



FEDERAL PUBLIC SERVICE COMMISSION

**COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BPS-17 UNDER
THE FEDERAL GOVERNMENT, 2001**

<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. (a) What were the special characteristics of Muslim Scientists?

(b) What were the contributions of the following Muslim Scientists:

- (i) Umar Al-Khayyam.
- (ii) Abu Ali Sina
- (iii) ibn Hayyan
- (iv). Jhn al Baitar
- (v) Zakariya Al-Razi.

Q. 2. (a) Differentiate clearly between Cyclone, Huriicane and tornado.

(b)

- (i) Name two minerals which ate exported from Pakistan.
- (ii) Name some gem-minerals used in Jewellery.
- (iii) What is dead sea.
- (iv) Why does the Sun appears orange-red at the time of Sunrise and Sunset.
- (v) Why does the total Eclipse can happen only at the new Moon.

Q. 3.

(a) Name popular farms of Energy. Write five various scientific devices used to convert one type of energy into another form of energy.

(b) Write meaning of the following units:

- (i) Barrel
- (ii) Joule
- (iii) Btu
- (iv) KWh
- (v) Newton.

Q. 4. Write short notes on any THREE of the following:

- (i) Synthetic Polymers..
- (ii) Laser.
- (iii) Pesticides
- (iv) Fission and Fusion
- (v) Paramagnetism and Diamagnetism.

Q. 5. Write difference between:

- (i) Microcomputer and minicomputer
- (ii) Main frame and Super computer.
- (iii) Hardware and Software.
- (iv) Byte and Word.
- (v) Ram and Cache memory.

Q. 6. Describe briefly the principle and working of any TWO of the following:

- (i) Pressure cooker
- (ii) Television
- (iii) Microwave oven
- (iv) Radar
- (v) Tape recorder.

Q. 7. Differentiate between:

- (i) DNA and RNA
- (ii) Brass and Bronze
- (iii) Blood and Lymph
- (iv) Hard water and Heavy water
- (v) Small pox and Measles
- (vi) Pig iron and Stainless Steel.
- (vii) Alloy and Amalgum
- (viii) Isotopes and Isobars
- (ix) Artery and Vein
- (x) Barrage and Dam.

Q. 8. Explain the scientific reasons for the following:

- (i) It is not advisable to sleep under trees during the night.
- (ii) Water boils quicker on mountains.
- (iii) Rainbow is produced in the sky after rain fall and sunlight.
- (iv) Water remains cool in a Earthenware pitcher.
- (v) Milk is considered as an ideal food.

Q. 9. Which of the following statements are true or false. Only write “True” or “False” in the answer book. Do not reproduce the statement.

- (i) Urea is a phosphate fertilizer.
- (ii) Cellulose is a natural polymer. (iii) Magnetite is the ore of copper
- (iv) Malaria is caused by drinking polluted water.
- (v) The instrument used to measure velocity of wind is Barometer.
- (vi) Our eye is very sensitive to blue light.
- (vii) Sound can not travel through vacuum.
- (viii) Enzymes are biological catalyst.
- (ix) Leprosy is a disorder of Nervous System.
- (x) Mica is a non-conductor of electricity.

Q.10 What are Endocrine glands? Name any four. From which part of the body are the followings secreted:

- (i) Insulin
- (ii) Thyroxin
- (iii) Adrenaline
- (iv) Oestrogen
- (v) Testosterone and
- (vi) Cortisol

Q.11

- (a) Name the important parts of a Flower.
- (b) Explain the Pollination and Fertilization processes.

Q.12 Write short notes on any FIVE of the following:

- (i) Ecosystem
- (ii) CNG
- (iii) PVC
- (iv) Hormones
- (v) Antibiotics
- (vi) Ceramics
- (vii) Green House Effect
- (viii) Photosynthesis
- (ix) Pasteurization
- (x) Vaccine.

Q.13 What are the factors of water pollution? What types of diseases are transmitted by using polluted the methods to control pollution of water.

Q.14 Fill in the blanks with appropriate words:

- (i) The purpose of computer is _____
- (ii) polio is caused by _____
- (iii) The stalagmite is deposit of _____
- (iv) Bauxite is one of _____
- (v) The chemical name of washing soda is _____
- (vi) The main constituent of Sui gas is _____ colour has the shortest wave length.
- (vii) _____ colour has the shortest wave length.
- (viii) Glass is a _____
- (ix) Monomers of protein are _____
- (x) Ascorbic acid is vitamin _____
- (xi) The solar system has _____
- (xii) Aids is caused by _____
- (xiii) In a normal resting person the rate of heart heat is _____
- (xiv) The science which deals with heredity is known as _____
- (xv) In Pakistan Copper mineral is found in _____
- (xvi) The most abundant element in the earth crust is _____
- (xvii) _____ is an apparatus used tbr measuring the pressure of gases.
- (xviii) The smallest branches of an artery lead into tiny blood vessels are called _____
- (xix) The living part of a plant cc l is composed of a nucleus and _____
- (xx) The fastest revolving plant is _____