



# FEDERAL PUBLIC SERVICE COMMISSION

Roll Number

## COMPETITIVE EXAMINATION- 2003 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

### GENERAL KNOWLEDGE-I (GENERAL SCIENCE & ABILITY)

<b>TIME ALLOWED: THREE HOURS</b> <b>PART-I(MCQS): MAXIMUM 30 MINUTES</b>	<b>PART-I (MCQS)</b> <b>PART-II</b>	<b>MAXIMUM MARKS = 20</b> <b>MAXIMUM MARKS = 80</b>
<b>NOTE: (i) Part-II</b> is to be attempted on the separate <b>Answer Book</b> . <b>(ii)</b> Attempt <b>ONLY FOUR</b> questions from <b>PART-II</b> . <b>ALL</b> questions carry <b>EQUAL</b> marks. <b>(iii)</b> All the parts (if any) of each Question must be attempted at one place instead of at different places. <b>(iv)</b> Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper. <b>(v)</b> No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed. <b>(vi)</b> Extra attempt of any question or any part of the question will not be considered.		

**Q1. Write short notes on any two of the following:**

- a) Microwave oven b) Optic c) Biotechnology

**Q2. Give names of the members of the solar system. Briefly write down main characteristics of :**

- a) Mars b) venus

**Q3. Name :**

- a) The instrument used for the measurement of blood pressure  
b) A mammal, which can fly  
c) A disease which is more common in men than in women and is hereditary in character  
d) One endangered animal species of Pakistan  
e) An ore of mercury  
f) A cyanobacterium  
g) A hormone secreted by pancreas  
h) The nuclear reaction taking place on the surface of sun  
i) The scientist who discovered sulfuric acid  
j) The constituent elements of brass

**Q4. What do the following scientific abbreviations stand for :**

- a) SONAR b) SARS c) NTP d) RQ e) PVC f) NPN g) WAN h) ECG i) CPU j) BCG

**Q5 : what are pesticides ? discuss their classification commonly in use with agronomists.**

**Q 6 : Define any five of the following :**

a) Acoustics b) Quartz c) Cross Pollination d) Allele e) Optical Illusion f) Ovulation g) Aqua Regia

**Q. 7 : Which physical quantities are measured by the following units :**

a) Pascal b) Torr c) Curie d) Angstrom e) Light year f) Dioptre Lens g) Horse power h) Radian i) Candela  
j) Mole

**Q. 8: Explain the structure of Earth and its Atmosphere**

**Q. 9 : Fill in the blanks:**

- a) The conversion of non-diffusible substances into diffusible ones by the action of enzymes is called \_\_\_\_
- b) Diamond is the purest naturally occurring crystalline form of \_\_\_\_
- c) Caustic soda is extensively used for making \_\_\_\_
- d) When a person can see nearer objects but not the distant ones he is said to be suffering from \_\_\_\_
- e) Marble is \_\_\_\_ rock
- f) Curie is a unit of \_\_\_\_
- g) The brown colour of rust is because of \_\_\_\_
- h) The movement of food through esophagus is by the muscular action known as \_\_\_\_
- i) Granite is a form of \_\_\_\_
- j) \_\_\_\_ is the main chemical substance in the plant cell wall :
- k) \_\_\_\_ was first discovered by Robert Brown :

**Q 10. What are Endocrine Glands ? Name any two . From which of the body are the following secreted :**

a) Insulin b) Thyroxine c) Adrenaline d) Estrogen e) Testosterone f) Cortisol

**Q. 11 Chose the best choice in the following statements :**

- 1. Enzymes are organic catalysts made up of : a. Carbohydrate b. Proteins c. Fats d. Nucleic Acid
- 2. A nanometer is: a.  $10^{-3}$  meters b.  $10^{-6}$  meters c.  $10^{-9}$  meters d. 10-12 meters
- 3. The minimum speed of a Pentium II computer is : a. 133 Mhz b. 233 Mhz c. 333 Mhz d. 433 Mhz
- 4. According to recent classifications the living organisms are divided into number of kingdoms : a. 2 b. 3 c. 4 d. 5
- 5. Glycolysis is a process of: a. Photosynthesis b. Reproduction c. Transpiration d. Respiration
- 6. The Unit that coordinates different devices of Computer system is : a. ALU b. Register c. Control Unit d. Logical Instruction
- 7. Seed is technically: a. Ripened Ovule b. Carpel c. Ripened Ovary d. Fully mature pollen grain
- 8. ADH is a hormone secreted by : a. Anterior pituitary b. posterior pituitary c. Adrenal Cortex d. Adrenal Medulla
- 9. The number of natural satellites orbiting around the Mars is: a. 1 b. 2 c. 5 d. 14
- 10. Permian Period belongs to: a. Palaeozoic era b. Mesozoic era c. Cenozoic era d. Precambrian era

**Q . 12 Differentiate between the following pairs :**

a) Lava and Magma b) Ultraviolet and infrared c) Fault and Fold d) Caustic Soda and Caustic Potash e) S.E.M. and T.E.M.

**Q.13 which of the following statements are true and which are false**

- a) Right kidney in man is slightly lower in position than the left kidney
- b) Light is not visible
- c) Steel is more elastic than rubber
- d) Pitch of man's voice is greater than that of woman
- e) Diastolic blood pressure is greater than systolic blood pressure
- f) Base metal can be converted into gold by heating
- g) Guava contains more vitamin C than orange
- h) A light year is a unit of time
- i) Mercury is heavier than lead
- j) Movement of tectonic plates may cause eruption of a volcano

**Q.14 Give scientific reason of the following :**

- a) Colour blindness is more common in men than in women
- b) Light coloured clothes are generally worn in summer
- c) A person is hurt