

## FEDERAL PUBLIC SERVICE COMMISSION FOR POSTS IN BS-17 2012 (EVERYDAY SCIENCE)

TIME ALLOWED:	(PART-I MCQs)	80 MINUTES	MAXIMUM MARKS: 50		
THREE HOURS	(PART-II)	100 MINUTES	<b>MAXIMUM MARKS: 50</b>		
NOTE: (i) Candidate must write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.					
(ii) Overwriting/cutting of the options/answers will not be given credit.					

## **PART-II**

NOTE:(i) (ii) (iii)		PART-II is to be attempted on separate Answer Book.  Attempt ONLY FIVE questions from PART-II. All questions carry EQUAL marks.  Extra attempt of any question or any part of the attempted question will not be				
		considered.				
Q. 2.		te briefly about two or more major achievements of each of the following two ous Muslim scientists:  Abu Abdullah Mohammad Bin Musa Al Khwarizmi Abu Ali Al Hassan ibn Al Hassan Al Haytham	5x 2=10			
Q. 3.	(a) (b)	List four or more physical characteristics of the Earth. Briefly explain how Seasons and Ocean Tides are produced on the Earth?	(05) (05)			
Q. 4.	<ul><li>(a)</li><li>(b)</li></ul>	Very briefly explain the difference between Earthquakes, Volcanic eruptions, Floods and Tsunamis. Briefly explain the difference between Sedimentary and Metamorphic rocks.	(05) (05)			
Q. 5.	<ul><li>(a)</li><li>(b)</li></ul>	Very briefly explain the difference between an Insulator, a Conductor, a Semiconductor and a Superconductor.  Briefly explain the difference between a Laser and a Photovoltaic Cell.				
Q. 6.	<ul><li>(a)</li><li>(b)</li></ul>	Briefly explain the difference between an Antibiotic, an Antiviral Drug, a Pesticide and a Vaccine.  List any two of the three things that the MMR vaccine protects against. List any two other vaccines given to children.				
Q. 7.	(a) (b)	Briefly explain how Photosynthesis works. Briefly explain the Nitrogen Cycle in nature.	(05) (05)			
Q. 8.	(a)	Differentiate between the following: Deoxyribonucleic Acids (DNA) Messenger Ribonucleic Acids (mRNA) Proteins	(05)			
	<b>(b)</b>	Explain how DNA, mRNA and Proteins are interrelated to each other.	(05)			
Q. 9.	(a) (b)	Explain what is meant by a balanced diet? Give the major function of the following micronutrients: Vitamin A Vitamin C Iron Calcium Iodine	(05) (05)			