

SCIENCE AND ISLAM

DEFINITION

Islam: - The last divinely instituted way of life revealed to the prophet Muhammed (Peace and blessing of Allah be upon him).

Science: - The study of nature.
Systemised knowledge in any field.
Intellectual activities concerned with the physical world and its Phenomena.

ILM: - Science, knowledge.
a. Revealed knowledge.
b. Empirical knowledge or scientific knowledge (depending upon observation and experience.

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ILM - Some Basic Principles

1. Islam makes the pursuit of ILM an obligation on every Muslim.
2. An Islamic society has to be always a knowledge-based society.
3. In Islam ILM must be sought with modesty and humility.
4. The aim of ILM, in Islam is to promote dignity, piety, freedom and justice within the moral and spiritual framework of Islam.
5. In Islam, ILM can only be sought by just means. The pursuit of noble ends by unjust means is not permitted
6. Every Muslim is individually obliged to learn the basic principles of Islam, individual duties and moral requirements.
7. The Muslim community is collectively responsible for education in all other spheres of knowledge.

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ILM AND ITS IMPORTANCE

THE HOLY QURAN SAYS:

READ! In the name of your Lord Who created- Created out of a mere clot of congealed blood. Read! And your Lord is most Bountiful, He Who taught the use of the pen, taught man that which he knew not.

(AL-ALAQ - 96, VERSE 1-5)

1. The very first revelation commences with the subject of learning.
2. The man can acquire knowledge only with the help and grace of Allah Almighty.
3. He is not only given knowledge, but also the art of writing with the pen.
4. This art of writing has given the man an opportunity to disseminate the knowledge and thereby preserve and improve it generation after generation.

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ILM AND ITS IMPORTANCE

Prophet Muhammed (peace and blessings of Allah be upon him) is reported to have said:

1. If anyone travels on a road in search of knowledge, Allah will cause him to travel on one of the roads paradise.
2. The superiority of the men of learning over virtuous men is like that of the moon in the night when it is full over the rest of the stars.
3. He who goes out in search of knowledge is in Allah's way till he returns.

(ALL TAKEN FROM MISHKAT-UL-MASAABIH)

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HISTORICAL DEVELOPMENT OF ILM - A

1. 610 - 632 A.D. Introduction and establishment of the concept, value and importance of ILM by Prophet Muhammed (peace be upon him).
2. 632 - 661 A.D. Recognition and formation of the institutions of ILM during the period of KHULAFAT AR-RASHIDUN.
3. 661 - 750 A.D.
 - a. Umayyad dynasty __ 13 rulers
 - b. HAZRAT AMEER MUAWIYAH - to - MARWAN II
 - c. Development of the institutions of revealed knowledge i.e QURAN, TAFSEER, HADITH, FIQH e.t.c

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HISTORICAL DEVELOPMENT OF ILM - B

750 - 1258 A.D.

1. ABBASI DYNASTY - 37 RULERS
2. ABU ABBAS AS-SAFFAH - TO - AL-MUSTASIM
3. It is considered to be the golden age of Muslim era.
4. Great energy was devoted towards the development of industry, commerce and institutions of scientific knowledge.
5. Translation and absorption of learning from other civilisations (Greece, China, Persia, India).
6. Critical analysis, accepting or rejecting.
7. Intense debate among Muslim scholars.
8. Writing books (key vehicle for communication of ideas).
9. Research and inventions in the fields of science, technology and engineering.
10. Great Muslim scientists dominating the whole of the world.

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THINGS THAT THE WEST LEARNED, TOOK OR OTHERWISE BORROWED FROM MUSLIMS - A.

1. How to argue, intellectual methods.
2. Greek Philosophy; Plato Aristotle.
3. University system
4. How to count: Zero, Arabic numerals.
5. Algebra, Trigonometry and spherical geometry.
6. Laboratory tools (test tubes, flasks)
7. Optics, the basic laws of light.
8. Hospitals, surgical tools.
9. Bibliographical Tools: Catalogues, Encyclopaedias, Dictionaries, Biography.
10. Organisation and administration of libraries, Classification schemes.

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THINGS THAT THE WEST LEARNED, TOOK OR OTHERWISE BORROWED FROM MUSLIMS - B.

11. Paper manufacture.
12. Publishing and Bookshops.
13. Hydrology; various irrigation tools.
14. How to find your way; calculation of direction navigation, compass.
15. An authentic map of the world.
16. Basic understanding of the Human body.
17. The basic canons of medicines.
18. Astronomical facts and laws.
19. Universal History.
20. Calligraphy and decorative arts.

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MUSLIM SCIENTISTS - A

1. JABIR IBN HAYYAN (d. 813 A.D) ----- CHEMISTRY
2. AL - KHWARIZMI (d. 850 A.D) ----- ALGEBRA
3. AL - KINDI (d. 866 A.D) ----- MATHEMATICS, PHYSICS,
PHARMACY
4. AL - JAHIZ (d. 869 A.D) ----- Animal Biology
5. AHMED, HASAN AND MUHAMMED
(The Musa Brothers) [9TH CENTURY A.D] -----ENGINEERING
6. ZAKARIYA AR-RAZI (d. 925 A.D) ----- MEDICAL SCIENCE
7. AL-BATTANI (d. 929 A.D) ----- SPACE PHYSICS, GEOGRAPHY
8. ABU BAKR AR-RAZI (d. 935 A.D) ----- CHEMISRTY

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MUSLIM SCIENTISTS - B

9. AL-FARABI (d. 935) ----- MATHEMATICS
10. ABDUL WAFA (d.997 A.D)----- MATHEMATICS
11. IBN SINA (d. 1037 A.D) ----- MEDICAL SCIENCE/
PHARMACY/BOTANY
12. IBN AL-HAYTHAM (d.1039 A.D) ----- OPTICS
13. AL-GHAZZALI (d. 1111 A.D) ----- PHILOSOPHY
14. OMAR KHAYYAM (d. 1124 A.D) ----- MATHEMATICS
15. AL-KHAZINI (d. 1125 A.D) ----- LAW OF GRAVITY/PHYSICS
16. AL-IDRIS (d. 1154 A.D) ----- GEOGRAPHY

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MUSLIM SCIENTISTS - C

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| 17. IBN RUSHD (d. 1198 A.D)----- | MEDICINE, PHILOSOPHY |
| 18. FAKHR AD-DIN-RAZI (d. 1209 A.D)----- | ENCYCLOPEADIST, MASTER OF KALAAM. |
| 19. IBN NAFIS (d.1288 A.D) ----- | HUMAN BIOLOGY |
| 20. ABU BAKR AL-BAYTAR (d. 1340)----- | VETRINARY MEDICINE |
| 21. AD-DAMIRI (d 1405 A.D) ----- | ZOOLOGICAL TAXONOMY |
| 22. IBN KHALDUN (d. 1406 A.D) ----- | HISTORY, SOCIOLOGY |