



FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2020 FOR RECRUITMENT TO POSTS IN
BS-17 UNDER THE FEDERAL GOVERNMENT
GENERAL KNOWLEDGE-I (GENERAL SCIENCE & ABILITY)

<u>Roll Number</u>

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

PART – II (SECTION – A)

- Q. 2. (a)** On 7th April 2012 an Avalanche hit a Pakistan military base in Gayari sector trapping 140 soldiers and civilians under deep snow. What is Avalanche; describe its four types with focus on most dangerous type? (5)
- (b)** What do you understand by Global Wind and Pressure patterns? Also explain wind and pressure features at higher altitude. (5)
- (c)** World largest earthquake was assigned a magnitude of 9.5 by the United States Geological Survey on 22 May 1960 in southern Chile Valdivia. What do you know about earthquake? Also explain shallow-focus and deep-focus earthquakes. (5)
- (d)** Differentiate between the renewable and non renewable energy sources. Briefly explain Geothermal Energy and Hydro Electricity. (5)(20)
- Q. 3. (a)** What are Pesticides? Explain their different types; why persistent pesticides are more lethal for mankind? (5)
- (b)** What are carbohydrates? Classify and give detail of each class along with examples. (5)
- (c)** Discuss different methods of Food preservation. (5)
- (d)** Where and how Fiber Optics are used? Also write down their advantages and disadvantages. (5)(20)
- Q. 4. (a)** Briefly describe the various segments of atmosphere. How these segments are maintaining the Earth Radiation Balance? (5)
- (b)** How the organic particulate matter enters in the atmosphere. Also describe the sources? (5)
- (c)** What is natural radioactivity? How it is different from the artificial radioactivity? (5)
- (d)** What are the Fossils? Discuss the importance of paleontology. (5)(20)
- Q. 5. (a)** What do you know about Hepatitis? Describe its types and write down preventive measures. (5)
- (b)** Differentiate between Middle Latitude Cyclones and Tornadoes. (5)
- (c)** What is Open System Interconnections (OSI) and describe its layers? (5)
- (d)** What is GPS? How does it work? (5)(20)

(SECTION – B)

- Q. 6. (a)** Tariq can do a tailoring job in 6 hours. Sajid does the same job in 4 hours. Irfan does it in 8 hours. Tariq and Sajid start doing the work. Sajid leaves after two hours and Irfan replaces him. How long would it take to complete the work? (5)
- (b)** Find the missing number to complete each sum. (5)
- (a) $9 + 8 - 5 = 2 \times$ (-----) (b) $3 \times 9 - 14 = 24 -$ (-----)
- (c) $15 \div 3 \times 12 = 41 +$ (-----) (d) $24 \div 4 + 5 = 66 \div$ (-----)
- (e) $8 \times 6 - 13 + 3 = 7 \times 6 -$ (-----)
- (c)** There are seven students in a group having ages 17,17,18,18,18,19,19. Calculate mean, median, mode and range of their ages. Also define these mentioned terms. (5)
- (d)** How does mental ability scales differ from IQ test? (5)(20)
- Q. 7 (a)** Mushtaq, Pervaiz, Ehsan, Umair and Saleem are friends having different heights and weights. Mushtaq weighs four times as much as Pervaiz and Pervaiz weighs double than Ehsan, Ehsan weighs half as much as Umair and Umair weighs half as much as Saleem. (5)
- (i) Who is the heaviest among five friends? (ii) Who is the second heaviest? (iii) Who has lowest weight? (iv) Who are equal in weight? (v) Mention the descending order.
- (b)** A farmer needs to build a boundary wall around his farm. If the area of farm is 484 m^2 , what will be the total area of the wall if it is two meters high on three sides and three meters high on one side? (5)
- (c)** Five girls A,B,C,D,E and four boys W,X,Y,Z have to go to a trip in three cars, car-1,car-2 and car-3. The following restrictions for seating in car are to be observed: (5)
- (i) Only three persons can sit in one car (ii) At least one boy and one girl must be in each car
- (iii) A and D should remain together (iv) Z cannot sit with B or C in the same car
- Distribute boys and girls in three cars.
- (d)** What are social skills? Describe four causes of weak social skills. (5)(20)
- Q. 8. (a)** What do you understand by systematic sampling? Discuss its types. (5)
- (b)** Blood groups of inhabitants of a village were checked. It was found that 600 people possessed blood group A, 650 possessed blood group B, 550 had blood group AB and 200 have blood group O. Calculate the probability of having blood group B. (ii) Calculate the probability of having blood group O. (5)
- (c)** A group of 50 men can construct 20 kilometer road in 40 days. How long will 70 men take to complete same length of road? (5)
- (d)** Zahid left a property worth Rs 1750,000/-. His family had to pay off a debt of Rs 150,000/-. The rest of money was distributed between a son and a daughter. How much did each child receive if share of a son was double than that of a daughter? (5)(20)