science whose contents, arguments and procedures obey certain rules isknown as _____
Ans: **formal science**

____cannot be attributed to formal science
Ans: **prophecy**

Science regarded as a body of knowledge does not include _____
Ans: **Sophistry**

The term, science, was derived from a Latin word, namely_____
Ans: **scientia**

What is the English meaning of the Greek word, Philo?
Ans: Love

Who do we owe the practice of definition in scientific research?
Ans: Aristotle

What is the etymological meaning of the word, philosophy?
Ans: Love of wisdom

Which of these has its origin in Egypt?
Ans: astronomy

Who was regarded as the greatest physician of the ancient Egypt?
Ans: Imhotep

On what does the reputation of Hypatia rests on?
Ans: Her being the first female philosopher

Who championed the division of the circle into 360 degrees?

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Ans: Babylonians

Who regarded water as the source of all things?
Ans: Thales

Who theorised that the universe is composed of numbers?
Ans: Pythgoras

Who is known as the world's first philosopher?
Ans: Ptah-Hotep

All living things are composed of what?
Ans: cells

Which of these first made use of language?
Ans: Homo Habilis

What is the name given to the belief that man descended from the apes?
Ans: Evolutionism

On what do scientists who try to prove the theory of evolution rely?
Ans: Gene Mutation

Which of these is not a characteristic of scientific knowledge?
Ans: Relativity

What do we regard as the first hominids?
Ans: The Southern apes

What is another name for inductive logic?
Ans: Baconic Logic

What is regarded as the most important discovery of the stone age?
Ans: Discovery of Fire

Which of the following is not a branch of philosophy?
Ans: Science

Where do current evolutionists regard as the birthplace of man and primates?
Ans: Africa

The simple meaning of Australopithecus is_____
Ans:Southern Ape

Which stage of evolution did the HOMO looked very much like modern man?_____
Ans: Homo Sapien

At what stage of evolution did man began to control fire and fashion advanced tools
Ans: Homo Erectus

According to the theory of evolution, man might have evolved from the following except_____
Ans: God

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According to the evolutionist,man originated from_____
Ans: Africa

Which of the following is a characteristics of evolution._____
Ans: It involves struggle for survival

The principle of Gravitational attraction which answers the questions of earlier scientists was formulated by _____
Ans: Issac Newton

The honour of inventing a scientific instrument called the telescope goesto _____
Ans: Galileo

According to history, the first great change in scientific outlook after the renaissance was made by a Polish mathematician and astronomers called_____
Ans: Nicolaus Copernicus

The Nigerian scientist whose name appear in the history book of internet was _____
Ans: Philip Emeagwali

The geologist who propounded the idea of gradualism in evolution iscalled _____
Ans: James Hutton

_____is the remains or body impressions of dead organism that lived is the past
Ans: fossils

The belief that each kind of animal and plant had remained unchanged since creation is called _____
Ans: doctrine of fixed creationism

The progressive change of living things through ages and time iscalled _____
Ans: evolution

The basic type of food needed by man include all the following except_____
Ans: vitamin

One of the following is given off during photosynthesis. Itis_____
Ans: oxygen-oxide

Among the ancient settlement,Tigris and Euphrates valley is foundin _____
Ans: babylonia

Agricultural production depend on all the following except_____
Ans: solar energy

_____is not part of primitive agriculture
Ans: seasoning

True experiment science, free from philosophy and religion emerged inthe _____
Ans: 16th and 17th century

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An Italian monk who taught alongside Albert the great at University of Paris in the 12th century was _____
Ans: Thomas Aquinas

Historically rebirth or revival of learning was started in Italy by threescholars called_____, _____and_____
Ans: Dante,Petrarch and Boccaccio

The spirit of questioning old beliefs and forming new opinions was described as_____
Ans: renaissance

What is the difference between the renaissance men and the men of dark of ages in term of attitude. It is _____
Ans: men of dark ages were satisfied and did not ask question

The food that man eat are derived from _____
Ans: plant and animal

The sun supplies solar energy while the plants provide_____
Ans: oxygen

Man's existence is sustained through biological reproduction and _____
Ans: utilization of natural resources from his environment

The founder of the Geometric Machine Corporation and a consultant to North Atlantic Treaty Organization is _____
Ans: Bartholomew Nnaji

Yangte is a river found in_____
Ans: China

Which of these is most useful to the plant during photosynthesis. _____
Ans: carbondioxide

The interdependence between man and plant in their air consumption is called _____
Ans: symbiosis

_____is a simpler form of sugar which is derived from carbondioxide, water andsunlight
Ans: glucose

Yankari Game Reserve is located in_____state
Ans: Bauchi

Which of these sphere is not part of the layers in the atmosphere _____
Ans: xtratosphere

In which of these vegetation is farming difficult. _____
Ans: tundra

Temperate rain forest can be found can be found in _____
Ans: USA and China

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The theory that state that the earth is the center of the universe and all other heavenly bodies move round it. This theory is called _____
Ans: Geocentric

A scientist who used his primitive microscopic in 1665 to observe that plant materials have cellular structure was_____
Ans: Robert Hooke

The combination of two hydrogen atom and one atom of oxygen willproduce_____
Ans: water

Who among the following scientists will receive the honour of revolution in chemistry. It goes to _____
Ans: Antoine Laurent Lavoisier

Which of these may not constitute environmental pollution
Ans: crude oil

_____is a substance whose presence in the air is harmful?
Ans: pollutant

Which of these gases is an air pollutant?
Ans: carbon monoxide

_____refers to the release of substances or energy into the environment in quantities which are harmful to man and other living things
Ans: pollution

Envoronmental assault such as constant flaring of gas may happen to one of these communities
Ans: Ogoni

In which year was the cellular phoneintroduced? _____
Ans: 1979

Which of these diseases is not associated with the radioactive particles from atomic bomb
Ans: diabetes

All the following are facts about atomic bombsexcept _____
Ans: part of the radioactive element can be used to cure cancer

All these constitute water pollutionexcept _____
Ans: oxygen transformation

The bombing of Japanese cities during the second world war in 1945 was carried out by the _____
Ans: Americans

Hiroshima was a popular town in _____
Ans: Japan

Which of these towns were destroyed by atomic bombs during the 2nd world war
Ans: Nagasaki

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Which of the following is not an effect of climate change
Ans: desertification

____refers to absorbing and returning of heat to the earth's surface due to green house gases
Ans: global warming

Which of these is not a green house gas
Ans: neon

The threat to climate arises from the retention of a level of_____in the atmosphere
Ans: carbondioxide

_____is a collection of various computer networks linked together and communicating by a common protocol
Ans: internet

The term ENIAC simply means_____
Ans: Electronic Numeral Intergrator and Computer

The first electronic digital computer was assembled in the year _____
Ans: 1946

The first communication satellite called "Echos" was launched by the _____
Ans: United state

The first step of the Arabs when they came in contact with ancient science was _____
Ans: searched for the writing of the greeks and translated them into their language

In which region of the world did Islamic knowledge flourish
Ans: east

One significant invention during the dark ages that was not noticed is _____
Ans: the convention of rigid horse collar and iron horse shoes

The proposition that "everything that moves is moved by something else" can be credited to _____
Ans: Aristotle

From the point of view of early christians, knowledge on nature was valued only as a means of _____
Ans: edification

Why did the father of the church show little interest in knowledge of nature
Ans: knowledge of nature would not help them in their hope of life to come

Why was the study of biology lagged far behind chemistry and physics
Ans: people at that time believed that organisms were too complex to study

The following facts supported the proposotion that 19th century was considered as the classic scientific age except_____
Ans: the usage of scientific method in the field of science was introduced

In what century was the role of air and gas in chemical reaction (combustion) discovered
Ans: 18th-19th century

The first scientist-philosopher who attempted to arrange the steps of scientific method in a logical manner was _____
Ans: Francis beacon

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Who among the following is not a proponent of the heliocentric theory of the universe
Ans: Leonardo da vinci

Which of the following is not a planetary law according to the proponents of heliocentric theory
Ans: the rotation and revolution is inversely proportional to their astronomicaldistance

Who among the early scientists searched the heaven with his mind and not thetelescope
Ans: Nicolas Copernicus

The most gratest eminent Muslim Physicistwas _____
Ans: Ibn-al-Huthaim

Why did the church authorities oppose the heleocentric theory of the universe
Ans: the theory implied that humanity is no longer at the centre of the creation

The copernican theory of the universe was _____
Ans: not based on experimentation

The view of the universe which posited that the sun is at the centre of universe while the planets revolve round is called_____
Ans: heliocentric theory

The view of the author of Al- Majest about the earth and other planets iscalled _____
Ans: geocentric theory

Australopithecus_____was found in 1924 in South Africa
Ans: Africanus

Which century marked the true freedom of true experimental science from philosophy and religion
Ans: 16th-17th century

Paradigm conservation in philosophy refersto _____
Ans: impractical proposal

Semantic in philosophy is about_____
Ans: language

The philosopher that introduced the principle of falsifiability iscalled _____
Ans: Karl Popper

Falsifiability simply means_____
Ans: the principle which take care of statement which cannot be verified

Philosophy with the analysis of concepts and the meaning of words iscalled _____
Ans: semeiotic

The branch of philosophy which deals with validity and soundness of an argument is called ____
Ans: logic

All men are mortal, John is a man, therefore John is a mortal. The conclusion John is Mortal is a knowledge_____
Ans: deductive

Consider the argument " All men are mortal. Peter is a man. Therefore Peter is Mortal. Which of these statement is a premise?

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Ans: all men are mortal

_____is a branch of philosophy that deals with human andthought
Ans: logic

Objectivity in science can be sustained if one does all the following but_____
Ans: disregard all unpleasant or threats situation

The objectivity in critical thinking can be affected due to all the following except
Ans: exposure to inspiration

All the following are forms in which theory can be stated except
Ans: tentative assertion

Which of the following is regarded as the final step in scientific method
Ans: theory formulation

Scientific conclusion has the following characteristicsexcept_____
Ans: it is absolute

Philosophy of science is hinged on the _____ nature of philosophy
Ans: reflective

Which of these statements is false in respect of philosophy and science
Ans: inductive method is applied in philosophy while deductive method only is for science

Which of the following may not be considered as the point of convergence between philosophy and science
Ans: they emphasize irrationality and spirituality

Which of these questions may not get response in philosophy of science
Ans: what is the essence of humanity?

Which of these statements is not true about philosophy
Ans: philosophy as a subject originate from science

According to the greeks, a philosopher is simply _____
Ans: lover of wisdom

All the features below describes religion except_____it
Ans: it could be authenticated using scientific method

All the following are nonscience disciplinesexcept_____
Ans: anthropology

Which of the following is not true about science
Ans: it contribute to the development of theology

Which of these does not explain why is man involved in scientific activity
Ans: to enhance spiritual fulfillment

All these disciplines reflect curriculum integrationexcept _____
Ans: anthropology

All the folllowing are example of social scienceexcept _____
Ans: physiology

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The disciplines that are concerned with drugs and drug contents of plant can be grouped under _____
Ans: pharmaceutical science

Anatomy, physiology, surgery can be categorized as _____
Ans: medical science

All these are examples of biological science except_____
Ans: chemistry

Physics, chemistry and astronomy can also be described as _____
Ans: physical science

Which of these can be described as non-perception object:
Ans: virtues

Which of the following does not belong to genusAustralopithecus?_____
Ans: Asianus

Sense perception objects are mostly associated with_____
Ans: empirical science

Physics, chemistry, biology and medical sciences are best described as _____
Ans: empirical science

Religion relies on the principle that the universe is generallygoverned by_____laws
Ans: spiritual

Logic, physics and statistics will be best described as _____
Ans: formal science

Geometry, algebra, trigonometry and arithmethic are examples of _____
Ans: formal science

Which of the Australopithecus was discovered in Ethiopia in1978?_____
Ans: A ferensis

All of these terms are associated with formal science except _____
Ans: myth

Which of these group of science adopt scientific method to acquire knowledge
Ans: empirical and formal science

Which of the following is not a discipline in the social science?
Biology

In resolving mathematical problems involving BODMAS what do you resolve first?
Bracket

Which of these is not a branch of mathematics?
Addition

Which among the following is not an example of empirical science?
Ethics

Which of the following is an appropriate concern of empirical science?
Material Things

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Which of the following is not a tool of the empirical science?
History

Which of these is not an example of physical science?
Mathematics

Which of these is an example of non-science?
Religion

The fact that scientific claims can be verified by others adopting the same method is proof of what in science?
Objectivity

Which of these is not a characteristic of non science?
Objectivity

"Which of these is not a definition of science?
Absolute truth about the world

Which step of the scientific method is concerned with guessing?
Hypothesis formulation

What is the mark of a good theory?
Its predictive value

Science does not enables us to do which of the following?
Worship nature

_____science has deductive character
Formal

What is the name given to unexpected scientific observation?
Spontaneous observation

Scientists undertake experimentation because they are in search of what?
Evidence

Which of these is not a manifestation of man's creative capacity?
Procreation

What are the types of thinking required by the scientific method?
Creative thinking and critical thinking

Falsifiability as a scientific attitude is credited to _____
Karl Popper

Hypothesis is basically about what?
Guessing answers to questions raised

Which of the following is not a form which a theory can take?
Prophetic pronouncement

Which of these is not an example of a theory?
Theory of assumptive veneration

From who did the Islamic scholars borrow the idea of Zero?
Hindu Mathematicians

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Modern science arose in what centuries AD?
15th and 16th

The traditional explanation of reality does not involve which of these?
Causality

Who first propounded the theory of universal gravitation?
Isaac Newton

Which of these is not among the great groups of organisms?
Insects

Which of these is the naturalist who independently arrived at theory of evolution at the same time with Darwin?
Alfred Wallace

Which of the following is not a rule of Mathematics?
Triangulation

_____branch of science studies objects and phenomena which can be observed through any of the senses
Empirical science

The religious centres of Kingdom of Egypt were administered by who?
Priest-scholars

In which country was the lunar calendar invented?
Egypt

Who pioneered the division of day into hour?
Babylonians

To whom do we attribute the critical tradition of medicine?
Anaximander

_____science is concerned with knowledge which can be observed with the senses
Empirical

Anatomy is an example of_____science
medical

Religion believes that the universe is governed by_____laws
spiritual

_____is the character of science which guarantees that all who adopts the same method or procedure can prove or verify the claims or statements, which the body of scientific knowledge contains. **Objectivity**

Theories that have proved to be universally valid and have a high degree of probability are called _____
Natural Laws

The ancient Egyptians believed that rats came from _____
Garbage

Another name for doctrine of fixed species is _____

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Creationism

The theory of spontaneous generation was disproved by _____
Louis Pasteur

The carriers of hereditary materials in living organisms are called_____
Chromosomes

_____is the third step of scientific method
Hypothesis formulation

_____is the name given to the procedures of doing science
Scientific Methods

Another name for basic science is_____
Pure science

Among ancient Africans the_____of Mali were reputed for their vast knowledge of astronomy
Intergovernmental organizations

_____is the author of "Elements of Geometry"?
Euclid

Democritus believed that everything is achieved by combination of_____
Atoms

_____introduced inductive reasoning to scientific and philosophical discourses
Socrates

The Babylonian unit of length was_____
Finger

The Greek father of modern medicine is_____
Hippocrates

Love of wisdom is said to be the etymological meaning of_____
Philosophy

In scientific method hypothesis is tested during _____
Experimentation

The Latin word for knowledge is _____
Scientia

Subtraction, addiction, multiplication, etc. are rules of _____
Mathematics

The doctrine that each species of living things was created by God is called _____
Creationism

The explanation that individuals with superior physical or behavioural attributes might have an edge in survival battle is known as_____
Natural selection

Induction is rested on a scientific law known as the_____
Law of uniformity of nature

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The force which pulls every object in the universe toward every other object in the universe is called _____
Gravitation

_____is the name which the ancient Greeks gave the Egyptian greatest physician of the ancient time
God of medicine

The Babylonian gods lived in_____
Heaven

The type of writing invented by ancient Egyptians is called _____
Hieroglyphics

_____is often referred as the father of western philosophy
Thales

The Pythagorean theory is named after _____
Pythagoras

The atomic theory was invented by_____
Leucipus

Aquinas regarded_____as the source of all knowledge
God

Einstein held that the only absolute unchanging quantity in the universe was _____
Speed of light

The only single surviving species of hominids is the_____
Homo sapiens

Logic, theoretical physics, statistics, algebra have something in common and they are and all regarded as _____ science
formal

Mathematics deals with social institutions and society? TRUE OR FALSE.
FALSE

Religion believes that the universe is governed by_____laws
Spiritual

Observations that are made with the aid of instruments is called_____observation
Indirect

_____explains how things are related or their common properties
Theory

Your dead body when discovered in the next eight hundred years, for instance, will be regarded as _____
Fossil

Another name for doctrine of fixed species is _____
Creationism

The theory of spontaneous generation was disproved by _____
Louis Pasteur

Laws of nature exists simply because natural phenomena are_____in character

Uniform

_____is the third step of scientific method
Hypothesis formulation

_____is the name given to the procedures of doing science
Scientific Methods

Another name for basic science is_____
Pure science

Among ancient Africans the_____of Mali were reputed for their vast knowledge of astronomy
Dogon

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Euclid

Democritus believed that everything is achieved by combination of_____
Atoms

_____introduced inductive reasoning to scientific and philosophical discourses
Socrates

The Babylonian unit of length was_____
Finger

The Greek father of modern medicine is_____
Hippocrates

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Philosophy

In scientific method hypothesis is tested during _____
Experimentation

The Latin word for knowledge is _____
Scientia

Subtraction, addiction, multiplication, etc are rules of _____
Mathematics

The doctrine that each species of living things was created by God is called_____
Creationism

The explanation that individuals with superior physical or behavioural attributes might have an edge in survival battle is known as_____
Natural selection

_____is rested on a scientific law known as the Law of uniformity of nature
Induction

The force which pulls every object in the universe toward every other object in the universe is called_____
Gravitation

_____is the name which the ancient Greeks gave the Egyptian greatest physician of the ancient time

God of medicine

The Babylonian gods lived in_____
Heaven

The type of writing invented by ancient Egyptians is called _____
Hieroglyphics

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Thales

The Pythagorean theory is named after _____
Pythagoras

The atomic theory was invented by_____
Leucipus

Aquinas regarded_____as the source of all knowledge
God

Einstein held that the only absolute unchanging quantity in the universe was_____of light
Speed

The only single surviving species of hominids is the_____
Homo sapiens

What is the name given a type of science that utilises theories, rules and concepts?
Formal science

What name do we give to science when it is defined with reference to science lecturers you know as well as other experts in the field?
Science as an institution

Why do you think scientists cannot investigate spirits?
They cannot be observed

My guess that the antiretroviral drugs used in the treatment of HIV patients can also be deployed successfully in the treatment of cancer is called what in the chain of scientific method?
Hypothesis formulation

What do we call a hypothesis confirmed through experimentation?
Theory

What is the name given to George Cuvier's effort to explain the changes which fossils undergo?
Catastrophism

What name do you give to a theory that was true some 1000 years ago and is still true today whether in America, Africa or Australia?
Natural law

Give an example of objects that cannot be perceived by the senses.
Angels

The fact that scientific claims can be verified by others adopting the same method is proof of what in science?
Objectivity

Which of these is not a type of scientific observation?

Octagonal observation

"Why is the weather hot today instead of cold?" is an example of what in scientific steps
Definition of problem

Which step of the scientific method is concerned with guessing?
Hypothesis formulation

What is the mark of a good theory?
Its predictive value

Who disproved the theory of spontaneous generation?
Louis Pasteur

____science has deductive character
Formal

Which of these is true of theory?
It can become obsolete

How many days does it take the earth to complete one revolution around the sun?
365

Which of these is not a manifestation of man's creative capacity?
Procreation

Which of these is not a factor in the development of man from apelike creature?
Development of sex organs

Falsifiability as a scientific attitude is credited to ____
Karl Popper

Which of these is not an example of science in application?
Mathematics

Which of the following consists of man's earliest natural tools?
Hands and teeth

Which of these is not among the spirit of inquiry?
Pursuit of wealth

From who did the Islamic scholars borrow the idea of Zero?
Hindu Mathematicians

Fire was discovered during which age?
Stone age

The traditional explanation of reality does not involve which of these?
Causality

Who first propounded the theory of universal gravitation?
Isaac Newton

Which of these is not among the great groups of organisms?
Insects

Which of these is the naturalist who independently arrived at theory of evolution at the same time with Darwin?
Alfred Wallace

Which of the following is not a rule of Mathematics?
Triangulation

_____branch of science studies objects and phenomena which can be observed through any of the senses
Empirical science

The religious centres of Kingdom of Egypt were administered by who?
Priest-scholars

In which country was the lunar calendar invented?
Egypt

Who pioneered the division of day into hour?
Babylonians

To whom do we attribute the critical tradition of medicine?
Anaximander

A grouping of subjects like Chemistry, physics, biology, mathematics, is used to define science as a_____
Body of knowledge

While empirical science makes use of the scientific method, formal science does not. TRUE OR FALSE.
FALSE

Mathematics is an example of _____ science
Formal

"M" stands for _____ in BODMAS
Multiplication

Empirical science employs such instruments as microscope, ruler, tape and scale. TRUE OR FALSE
True

___ is the name given to an explanation about the cause or causes of a broad range of related phenomena
Theory

_____ is the general name given to such belief as held by the ancient Egyptian that rats originated from garbage
Spontaneous generation

_____ is regarded as the science of inheritance
Genetics

Laws of nature exists simply because natural phenomena are_____ in character
Uniform

The force which the earth possesses which draws objects towards it is regarded as _____force
Gravitational

The discipline we today call science was once part of another discipline from which it separated. _____ is the name of that discipline
Philosophy

The three religious centres of ancient Egypt were administered by_____

Priest-scholars

Egyptian study of heavens, the stars and weather led to the emergence of ____ as a discipline
Astronomy

_____ is the name of the Egyptian Black founder of medicine
Imhotep

Democritus believed that everything is achieved by combination of_____
Atoms

_____ is regarded as the first woman philosopher
Hypathia

The Babylonian unit of length was_____
Finger

The Homo habilis evolved into the _____
Homo erectus

Love of wisdom is said to be the etymological meaning of_____
Philosophy

In scientific method hypothesis is tested during _____
Experimentation

The Latin word for knowledge is _____
Scientia

Subtraction, addiction, multiplication, etc are rules of _____
Mathematics

The doctrine that each species of living things was created by God is called_____
Creationism

The explanation that individuals with superior physical or behavioural attributes might have an edge in survival battle is known as_____
Natural selection

Induction is rested on a scientific law known as the_____
Law of uniformity of nature

The force which pulls every object in the universe toward every other object in the universe is called_____
Gravitation

_____ is the name which the ancient Greeks gave the Egyptian greatest physician of the ancient time
God of medicine

The Babylonian gods lived in_____
Heaven

The type of writing invented by ancient Egyptians is called _____
Hieroglyphics

_____ is often referred as the father of western philosophy

Thales

The Pythagorean theory is named after _____
Pythagoras

The atomic theory was invented by_____
Leucipus

Aquinas regraded _____as the source of all knowledge
God

Einstein held that the only absolute unchanging quantity in the universe was _____
Speed of light

The only single surviving species of hominids is the_____
Homo sapiens

Which of the following is not a definition of science?
Productive industries

Which of the following is not a branch of mathematics?
Statistics

Why do you call the branch of science that is concerned with rules?
Formal science

My guess that the antiretroviral drugs used in the treatment of HIV patients can also be deployed successfully in the treatment of cancer is called what in the chain of scientific method?
Hypothesis formulation

Identify the object that is not a subject of empirical science.
Witchraft

What do scientists need to do to advance the course of science?
Cooperate among themselves

The aims of science do not include one of the following. Identify the odd one
Imbue scientists with political powers

Which of these is not a characteristic of non-science?
Measurability

The fact that scientific claims can be verified by others adopting the same method is proof of what in science?
Objectivity

The scientific term given to assumed answer to scientific questions is called _____
Hypothesis

Experimentation is by far the hardest part of the scientific method because there are _____
No rules to follow

Theories are not open to which of the following?
Immediate acceptance

What is the mark of a good theory?
Its predictive value

Theories cannot take the form of which of these?
Proverbs

What is the character of a good theory?
It must have a predictive value

Which of these believed that each organism was fashioned by God?
Theologians

On what Law does induction as a scientific method rest?
Law of uniformity of nature

What happens to a stone when it is shot out of the earth?
Its weight decreases

The man who studied plants and animals during the ancient Egyptian era was likely to be regarded as a what?
Philosopher

Which of these is not among the three religious centres of the ancient Egypt?
Cairo

What is regarded as the origin of Greek Philosophy?
Egyptian philosophy

What did Thales regard as the source of all things?
Water

What is science?
Who is the most prominent scientist alive?

From who did the Islamic scholars borrow the idea of Zero?
Hindu Mathematicians

Which of these is not among the shared characteristics between philosophy and science?
They are both transcendental

The traditional explanation of reality does not involve which of these?
Causality

Who first propounded the theory of universal gravitation?
Isaac Newton

Which of these is not among the great groups of organisms?
Insects

Which of these is the naturalist who independently arrived at theory of evolution at the same time with Darwin?
Alfred Wallace

Which of the following is not a rule of Mathematics?
Triangulation

_____branch of science studies objects and phenomena which can be observed through any of the senses
Empirical science

The religious centres of Kingdom of Egypt were administered by who?

Priest-scholars

In which country was the lunar calendar invented?
Egypt

Who pioneered the division of day into hour?
Babylonians

To whom do we attribute the critical tradition of medicine?
Anaximander

What do you call Lamarck's theory which states that changes acquired during an individual's life are brought about by environmental pressure and internal desires and that offspring inherit the desired changes?
Theory of inheritance of acquired characteristics

The definition of science that traces the root meaning of the word science is called?
Etymological definition

What did Georges-Louis Comte de Buffon's study establish?
That all mammals have common features

By questioning Thales' position that water is the basic phenomenon behind all reality Anaximander is said to have given birth to something fundamental to the advance of science. What is that?
Critical tradition

Which of the following do we attribute our inability to articulate Africa's contribution to world civilisation?
Colonial education

The Copernican theory was based on what?
Hypothesis

Formal science does not employ which of the following?
Experimentation

What do you call the period that witnessed the first complex change in scientific outlook?
Era of scientific revolution

Which of these is not a step of the scientific method?
Introduction

What were the intellectual class of the ancient Egyptians called?
Priest-scholars