## RUBRICS: HSSC 1 st ANNUAL EXAMINATION 2023

SUBJECT: COMPUTER SCIENCE-II (HA)

| Q.\# / <br> Part \# | Criteria | Level 1 (Marks) | Level 2(Marks) |  | Level 3 (Marks) |  | Level 4 (Marks) | Level 5 (Marks) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2(i) | Reasons for requirements of OS for file management | Any three valid reasons for requirement of OS for File management (3) | Any two valid reasons (2) |  | Any one valid reason <br> (1) |  | Irrelevant/wrong(0) |  |
| 2(ii) | Purpose of any three state of a process | Correct purpose of any three states of a process (3) | Correct purpose of any two states of a process (2) |  | Correct purpose of anyone states of a process (1) |  | Irrelevant/wrong(0) |  |
| 2(iii) | Comparisons <br> between <br> multiprogramming <br> and <br> multiprocessing OS | Any three correct comparisons between Multiprogramming and Multiprocessing OS (3) | Any two correct comparisons (2) |  | Any one correct comparisons (1) |  | Irrelevant/wrong(0) |  |
| 2(iv) | Reasons of importance of feasibility in SDLC | Any three correct reasons of feasibility in SDLC (3) | Any two correct reasons (2) |  | Any one correct reason <br> (1) |  | Irrelevant/wrong(0) |  |
| $2(v)$ | Correction of Compile time errors | Correction of any six compile time errors (3) | Correction of any five errors (2.5) | Correction of any four errors (2) | Correction of any three errors (1.5) | Correction of any two errors (1) | Correction of any one error (0.5) | Irrelevant/wrong (0) |
| $2(v i)$ | Result of expressions | Three correct results of expression (3) | Two correct results (2) |  | One correct result (1) |  | Irrelevant/wrong (0) |  |
| 2 (vii) | C++ program to display the area of a triangle | Correct program code with: <br> i. Input statement \& variable declaration <br> ii. Expression <br> iii. output statement (3) | Any two co | ect aspects (2) | Any one corr <br> (1) | ct aspect | Any relevant information (0.5) | Irrelevant/wrong(0) |
| 2 (viii) | a. Output of the program | Correct output (1.5) | Partially correct output (1) |  | Irrelevant/wrong (0) |  |  |  |
|  | b. Conversion of program using ifelse | Correction conversion using if-else (1.5) | Partially correction conversion using if-else (1) |  | Irrelevant/wrong (0) |  |  |  |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 (ix) | Differences between break statement and exit() function | Any three correct differences between break and exit() (3) | Any two correct differences (2) | Any one correct difference (1) | Any relevant information (0.5) | Irrelevant/wrong(0) |  |
| $2(x)$ | Output of program segment | Three correct outputs (3) | Two correct outputs (2) | One correct output (1) | Irrelevant/wrong (0) |  |  |
| $2(x i)$ | Purpose of strcmp() | Correct purpose of strcmp() (2) | Partially correct purpose of strcmp() (1) | Any relevant information (0.5) | Irrelevant/wrong(0) |  |  |
|  | Example | Correct example of $\operatorname{strcmp}()$ (1) | Irrelevant/wrong (0) |  |  |  |  |
| 2(xii) | Usage of default argument | Correct purpose/ usage of default argument (2) | Partially correct purpose/ usage (1) | Any relevant information (0.5) | Irrelevant/wrong (0) |  |  |
|  | Example | Correct example (1) | Irrelevant/wrong (0) |  |  |  |  |
| 2(xiii) | Definition of Inline function | Correct definition of inline function (1) | Any relevant information (0.5) | Irrelevant/wrong (0) |  |  |  |
|  | Advantages | Any two correct advantages (2) | Any one correct advantage <br> (1) | Irrelevant/wrong (0) |  |  |  |
| 2(xiv) | Differentiation between reference and dereference operator | Correct differentiation (2) | Partially correct differentiation (1) | Irrelevant/wrong (0) |  |  |  |
|  | Example | Correct examples of both operators (1) | Correct example of any one operator (0.5) | Wrong example (0) |  |  |  |
| 2 (xv) | Definition of Polymorphism | Correct definition (2) | Partially correct definition (1) | Irrelevant/wrong (0) |  |  |  |
|  | Example from daily life | Correct example (1) | Irrelevant/wrong (0) |  |  |  |  |
| 2(xvi) | Characteristics of text file in C++ | Any three correct characteristics of text file (3) | Any two correct characteristics (2) | Any one correct characteristic (1) | Irrelevant/wrong (0) |  |  |
| 3 (a) | Writing a program to input number, display table until entered number is negative | Correct program code with: <br> i. Structure <br> ii. Variable declaration <br> iii. Input statement <br> iv. Use of outer loop <br> v. User of inner loop <br> vi. Output statement for table (6) | Any five correct aspects (5) | Any four correct aspects (4) | Any three correct aspects (3) | Any two correct aspects (2) | Any one correct aspect (1) |


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| 3 (b) | Program declaring class, its member functions, and output | Correct program code with: <br> i. Declaration of class, <br> ii. Member variables <br> iii. gets-data() <br> iv. display-average() <br> v. Creating object <br> vi. Using member function | Any five correct aspects (5) |  |  | Any four correct aspects <br> (4) |  |  | Any three correct aspects <br> (3) |  |  | Any two correct aspects (2) | Any one correct aspect (1) |  |
| 4 (a) | Purpose of the C++ statements | All eight correct purposes of C++ statements (8) | All seven correct purposes (7) | Any six correct purposes (6) |  |  | Any four correct purposes (4) |  | Any three correct purposes (3) | Any two correct purposes (2) |  | Any one correct purpose (1) |  | Irrelevant/wrong <br> (0) |
| 4 (b) | Writing program to input sentence and display number of words and number of letters | Correct program code with: <br> i. Variable declaration \& Input statement <br> ii. Use of loop <br> iii. Use of control structure <br> iv. Output statements <br> (4) | Any three correct aspects (3) |  | Any two correct aspects (2) |  |  | Any one correct aspect (1) |  | Any relevant information (0.5) |  | Irrelevant/wrong(0) |  |  |
|  | i. Responsibilities of software tester | Any correct four responsibilities of software tester (4) | Any correct three responsibilities of software tester (3) |  |  | Any correct two responsibilities of software tester (2) |  |  | Any correct one responsibility of software tester (1) |  |  | Irrelevant/wrong (0) |  |  |
| 5 (a) | ii. Responsibilities of programmer | Any correct four responsibilities of programmer (4) | Any correct three responsibilities of programmer (3) |  |  | Any correct two responsibilities of programmer (2) |  |  | Any correct one responsibility of programmer (1) |  |  | Irrelevant/wrong (0) |  |  |
| 5 (b) | Program to input number, and print pattern by passing parameter as reference to function | Correct program code with: <br> i. Input statement <br> ii. Function prototype <br> iii. Function definition <br> iv. Function calling by reference (4) | Any three correct aspects (3) |  |  | Any two correct aspects (2) |  |  | Any one correct aspect (1) |  | Any relevant information (0.5) |  | Irrelevant/wrong(0) |  |

## Note: All the markers must know the solutions of all the question items of the question paper before starting marking.

