FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2025 FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT

Roll Number

GENERAL KNOWLEDGE-I (GENERAL SCIENCE & ABILITY)

TIME ALLOWED: THREE HOURS	(PART-I MCQs)	MAXIMUM MARKS: 20
PART-I (MCQs) : MAXIMUM 30 MINUTES	(PART-II)	MAXIMUM MARKS: 80

NOTE: (i) First attempt PART-I (MCQs) on separate OMR Answer Sheet which shall be taken back after 30 minutes.
(ii) Overwriting/cutting of the options/answers will not be given credit.
(iii) There is no negative marking. All MCQs must be attempted.

PART-I (MCQs)(COMPULSORY)

Q.1. (i) Select the best option/answer and fill in the appropriate Box ■ on the OMR Answer Sheet. (20x1=20)
(ii) Answers given anywhere else, other than OMR Answer Sheet, will not be considered.

1. 'Blue dwarfs' and 'Red giants' respectively refer to:
   (A) Moons of Jupiter (B) Young star and Old star (C) Old star and Young star (D) None of these

2. Most major Tsunamis are produced by earthquakes with hypocenters less than:
   (A) 30 km   (B) 40 km   (C) 50 km   (D) None of these

3. Which of the following source of energy is caused by uneven heating of earth's surface?
   (A) Wind   (B) Solar   (C) Biomass   (D) None of these

4. Global winds towards western direction are known as:
   (A) Trade winds   (B) Western winds   (C) Reynolds wind   (D) None of these

5. Perinatal transmission is said to occur when a pathogen is transmitted from:
   (A) Non-human to human   (B) Infected to uninfected   (C) Mother to infant   (D) None of these

6. Which of the plant group needs both land and water to complete their life cycle?
   (A) Bryophyta   (B) Tracheophyta   (C) Thallophyta   (D) None of these

7. Maximum amount of carbohydrates are obtained from:
   (A) Nuts   (B) Plant oil   (C) Whole grain food   (D) None of these

8. Which of the following class has the largest number of animals?
   (A) Fishes   (B) Insects   (C) Mammals   (D) None of these

9. The process of preserving meat by stewing in a covered earthenware jug is called:
   (A) Burial   (B) Jugging   (C) Curing   (D) None of these

10. All operating systems get their total memory initialized from:
    (A) BIOS   (B) RAM   (C) ROM   (D) CPU

11. The amount of data transmitted for a given amount of time is called:
    (A) Noise   (B) Bandwidth   (C) Frequency   (D) None of these

12. Which of the following products can be prepared using raw guava?
    (A) Jam   (B) Jelly   (C) Both (A) and (B)   (D) None of these

13. Which of the following is used as a stabilizer in ice cream?
    (A) Sugar   (B) Milk   (C) Gelatin   (D) None of these

14. In the structure of fiber, the light is guided through the core due to total internal:
    (A) Reflection   (B) Refraction   (C) Diffraction   (D) None of these

15. Who is known as the inventor of Artificial Intelligence?
    (A) Charles Babbage   (B) John McCarthy   (C) Alan Turing   (D) None of these

16. Which of the following is the common language for Artificial Intelligence?
    (A) Java   (B) Python   (C) Lisp   (D) None of these

17. Cement factory labourer are prone to:
    (A) Leukemia   (B) Cytosilicosis   (C) Bone marrow   (D) None of these

18. The fastest enzyme is:
    (A) Pepsin   (B) DNA polymerase   (C) Carbonic anhydrase   (D) None of these

19. Process of adding vitamins to milk is known as:
    (A) Flavoring   (B) Fortification   (C) Fermentation   (D) None of these

20. The waves which are used for line of sight (LOS) communication are called:
    (A) Space waves   (B) Cable waves   (C) Antenna waves   (D) None of these

****

PART – II

NOTE: (i) Part-II is to be attempted on the separate Answer Book.
(ii) Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH SECTION. ALL questions carry EQUAL marks.
(iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.
(iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.
(v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
(vi) Extra attempt of any question or any part of the question will not be considered.
(vii) Use of Calculator is not allowed.

(SECTION – A)

Q. 2. (a) What effects are produced due to Rotation & Revolution of Earth? Explain briefly. (5)

(b) Describe Electromagnetic Radiations. Give its types and explain their applications. (5)

(c) What are Hurricanes? How they are formed and what level of damage they can produce? (5)

(d) Explain the advantages and disadvantages of nitrogen containing fertilizers and insecticides. (5) (20)

Q. 3. (a) Explain how temperature and light intensity affect the rate of photosynthesis in plants. (5)

(b) Describe the structure and functions of capillaries in the human blood circulatory system. (5)

(c) What is hepatitis? Give its types and briefly explain its common symptoms along with preventions. (5)

(d) Differentiate between biomass and biogas. Briefly explain various methods for obtaining energy from biomass. (5) (20)

Q. 4. (a) What is deforestation? State the disadvantages caused to the environment due to this. (5)

(b) Explain how water pollution is produced? Describe the part played by bacteria after a river has been polluted by sewage. (5)

(c) State some examples of pollution caused by human activity and discuss the effects of each example. (5)

(d) What does air pollution means? State ten serious effects of air pollution on the environment and briefly explain how they can be reduced? (5) (20)

Q. 5. (a) Differentiate between food contaminants and food adulterants. (5)

(b) Enlist major food groups based on nutrients, their functions and sources. (5)

(c) What is Artificial Intelligence and how does it differ from traditional programming? Describe the main branches of Artificial Intelligence. (5)

(d) What are the advantages of optical fibers in communication system? Draw basic structure of optical fiber and explain propagation of light through it. (5) (20)

(SECTION – B)

Q. 6. (a) In an annual sale, Salma buys a Fridge and a Freezer. The sale offers 15% off everything and she pays a total of Rs. 57,120/-. If the price of a freezer, before the sale, is Rs. 40,000/. What was the price of the Fridge before the sale? (5)

(b) Mr. Rasheed pays a deposit of Rs. 60,000/- followed by 36 equal monthly payments. The total amount that he pays is 127% of the basic price of Rs. 3,360,000/-. Calculate Rasheed's monthly payment. (5)

(c) Divide Rs. 600/=among A, B and C so that Rs. 40 more than 2/5 of A's share, Rs. 20 more than 2/7 of B's share and Rs. 10 more than 9/17 of C's share may be equal. (5)

(d) Find out the correct words from the jumbled spellings given below. (5) (2
(i) TEANAIRM   (ii) VAGNACEXETRA   (iii) VADIELTIONC
(iv) PKUNYBARTC (v) TAESROSNC

GENERAL KNOWLEDGE-I (GENERAL SCIENCE & ABILITY)

Q. 7 (a) Calculate the marked price of the sculpture if it is sold for Rs.79950/- after a discount of (5)
18%. On another day, if 10% discount is given on the marked price of the same
sculpture before it is sold at a further discount of 8%. Would the sale price still be
Rs.79950/-?

(b) Majid pays a total of Rs.51520/- for his car insurance. The total is made up of a basic (5)
charge plus 15% sales tax. Calculate the amount of sales tax that Majid pays.

(c) A camp site in the shape of a rectangle has sides $(3x+6)$ m and $(x+1)$ m and the length of (5)
the diagonal is $(4x+1)$ m. Find the area and the perimeter of the camp site.

(d) Arrange the following fractions in the descending order. (5) (20)

(a) $\dfrac{7}{12}, \dfrac{4}{7}, \dfrac{9}{14}, \dfrac{25}{42}$ (b) $\dfrac{5}{8}, \dfrac{7}{12}, \dfrac{5}{9}, \dfrac{13}{24}$ (c) $\dfrac{6}{35}, \dfrac{5}{21}, \dfrac{2}{7}, \dfrac{4}{15}$

(d) $\dfrac{2}{5}, \dfrac{6}{11}, \dfrac{7}{15}, \dfrac{9}{20}, \dfrac{13}{25}$ (c) $\dfrac{1}{5}, \dfrac{2}{7}, \dfrac{3}{8}, \dfrac{4}{13}, \dfrac{5}{17}$

Q. 8. (a) A train in first five successive minutes from its start runs 68m, 127m, 208m, (5)
312m and 535m and for next 5 minutes maintains an average speed of 33km/hr.
Find the whole distance covered and the average speed in covering this total
distance.

(b) A solid cuboid with base 10cm by 6cm is available. The height of the cuboid is (5)
'y' centimeter and the total surface area of the cuboid is given to be 376cm². Find
the height of the cuboid.

(c) In a six member family (Â, B̂, Ĉ, D, Ê and F̃), there are two fathers, three (5)
brothers and a mother. If C is the sister of F, B is the brother of E's husband. D
is the father of A and grandfather of F. Who is E's husband?

(d) How many prime numbers are between each of the following pairs of numbers? (5) (2
  a) $\sqrt{3}$ and $\sqrt{120}$
  b) $\sqrt[2]{10}$ and $\sqrt[2]{410}$
  c) $\sqrt[3]{10}$ and $\sqrt[3]{999}$
  d) $\sqrt[3]{28}$ and $\sqrt{120}$
  e) $\sqrt[3]{8}$ and $\sqrt{400}$

****