

FEDERAL PUBLIC SERVICE COMMISSION



**COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BS-17
UNDER THE FEDERAL GOVERNMENT, 2012
GENERAL KNOWLEDGE, PAPER-I
(EVERYDAY SCIENCE)**

Roll Number

TIME ALLOWED:	(PART-I MCQs)	80 MINUTES	MAXIMUM MARKS: 50
THREE HOURS	(PART-II)	100 MINUTES	MAXIMUM MARKS: 50
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) PART-II is to be attempted on separate Answer Book.
(ii) Attempt ONLY FIVE questions from PART-II. All questions carry EQUAL marks.
(iii) Extra attempt of any question or any part of the attempted question will not be considered.**

- Q. 2.** Write briefly about two or more major achievements of each of the following two famous Muslim scientists: **5x 2=10**
- (a) Abu Abdullah Mohammad Bin Musa Al Khwarizmi
(b) Abu Ali Al Hassan ibn Al Hassan Al Haytham
- Q. 3.** (a) List four or more physical characteristics of the Earth. **(05)**
(b) Briefly explain how Seasons and Ocean Tides are produced on the Earth? **(05)**
- Q. 4.** (a) Very briefly explain the difference between Earthquakes, Volcanic eruptions, Floods and Tsunamis. **(05)**
(b) Briefly explain the difference between Sedimentary and Metamorphic rocks. **(05)**
- Q. 5.** (a) Very briefly explain the difference between an Insulator, a Conductor, a Semiconductor and a Superconductor. **(05)**
(b) Briefly explain the difference between a Laser and a Photovoltaic Cell. **(05)**
- Q. 6.** (a) Briefly explain the difference between an Antibiotic, an Antiviral Drug, a Pesticide and a Vaccine. **(05)**
(b) List any two of the three things that the MMR vaccine protects against. List any two other vaccines given to children. **(05)**
- Q. 7.** (a) Briefly explain how Photosynthesis works. **(05)**
(b) Briefly explain the Nitrogen Cycle in nature. **(05)**
- Q. 8.** (a) Differentiate between the following: **(05)**
Deoxyribonucleic Acids (DNA)
Messenger Ribonucleic Acids (mRNA)
Proteins
(b) Explain how DNA, mRNA and Proteins are interrelated to each other. **(05)**
- Q. 9.** (a) Explain what is meant by a balanced diet? **(05)**
(b) Give the major function of the following micronutrients: **(05)**
Vitamin A
Vitamin C
Iron
Calcium
Iodine
