## INDIAN SCHOOL MUSCAT

FIRST PRELIMINARY EXAMINATION
JANUARY 2019

## CLASS XII

Marking Scheme - SUBJECT [THEORY]

| Q.NO. | Answers | Marks |
| :---: | :---: | :---: |
| 1a | stdio.h, string.h $1 / 2 \mathrm{~m}$ each for the correct answer | 1 |
| b | Assignment operator, relational operator, logical operator \& conditional operator <br> $1 / 2 \mathrm{~m}$ each for the correct operator | 2 |
| c | ```Rewrite the following C++ code after removing any/all Syntactical Error(s) with each correction underlined. #include "iostream.h" }->\mathrm{ <iostream.h> class MEMBER { int Mno; float Fees; public: void MEMBER() }->\mathrm{ MEMBER { Mno=0;} void Register () {cin>>Mno>>Fees;} void Display() {cout<<Mno<<" : "<<Fees<<endl;} }; void main() { MEMBER switch; }\quad->\mathrm{ Switch; Register(); }\longrightarrow\mathrm{ Switch.Register(); Switch.Display(); } 1/2 m each error finding & correcting``` | 2 |
| d | $\begin{aligned} & 25 \\ & 35 \\ & 45 \\ & 17 \\ & 1 / 2 \text { m each for the correct answer } \end{aligned}$ | 2 |
| e | 10\#45\#14\# <br> 18\#77\#22\# <br> $11 / 2 \mathrm{~m}$ each line of correct answer | 3 |
| f | Option (iii) Value for $\mathrm{x} \rightarrow$ Maximum : $6 \&$ minimum : 4 | 2 |


|  | 1 m for correct output and 1 m for maximum \& minimum value |  |
| :---: | :---: | :---: |
| 2 a | 1 M for correct explanation and 1 m for example | 2 |
| b | ```class Inter \{ int m; public: Inter( int y) \{ m = y; \}// Function 1 Inter ( Inter \& t );// Function 2 \(\sim \operatorname{Inter}()\) \{ \}// Function 3 \}; \\ (i) a) Inter obj(45); \\ b) Destructor \\ (ii) Inter (Inter \& t ) \{ m=t.m;\} \\ 1 m each for (i) \& (ii)``` <br> OR <br> 1 M for correct explanation and 1 m for example | 2 |
| c | ```( \(1 / 2\) Mark for declaring class header correctly) ( \(1 / 2\) Mark for declaring data members correctly) (1 Mark for defining NewSports() correctly and \(1 / 2\) Mark for taking inputs ) ( \(1 / 2\) Mark for constructor) ( \(1 / 2\) Mark for defining DisplaySports() correctly) ( \(1 / 2\) Mark for correctly closing class declaration with a semicolon ; )``` | 4 |
| d | (i) Base class University and derived class Department <br> (ii) name,dname,HOD,no_of_students,vc,x <br> (iii) Multilevel <br> (iv) 106 bytes <br> 1 m each for answer correct answer (i) to (iv) <br> OR <br> (1 Mark for correct syntax for derived class header) <br> ( $1 / 2$ Mark for writing public: ) <br> ( $1 / 2$ Mark for correct declaration of data members ) <br> (1 Mark for defining the function INPUT( ) ) <br> (1 Mark for defining the function OUTPUT( ) ) | 4 |
| 3 a | ( $1 / 2$ Mark for correct loops) <br> ( 1 Mark for logic) <br> ( $1 / 2$ Mark for output ) | 2 |
| b | (1 Mark for correct loop) <br> (2 Marks for correct logic) | 3 |
| c | 1 Mark for writing correct formula OR substituting formula with correct values) (1 Mark for correct step calculations) (1 Mark for final correct address) | 3 |
| d | (1 Mark for checking if Queue is Empty) <br> (1 Mark for checking Declaring) <br> ( 2 Mark for deleting the value in the Queue) | 4 |
| e | $\begin{aligned} & \mathrm{AB}+\mathrm{CDE}-\wedge \mathrm{F}+* \mathrm{G}- \\ & \text { OR } \\ & 20 \end{aligned}$ | 2 |


|  | 1 m for correct answer \& 1 m for showing the status |  |
| :---: | :---: | :---: |
| 4 a | ( $1 / 2$ Mark for opening file correctly) <br> ( $1 / 2$ Mark for reading from the file) <br> ( $1 / 2$ Mark for checking the word starting with ' $t$ ') <br> ( $1 / 2$ Mark for displaying the word) <br> OR <br> ( $1 / 2$ Mark for opening file correctly) <br> ( $1 / 2$ Mark for reading from the file) <br> ( $1 / 2$ Mark for checking the lines not starting with ' A ' and counting it) <br> ( $1 / 2$ Mark for displaying the count) | 2 |
| b | (1 Mark for opening correctly) <br> (1 Mark for checking) <br> (1 Mark for output into the file) | 3 |
| c | $1 / 2 \mathrm{M}$ each for the correct answer | 1 |
| 5 a | 1 m for correct definition and 1 m for example | 2 |
| b | 1 m each for correct query for (i) to (iv) $1 / 2 \mathrm{~m}$ each for correct output (v) to (viii) | 6 |
| 6 a | 1 m for stating the law and 1 m for verifying | 2 |
| b | 2 m for correct logic diagram | 2 |
| c | $\mathrm{A}^{\prime} \mathrm{BC}{ }^{\prime}+\mathrm{A}^{\prime} \mathrm{BC}+\mathrm{ABC}+\mathrm{ABC}$ <br> 1 M for the correct answer | 1 |
| d | ( $1 / 2$ Mark for drawing K-Map and correctly plotting 1 s in the given cells) <br> ( 2 Mark each for groupings) <br> ( $1 / 2$ Mark for writing final expression in reduced/minimal form) | 3 |
| 7 a | Any 2 correct media $1 / 2 \mathrm{~m}$ each | 1 |
| b | One advantage and one disadvantage $1 / 2 \mathrm{~m}$ each | 1 |
| c | GPRS - General Packet Radio Service <br> GSM - Global System for Mobile communications <br> WLL - Wireless local loop <br> PPP - Point to point protocol <br> $1 / 2 \mathrm{~m}$ each for the correct answer | 2 |
| d | 1 mark kind of data \& 1 m for its use | 2 |
| e | 1 m each for the correct answer for parts (i) to (iv) | 4 |

