



FEDERAL PUBLIC SERVICE COMMISSION

**COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BPS-17 UNDER
THE FEDERAL GOVERNMENT, 2006**

<u>Roll Number</u>

**GENERAL KNOWLEDGE PAPER-I
EVERY DAY SCIENCE**

TIME ALLOWED: 100 MINUTES.....Maximum Marks: 50

NOTE:

- (i) Attempt **ONLY FIVE** questions. All questions carry **EQUAL** marks.
(ii) Extra attempt of any question or any part of the attempted question will not be considered.

Q.1. Write short notes on only TWO of the following: (5 each)

- (a) Magnetic Resonance Imaging
- (b) Tidal Energy
- (c) Supersonics

Q.2. What is Pollen Allergy? What preventive measures are to be taken to avoid it? (4, 6)

Q.3 Name. (1 each)

- 1) The alloy consisting of metals copper, zinc and nickel.
- 2) The instrument specially designed for recording earthquake waves,
- 3) The electrical device which converts sound energy into electrical energy.
- 4) The ore of mercury metal.
- 5) The device with which variation of blood flow can be heard.
- 6) The element, which is abundantly present in the human body.
- 7) The scientist who discovered penicillin.
- 8) The astronaut who first landed on the surface of the moon.
- 9) The desert mammal, which does not drink water.
- 10) The mode of heat transfer from the sun to the earth.

Q.4. Write briefly (not more than four to five sentences) about only FIVE of the following: (2 each)

- (a) Plaster of Paris
- (b) Theodolite
- (c) Bird Flu
- (d) Gene
- (e) Thermistor



- (f) Thermostat
- (g) Pedometer

Q.5. Which physical quantities are measured by the following units? (1 each)

- (a) Foot-Pound
- (b) Torr
- (c) Slug
- (d) Guass
- (e) Acre Foot
- (f) Becquerel
- (g) Erg
- (h) Dyne
- (i) Gilbert
- (j) Dioptre

Q.6. What is the difference between Dam and Barrage? What benefits are obtained by constructing a big dam? (2, 8)

Q.7. Which of the following statements are True and which are False: (1 each)

- 1) Pitch of the dog sound is greater than the pitch of the cat sound.
- 2) Ultraviolet light is visible but infrared light is not visible.
- 3) Earthquakes are the lamps illuminating the structure of the earth's exterior.
- 4) Electricity does not move through the wire but through a field around the wire.
- 5) A guava contains more vitamin C than an orange.
- 6) Sound travels faster in iron than in air.
- 7) Wheat Bridge is the name of an electrical circuit.
- 8) Morphine can cause constipation and lowering of blood pressure.
- 9) A concave lens is used for the correction of the Hyperphobia.
- 10) The nucleic acids are responsible for proteins synthesis in the human body.

Q.8. Differentiate between the following pairs: (2 each)

- (a) Telemeter and Multimeter
- (b) Perimeter and Altimeter
- (c) Periscope and Microscope
- (d) Nucleon and Photon
- (e) Cusec and Comet

Q.9. Fill in the blanks: (1 each)

- 1) The branch of zoology, which deals with the study of insects is called _____
- 2) The disease _____ is caused by the deficiency of Vitamin B1 (Thiamine).
- 3) Oil rises in a wick of oil lamp because of a property of matter, called _____
- 4) The production of generally identical reproduction is called as _____
- 5) _____ is the fastest planet of the solar system.
- 6) Mercury metal is _____ times heavier than water.
- 7) Relative density of milk is measured by an instrument known as _____
- 8) The temperature of a human body is measured by an instrument known as _____



9) Gold and silver are known as _____ metals.

10) The amount of ozone in the atmosphere is expressed in _____.

Q.10. What is global warming? Is there a sunny side to global warming? If yes, explain. (4, 6)

Q.11. Give scientific reasons of the following: (2 each)

- a) Why do some people snore?
- b) Why do we sometimes sleep walk?
- c) Climber bends forward while climbing a mountain.
- d) The manhole covers are generally round.
- e) Roads are bent inwards on curves.

Q.12. What are vitamins and minerals? Which vitamins and minerals play major role in the development of bones? (4, 6)

Q.13. what do the following scientific abbreviations stand for? (1 each)

- (1) CRO
- (2) SARS
- (3) BOT
- (4) AMU
- (5) EMF
- (6) ADH
- (7) STP
- (8) GeV
- (9) NTP
- (10) CRT

Q.14. Compare the columns A and B and write the correct answer from the column B corresponding to the column A (serial wise) in column C. (1 each)

Column A Column B Column C

- (1) Geiger Muller Counter Semi Conductor (1)
- (2) Newton Magnet (2)
- (3) Addison Electricity (3)
- (4) Bardeen and Brattin Radioactivity (4)
- (5) Weber Fehner's Law E.M Induction (5)
- (6) Benjamin Franklin Lightning Conductor (6)
- (7) Decibel Gravitation (7)
- (8) Dr. Gilbert Water (8)
- (9) Henry Cavendish Sound (9)
- (10) Faraday Non-conductor (10)

Q.15. Choose the best choice in the following statements:

1) One of the countries through which equator passes is:

- (a) Kenya
- (b) Malaysia
- (c) Malta
- (d) Pakistan

2) Copper can be converted into gold by:

- (a) Artificial radioactivity
- (b) heating
- (c) Electroplating
- (d) Chemical reaction

3) The three elements needed for healthy growth of plants are:

- (a) N, P, K
- (b) N, C, P
- (c) N, K,
- (d) N, S, P

4) Clocks, which moves with the velocities comparable with the velocity of light, run:

- (a) fast
- (b) slow
- (c) equal to the velocity of light
- (d) with zero velocity

5) Max Planck received the noble prize in Physics in 1918 for his discovery of:

- (a) electron
- (b) energy quanta
- (c) photon
- (d) positron

6) Bronze medal is made up of metals:

- (a) (copper, nickel)
- (b) (copper, tin)
- (c) (copper, silver)
- (d) (copper, zinc)

7) Addison's disease is caused by the excessive secretion of:

- (a) Antidiuretic Hormone
- (b) Luteinising Hormone
- (c) Melanophore stimulating Hormone
- (d) Adrenocorticotrophic Hormone



8) Development of calf muscles in ladies who wear high heels is a common example of:

- (a) Natural Selection
- (b) inheritance of acquired character
- (c) Use and disuse of organ
- (d) Artificial selection

9) Margalla Hill is a branch of:

- (a) Karakorum range
- (b) Hindukash range
- (c) Himalaya range
- (d) Nanga Parbat range

10) Humming bird belongs to a category called:

- (a) Ectotherm
- (b) Endotherm
- (c) Exotherm
- (d) Heterotherm.
