POKHARA UNIVERSITY

Year: 2021 Level: Bachelor Semester – Spring Program: BE Full Marks: 70 Course: Principles of Programming Language Pass Marks: 31.5 Time: 2 hrs. Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks. Attempt all the questions. **Section - A:** $(5 \times 10 = 50)$ Analyze the differences between FORTRAN and ALGOL control structure. 10 Q. N. 1 OR Discuss the desirable characteristics of a good programming language. Create a scenario where a good programming language outperforms the previous one with reference to some of the modern high level programming languages. "Different principles are to be considered while designing new language". Explain Q. N. 2 10 with support of different principles Q. N. 3 Differentiate association list and property list. Also write the user defined function 10 for to extract property from property list(getprop()) and association list(assoc()). Q. N. 4 "Object Orientated Programming has revolutionized the software industries". 10 Justify this statement with all necessary causes that make OOP revolutionary rather than just an evolution with the support of SMALLTALK. Write a program to read 10 numbers in array and sort them in ascending order in 10 Q. N. 5 FORTRAN. Section - B: $(1\times20=20)$ Design a pseudo-code for IBM machine. (considering 2000 words of 10 digit 20 Q. N. 6 memory) arithmetic operation control flow moving input/output array indexing and loops