



# NWFP PUBLIC SERVICE COMMISSION

COMPETITIVE EXAMINATION FOR THE POSTS OF  
PROVINCIAL MANAGEMENT SERVICE (BPS-17) 2008

GENERAL KNOWLEDGE PAPER-II  
(EVERYDAY SCIENCE)

TIME ALLOWED: THREE HOURS MAXIMUM MARKS: 100

Attempt any ten questions.

- Q. 1 Write Short notes on any TWO of the following: (5 marks each)  
(a) Atomic Structure (b) Uranium (c) Big Bang Universe
- Q. 2 Write briefly about any five of the following: (2 marks each)  
(a) Sound Barrier (b) White Dwarf Stars (c) Doppler shift  
(d) Antibiotics (e) Acid rain (f) FORTRAN
- Q. 3 (a) Describe the Greenhouse effect. (5 marks)  
(b) What is the significance of the geostationary satellites? (5 marks)
- Q. 4 Briefly account for (2 marks each)  
(a) Why water boils at lower temperature on hills than plains near to the earth surface?  
(b) Why do not the solar and lunar eclipses occur at constant intervals?  
(c) + winter in Sydney while people in England enjoy summer in August each year. Whys is it?  
(d) How impact printers are different from non impact printers?  
(e) How are character transmitted from parents to offspring?
- Q. 5 (a) Discuss the role of Satellites in data communication. (5 marks)  
(b) Compare Windows Operating System with other commercially available Operating System. (5 marks)
- Q. 6 Differentiate between the followings. (2 marks each)  
(a) Silver fish and Star fish  
(b) Nucleotides and Nucleosides  
(c) Butter fly and Spider  
(d) DNA and RNA  
(e) Angiosperm and gymnosperm
- Q. 7 (a) Comment on Einstein's Energy-Mass relationship (5 marks)  
(b) Differentiate between Input and Output devices. List two Devices of each type (5 marks)
- Q. 8 (a) Differentiate amongst Ceramics, Plastics and Semiconductors. (5 marks)  
Give two examples for each  
(b) Explain how the doping of semiconductors makes them commercially more significant than good conductors. (5 marks)
- Q. 9 (a) Define genetics. Explain its importance for human society. (5 marks)  
(b) Define vestigial organs. Give five vestigial organs in man. (5 marks)
- Q. 10 Whom do you regard as the best scientists of the Muslim history? (10 marks)  
Elaborate their achievements.
- Q. 11 (a) Explain environmental pollution with special reference to "use of Insecticides in the field of agriculture". (5 marks)  
(b) How insects are beneficial to man? (5 marks)
- Q. 12 Briefly explain the contributions of the following workers in the field of biology. (3,3,4 marks)  
(a) Charles Darwin and J.B.Lamarck.  
(b) George Johann Mendel.  
(c) J.D.Watson and F.H.C.Crick.
- Q. 13 Discuss the pros and cons of relying heavily on computers (10 marks)
- Q. 14 Enlist and elaborate the renewable resources of energy. (10 marks)
- Q. 15 Designate the followings in animal / plant kingdom (2 marks each)  
(a) Neurospora (b) Paramecium (c) Drosophila  
(d) Zea mays (e) Rana tigrina