FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2019
FOR RECRUITMENT TO POSTS IN BS-17
UNDER THE FEDERAL GOVERNMENT

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) **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.

PART – II
SECTION – I

Q. 2. (a) Deficiency of vitamins causes different human diseases some of which are given in the table below. Choose the correct type of vitamin from the box and write in front of each disease: (5)
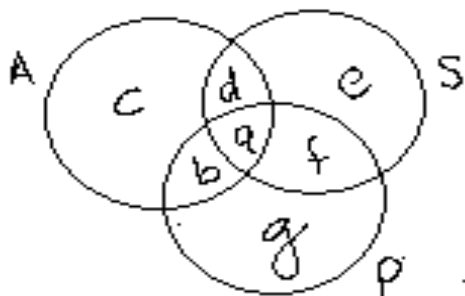
Vit. A	Vit. B_1	Vit. C	Vit. D	Vit.E	Vit.K

Disease caused due to lack of Vitamin	Name of the Vitamin
1. Poor night Vision	
2. Bleeding Gums	
3. Rickets in Children	
4. Beri-Beri	
5. Anaemia	

(b) People suffering from cardiovascular diseases have a high level of cholesterol in their blood. This often leads to a build up of fats on the internal arterial walls. Suggest how this might be harmful to the heart. (5)

(c) Why the excessive use of chemical fertilizers should be avoided? (5)

(d) Why are scientists worried about the increase of Carbon Dioxide in the atmosphere? (5) **(20)**

Q. 3. (a) Differentiate between the Renewable and Non-Renewable sources of energy giving examples of each one of them. (5)

(b) Give a brief account of Optic Fibres. What is their importance in present day telecom system? (5)

(c) What is the most dangerous part of a hurricane and how do cyclones affect humans? (5)

(d) What's the difference between vaccines and antibiotics? How do antibiotics and vaccines contribute to health? (5) **(20)**

Q. 4. (a) What is the importance of forests in the economy of a country? (5)

(b) Give a brief account of Biotechnology. (5)

(c) Do the mammals also lay eggs? If yes, where in the world do they live? Write the name of some of them. (5)

(d) How can the Sun have such a strong gravitational field if it's made of gases? (5) **(20)**

Q. 5. (a) What does Ozone depletion mean and how can we protect the ozone layer? (5)

(b) What are the different types of a network? Explain each briefly. (5)

(c) Why an indiscriminate/casual use of Antibiotics may prove dangerous? (5)

(d) Why do atoms form bonds? Name three major types of chemical bonds. (5) **(20)**

SECTION – II

Q. 6. (a) Moiz was trying to sleep at one night but there was too much noise around him. His (5) clock ticked every 5 second: a tap was dipping every 7 second and a pet dog snored every 12second. He noticed on his clock that all three things happened together on the stroke of mid night. Find after how many seconds all three things happened together again?

(b) One pipe can fill a pool 1.25 times as fast as a second pipe. When both pipes are (5) opened they fill the pool in five hours. How long would it take to fill the pool if only the slower pipe is used?

(c) The cost for hiring a car for 2 days in 2018 was Rs 264 which was 20% more than (5) in 2013. What was the cost of hiring a car for 2 days in 2013?

(d) What do you understand by measure of central tendency? State its types. (5) **(20)**

Q. 7 (a) Moiz and Mair share a lottery win of Rs 2000 in the ratio 1:4. Moiz then share his (5) part between himself, his wife and their son in the ratio 4:5:1. How much more does his wife get over their son.

(b) A farmer keeps hens and rabbits on his farm. One day, he counted a total of 70 (5) heads and 196 legs. How many more hens than rabbits does he have?

(c) What is polygon? Describe different types of regular polygon. (5)

(d) In a certain code, computer is written as RFUVQNPC. How will MEDICINE be (5) **(20)** written in code language?

Q. 8. (a) Seven piano students- T, U, V, W, X, Y and Z-are given a recital and their (5) instructor is deciding the order in which they will perform.
Each student will play exactly one piece, a piano solo. In deciding the order of performances, the instructor must observe the following restrictions:
(i)   X cannot play first or second
       W cannot play until X has played.
       Neither T nor Y can play seventh.
       Either Y or Z must play immediately after W plays.
       V must play immediately after or immediately before U plays
(ii)   If V plays first, which one of the following must be true
       T plays sixth
       X plays third
       Z plays seventh
       T plays immediately after Y
       W plays immediately after X

(b) U = {Whole number from 10 to 24} (5)
A = {Even number}
B = {Number divisible by 5}
Write down the number of elements of A∩B.

(c) In the following diagram A represent American, S represent scientists and P (5) represent politicians.

(i) American those are politicians but not scientists will be?
(ii) Scientists which are politicians but not Americans will be?

(d) Each packet of washing powder carries a token and 4 tokens can be exchanged for (5) **(20)** free packet. How many free packets will I receive if I buy 64 packets?

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