



**FEDERAL PUBLIC SERVICE COMMISSION**  
**COMPETITIVE EXAMINATION FOR**  
**RECRUITMENT TO POSTS IN BS-17**  
**UNDER THE FEDERAL GOVERNMENT, 2013**  
**GENERAL KNOWLEDGE, PAPER-I**  
**(EVERYDAY SCIENCE)**

Roll Number

<b>TIME ALLOWED:</b>	<b>(PART-I MCQs)</b>	<b>80 MINUTES</b>	<b>MAXIMUM MARKS</b>
<b>THREE HOURS</b>	<b>(PART-II)</b>	<b>100 MINUTES</b>	<b>MAXIMUM MARKS.</b>
<b>NOTE:</b> (i) First attempt <b>PART-I (MCQs)</b> on separate <b>OMR Answer Sheet</b> which shall be taken back after 80 minutes. (ii) <b>Overwriting/cutting of the options/answers will not be given credit.</b>			

**PART-I ((MCQs)(COMPULSORY)**

**Q.1. (i)** Select the best option/answer and fill in the appropriate Circle  on the **OMR Answer Sheet. (50x1=50)**  
**(ii)** Answers given anywhere, other than OMR Answer Sheet, shall not be considered.

1. Who proposed the concept " All motion is relative " ?  
(a) Albert Einstein      (b) John Kepler      (c) Galileo Galilie      (d) None of these
2. The field of specialization of famous Muslim scientist Abu Usman Aljahiz was :  
(a) Botany      (b) Zoology      (c) Astronomy      (d) None of these
3. Albatros is:  
(a) A sea bird      (b) A beetle      (c) A fruit      (d) None of these
4. The sunlight can reach a depth of ----- meters in the ocean :  
(a) 100      (b) 80      (c) 120      (d) None of these
5. The biggest planet in our solar system is:  
(a) Venus      (b) Pluto      (c) Jupiter      (d) None of these
6. The biggest species of the cat family is:  
(a) Tiger      (b) Lion      (c) Leopard      (d) None of these
7. Which group of animals has heterogametic females?  
(a) Domestic fowl      (b) Earthworm      (c) Rabbit      (d) None of these
8. The dominant phase of life cycle in these organisms is haploid:  
(a) Mosses      (b) Bacteria      (c) Protozoa      (d) None of these
9. The atmosphere of moon consists of:  
(a) 90% Hydrogen, 10% Nitrogen      (b) 80% Nitrogen, 20% Hydrogen      (c) 60% Nitrogen, 40% inert gases      (d) None of these
10. The chemical name of quartz is:  
(a) Silicon Dioxide      (b) Stannous oxide      (c) Aluminium Oxide      (d) None of these
11. Which month of a calendar year can lack a new moon?  
(a) December      (b) February      (c) May      (d) None of these
12. Deuterium differs from hydrogen in having:  
(a) Different atomic number but same atomic weight      (b) Different atomic number and different atomic weight  
(c) Same atomic number but different atomic weight      (d) None of these
13. One of the following is a water soluble vitamin:  
(a) Vitamin A      (b) Vitamin K      (c) Vitamin D      (d) None of these
14. Coulomb is the scientific unit to measure:  
(a) Velocity      (b) Temperature      (c) Mass      (d) None of these
15. Equator passes through one of these countries:  
(a) Saudi Arabia      (b) Italy      (c) Japan      (d) None of these
16. Anti Diuretic hormone is secreted by one of the following glands:  
(a) Pituitary      (b) Pancreas      (c) Thyroid      (d) None of these
17. Basha Dam is to be constructed on:  
(a) River Sutlaj      (b) River Jhelum      (c) River Chenab      (d) None of these
18. UV light falls in the category of:  
(a) Ionizing Radiations      (b) Non-Ionizing Radiations      (c) Visible Light      (d) None of these
19. The earth's -----is divided into 15 major plates of various sizes:  
(a) Mesosphere      (b) Stratosphere      (c) Lithosphere      (d) None of these
20. One of these scientists formulated basic laws of Geometry:  
(a) Pythagorus      (b) Archimedes      (c) Aristotle      (d) None of these
21. Phosphorus is an essential component of one of the following biological molecules:  
(a) Amino acids      (b) Nucleic acids      (c) Carbohydrates      (d) None of these
22. He was the first scientist to prove that planets move around the sun:  
(a) Archimedes      (b) Galileo Galilei      (c) John Kepler      (d) None of these
23. Atom is made up of ----- different kinds of subatomic particles:  
(a) Three      (b) Two      (c) Four      (d) None of these
24. Uranium is best used as nuclear fuel in one of the following forms:  
(a)  $U^{235}$       (b)  $U^{237}$       (c)  $U^{238}$       (d) None of these
25. The Alpha particles are compact clusters of:  
(a) Electrons and Protons      (b) Two Protons and Two Neutrons      (c) Three Protons and Three Neutrons      (d) None of these
26. The Beta particles are fast moving:  
(a) Protons      (b) Neutrons      (c) Electrons      (d) None of these
27. One of the following countries produces maximum energy from atomic reactors:  
(a) France      (b) USA      (c) UK      (d) None of these

**EVERYDAY SCIENCE GENERAL KNOWLEDGE, PAPER-I**

- 28. The unit to measure the quantity of Ozone in the atmosphere is:  
(a) Dobson (b) Dalton (c) Coulomb (d) None of these
- 29. The severity of 2005 earthquake of Pakistan on Richter Scale was:  
(a) 6.9 (b) 7.6 (c) 7.1 (d) None of these
- 30. Geiger-Muller Counter is used to detect:  
(a) Protons (b) Neutrons (c) Photons (d) None of these
- 31. Vacuum tubes have been replaced by:  
(a) Conductors (b) Diodes (c) Transistors (d) None of these
- 32. Dacron is:  
(a) Polyethylene (b) Epoxy (c) Polyamide (d) None of these
- 33. It is a secondary plant nutrient:  
(a) Nitrogen (b) Phosphorus (c) Sulphur (d) None of these
- 34. An area of microbiology that is concerned with the occurrence of disease in human population is:  
(a) Immunology (b) Parasitology (c) Epidemiology (d) None of these
- 35. The number of electrons of a neutral atom is automatically known if one knows the:  
(a) Atomic number (b) Atomic weight (c) Number of orbitals (d) None of these
- 36. Which of the following is not an enzyme?  
(a) Chymotrypsin (b) Secretin (c) Pepsin (d) None of these
- 37. It is impossible for a type O<sup>+</sup> baby to have a type \_\_\_\_\_ mother.  
(a) AB<sup>-</sup> (b) O<sup>-</sup> (c) O<sup>+</sup> (d) None of these
- 38. Serum is blood plasma minus its:  
(a) Calcium ions (b) Clotting proteins (c) Globulins (d) None of these
- 39. The autonomic nervous system innervates all of these except:  
(a) Cardiac muscles (b) Skeletal muscles (c) Smooth muscles (d) None of these
- 40. The damage to the \_\_\_\_\_ nerve could result in the defect of the eye movement:  
(a) Optic (b) Trigeminal (c) Abducens (d) None of these
- 41. Which of these is not a region of the spinal cord?  
(a) Thoracic (b) Pelvic (c) Lumbar (d) None of these
- 42. The shape of the external ear is due to:  
(a) Elastic cartilage (b) Fibrocartilage (c) Articular cartilage (d) None of these
- 43. The external surface of the stomach is covered by:  
(a) Mucosa (b) Serosa (c) Parietal peritoneum (d) None of these
- 44. Which of the following is not a human organ system?  
(a) Integumentary (b) Muscular (c) Epithelial (d) None of these
- 45. Which of the following does not vary predictably with the depth of the aquatic environment?  
(a) Salinity (b) Temperature (c) Penetration by sunlight (d) None of these
- 46. The quantity of available nutrients \_\_\_\_\_ from the lower levels of the energy pyramids to the higher ones.  
(a) Increases (b) Decreases (c) Remains stable (d) None of these
- 47. Which of the following is not a major subdivision of the biosphere?  
(a) Hydrosphere (b) Lithosphere (c) Stratosphere (d) None of these
- 48. Vaccination is synonymous with \_\_\_\_\_ immunity.  
(a) Natural active (b) Artificial passive (c) Artificial active (d) None of these
- 49. When a patient's immune system becomes reactive to a drug, this is an example of:  
(a) Superinfection (b) Drug resistance (c) Allergy (d) None of these
- 50. What is the smallest unit of heredity?  
(a) Chromosomes (b) Gene (c) Nucleotide (d) None of these

**PART-II**

**NOTE:** (i) **Part-II** is to be attempted on the separate **Answer Book**.  
(ii) Candidate must write **Q. No.** in the **Answer Book** in accordance with **Q. No.** in the **Q. Paper**.  
(iii) Attempt **ONLY FIVE** questions from **PART-II**. **ALL** questions carry **EQUAL** marks.  
(iv) Extra attempt of any question or any part of the attempted question will not be considered.

- Q.No.2. (a) "The flood disaster in Pakistan is caused by the follies of humans ". Comment. (05)  
(b) State the message of "The Earth Hour Movement". (05)
- Q.No.3. (a) Porifera is an ancient group of animals from Cambrian period. What is the cause of their survival /success? (05)  
(b) How heavy water differs from ordinary water and what is its use in the Atomic Reactor? (05)
- Q.No.4. What part do antibodies play in allergic reactions? How vaccination can be helpful in its control/ prevention? (10)
- Q.No.5. (a) Differentiate between Renewable and Non-renewable sources of energy. Give examples of each one of them. (05)  
(b) Why Nuclear Energy is being preferred in developed countries and why are we lagging behind in this important source of energy? (05)
- Q.No.6. (a) What is Nanotechnology and what are its uses? (05)  
(b) Briefly explain the differences between Chemotherapy and Radiotherapy. (05)
- Q.No.7. Write comprehensive notes on:  
(a) LASER and their uses. (b) OPTIC FIBRES and their importance in modern telecom system. (5 each)
- Q.No.8. Write all that you know about Pesticides. How are they classified by agronomists? (10)
- Q.No.9. Write note on: (a) Biotechnology (b) Global Warming (5 each)

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