FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BS-17
UNDER THE FEDERAL GOVERNMENT, 2014
COMPUTER SCIENCE

Roll Number

TIME ALLOWED:	(PART-I MCQs)	30 MINUTES	MAXIMUM MARKS: 20
THREE HOURS	(PART-II)	2 HOURS & 30 MINUTES	MAXIMUM MARKS: 80

NOTE:(i) **Part-II** is to be attempted on the separate **Answer Book.**
   (ii) Attempt **ONLY FOUR** questions from **PART-II,** Selecting at least **ONE** question from **Each Section. ALL questions carry EQUAL marks.**
   (iii) Candidate must write **Q. No.** in the **Answer Book** in accordance with **Q. No.** in the **Q. Paper.**
   (iv) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
   (v) Extra attempt of any question or any part of the attempted question will not be considered.
   (vi) Use of Calculator is allowed.

PART-II

SECTION-A

Q. No. 2. **(a)** The processor must have a process to handle exceptions. Explain four things that the processor must be able to identify and/or take care of. **(08)**
   (b) Discuss the essential servers/services that are used to complete an Intranet. **(06)**
   (c) Discuss why BIOS are not changed frequently. **(06)**

Q. No. 3. **(a)** Distinguish between the architecture of x86 to a 68000 processor. **(08)**
   (b) Differentiate differences of Unix operating system over Microsoft window OS. **(06)**
   (c) Write a note on network topology. Which topology will you prefer for an enterprise and why? **(06)**

SECTION-B

Q. No. 4. **(a)** What advantages are provided in OOP over other conventional programming techniques? **(08)**
   (b) Draw a data structure of a course registration system for a university level institute. **(06)**
   (c) Discuss some cost estimation techniques used in software engineering. **(06)**

Q. No. 5. **(a)** Write a do-while loop to compute the sum of the first 30 positive odd integers. **(08)**
   (b) Write a note on sorting algorithm. Write sodo-code for insertion sort. **(06)**
   (c) What are the key issues on which software engineering do work with? **(06)**

SECTION-C

Q. No. 6. **(a)** Discuss the concepts of data independency in DBMS. **(08)**
   (b) Web-applications are getting popular now a days. Write a note on languages use for web-application developments. **(06)**
   (c) What is the difference between Raster and Vector Graphics? Write down at least four differences. **(06)**

Q. No. 7. **(a)** Write a note on Data Models. **(08)**
   (b) Discuss essential issues in network programming. **(06)**
   (c) Define 'Transformation' and discuss briefly its types. **(06)**

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