

Muslim Period

They not only preserved it but translated it and added more knowledge in it. Muslim rule expanded from Atlantic to Pacific and the middle of Africa. 641 conquered Persia, 642 Egypt. 732, Spain, Portugal.

In 762 founded Baghdad.
 Harun - Al Rashid started the project to translate the work of Greeks and Romans and continued by Al mamoon (786 - 833). People were paid the weight of books gold. He directed to recalculate circumference of earth. He established first true School of Geography. Arabic Science reached its zenith.

1 - Kaliph Al-Mamun. (786 - 833 A.D)

→ Under him Arabic Science reached its zenith.

- An observatory was found.
- The circumference of the earth was recalculated.
- A world map was designed.
- He created first true school of geographical science.
- The "Geography" of Ptolemy and some other geographical works were translated.

2. Musa Al-Khwarizmi:- (780 - 850)

- He wrote a book 'Surasat-ul-ars' in first half of the 9th century.
- He compiled "a system of earth" a sort of index of place names along with its longitude and latitude.
- He made a world map.

3. Ibn-i-Khurdadhbih: (850 A.D.)

- He wrote a book on Routes and Kingdoms (850 A.D.)
- It gives a summary of the

main trade routes of Asia and a description of such distant areas as China, Korea, and Japan.

→ According to him the earth is round placed in the midst of the celestial area like the yellow in an egg.

4 AHMAD bin YAQUBI: died (897 A.D)

- He is known as the father of Arab Geography.
- He wrote a book "Kitab-al-buldan" (book of countries (891) human and physical geography.
- He was interested in statistical and topographical aspects.
- His book gives the detail of numerous places and explains the physical & human Geography of many areas.

5. AL-BALKHI -

- In 921 Climatic Atlas "Kitab ul Ashhal" gathered climatic observation of Arab travelers.

6. AL-ISTAKHRI -

- He wrote a "Book of climates" illustrated with maps. (977)

7. IBN-I-HAUKAL: (988 A.D)

- He traveled for about 30 years and it is estimated that he covered an approximate distance of distance of 75,000 miles.
- He wrote "Book of way and Provinces" which gives a geographical description of the Muslim countries. illustrated every region by maps.

8. AL-MASUDI (896 - 956 A.D) died

- He was a historian and a Geographer.
- Herodotus of Arabs.
- He traveled over the muslim world from Spain to china.

- He wrote a book "meadows of Gold"
- He has given his own map of the world.
- In Mojabiqve he wrote about moon soon evaporation of water and condensation of moisture in clouds.
- His book "mines of ~~the~~ Precious Stones" is record of his travel experiences & observations.
- He described the structure of the earth and earthquakes in an impressive way.

9 - AL - Ma'vidisi:

- He wrote a book "The Best of Divisions for the knowledge of climes".
- He took upon himself the task of collecting data from all parts of the "Islamic world".
- In 985 He divided the world into 14 climatic regions and prepared separate maps for ~~representing~~ ~~each~~ each division.

→ He used the Symbols and methods of representing relief.

→ He considered earth nearly a Spherical in Shape and divided it into two equal Parts by equator.

Southern hemisphere is ocean & Northern is mostly land.

10 :- AL - IDRISI :- (1099-1180 A.D)

→ He is famous for his wide travels and descriptions.

→ At the instance of King Roger II of Sicily he wrote a treatise 'Amusement for him who desire to travel round the world' as known as book of Roger. (1154)

NEW GEOGRAPHY

→ He corrected the courses of many rivers including Niger and Danube river.

→ He also made a celestial Sphere and presented the known world in the form of a disc.

II - AL BIRUNI:- (973 - 1048)

- Born in Kath (Khwarzjem Uzbekistan) at 17 calculated Kath latitude.
- He was a historian, Geographer, Mathematician, Chemist, Sociologist
- He wrote 146 Books ~~It~~ on Geography and ¹⁰ on Geodesy.
- His astronomical and mathematical labours are largely collected in his "Qanun al. Masudi" (Dedicated to Masud) dedicated to Sultan Masud.
- He wrote a numerous books such as "Kitab al Tazhitn" "Chronology of ancient nations," "Kitab al Hind" "Al Kutb" "Sana at al Tanjum" and "Waljarum, etc.
- Explore mountain heights valley depth.
- He devised a method for the Projection of maps of the earth.
- He explained the occurrence of natural Springs and artificial wells by the law of hydrostatics.

- He discussed the earth, its axis and its movements.
- Earth Radius - 6,339.9 Km only
16.8 Km less than actual.
- In 1025 first to describe Polar equidistant Projection.
- Geodesy: measurement and representation of earth including its gravitation pull.

12. ABU ALI SINA: (980-1036 A.D.)

- He wrote a Compendium of the Amagest.
- He worked about the landform of the earth.
- He pointed out the presence of fossils in high mountains.
- He observed the erosion made by running water.
- He observed that the mountains rise continuously with the passage of time.

13. IBN-E-BATUTA: (1304-1369 A.D)

He was a great traveller.

- His work is mainly in 'Social Geography'.
- He describes of varying natural environment, Products of far-off lands, articles of exports, metropolises, Sea routes & their significance.
- He was a Great traveller N to W Africa, S, E Europe middle East Indian Subcontinent South East Asia and China.
- He gives an excellent description of the numerous small coral Islands in the maldives.
- He wrote a book "The Kind of universe History" which correlates man, natural environment and history.
- A Gift to those who contemplate the wonders of Cities and the marvels of travelling Rhila (Journey)

14 - IBN - E-KHALDUN: (1332-1406 A.D.)

- He wrote a book "Muqadma"
- His universal history with its famous introduction (Prolegomena) is a monumental work both in respect of history and geography.
- His remarkable correlation of environment and human activity in introduction has earned for him a very important place in human and social geography.
- He traces the effects of both environment on the physical and mental qualities of different people.
- He studied the distinction between the arid country with nomadic life and cultivable country with settled life.

106 A.D.
15 - AL - QAZWINI, (1203 - 1288 A.D)

- His two major works are
Cosmography
Geography
- He wrote (i) "Ajab-al-Buldan"
(ii) "Athar al-Biald"
- His Cosmography consists of two parts.
 - (i) Part one dealing with heavenly things.
 - (ii) Part two dealing with the terrestrial things.

16 - IBN-e-majid:

- He wrote Sailing instructions for Indian Ocean, Red Sea, Persian Gulf and west China Sea.
- He invented an instrument for measuring the sea depths.
- He wrote a book, "Kitab al-Fawa'id"