**GRADE 11**

**JUNE 2017 EXAMINATIONS Marking Memo 100marks**

|  |  |
| --- | --- |
| 1.1 | G✓ |
| 1.2 | E✓ |
| 1.3 | C✓ |
| 1.4 | A✓ |
| 1.5 | B✓ |
|  |  |
| 2.1 | D✓ |
| 2.2 | D✓ |
| 2.3 | C✓ |
| 2.4 | C✓ |
| 2.5 | C✓ |
|  |  |
| 3.1 | T✓ |
| 3.2 | T✓ |
| 3.3 | F PORTABLE COMPUTERS✓ |
| 3.4 | F RAM✓ |
| 3.5 | F HARDWARE✓ |
|  |  |

4.1 motherboard – provides connectors to other circuits✓

ensures communication to all components in CPU✓

distributes power to all parts that are connected o motherboard✓

4.2 machine cycle

* Fetches instructions and data from RAM✓
* Decodes instructions✓
* Executes instructions✓
* Transfers data back to RAM✓

4.3 Hot swappable refers to the ability to plug in or remove a device when the power is on ✓ and the computer is working whilst plug and play is a term coined that automates the configuration process of a device before it can be used. ✓

4.4 SSD operates at a faster speed than your traditional HD. SSD is more sophisticated in the way data is stored and managed over the HD. ✓✓

4.5 ROUTER✓

4.6 Disadvantage of VRS – One may lose ones voice due to illness – unable to access computer, VRS may not be able to pick up familiar tone due to variation in pitch colds, illness (any reasonable answer) ✓✓

4.7 software bugs, GIGO✓✓

4.8 Webcam will ensure that video footage will be provided for easier identification of criminal activity. ✓ Video calling other policing forums and teleconferencing is easier and possible with webcam✓

4.9 operating system – controls all activities of computer. Able to run multiple programs with speed and efficiency ✓✓

5.1 Any 3 of ✓✓✓

Fast, efficient communication  
 Sharing of hardware resources  
 Centralisaiton of data  
 Transfer of files   
 Leisure  
 Increased control and security  
 Flexible access

5.2 To get and encode data from the computer to be sent over a specific medium✓ and to receive and decode data from the medium so it can be understood by the computer✓

5.3 A WiFI NIC ✓and an Ethernet Port✓.

5.4 If a cable or device[other than the central device] breaks only the one device is affected not the entire network ✓

5.5 Any 2 terms correctly defined for 2 marks each  
Switch – hardware device used to connect computers in a central location to a network so communication can occur. ✓ Directs traffic between connected devices ✓

Router – makes communication between networks possible over the internet✓ by directing data to correct destination ✓

Modem – Converts data or signal to a format that be transmitted over a communication channel✓✓

WiFi access point – send and receives radio signals ✓ and allows devices to connect wirelessly✓

5.6

a) Computer Labs with desktops – UTP as the access is a fixed point and the range is less than 100m✓

b) Between buildings – fibre optic as the range is in kms and better suited to distances ✓

c) Public spaces and general classrooms – wifi as access is anywhere in range and allows multiple users within 100m of access point. ✓

5.7 a) LAN ✓ b)WAN✓ c)PAN✓

5.8 explanation ✓ advantage ✓  
VoIP – protocol that allows voice to be transmitted as data over a network – much cheaper, free software, conference calls etc.  
VPN – allows users to log into a network from a remote location with same security – good for home or travel access to a company network.  
GPS – location based computing used to find location of people/places/objects – tracking/geotagging/directions etc

5.9 The OS keeps the device on and working at all times even when the screen is dark ✓ It is monitoring for messages, phonecalls and notifications ✓

5.10 Any 2 ✓✓  
Apps need to transfer less data leading to faster speeds  
Give users a better interface  
Give users more control  
Allow auto updates and notifications

5.11 Skype ✓

5.12 Microblogging✓

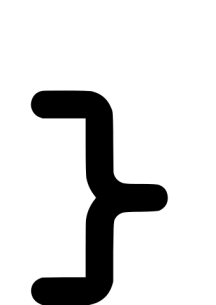
5.13 Gmail✓

5.14 Video, Audio, Images. ✓

5.15 Any 2 ✓✓  
Lower the brightness of the display  
Close apps not in use  
Turn off GPS when not needed  
Turn off Bluetooth/WiFi when not needed  
Use headphones instead of speaker

6.1 Grade, Total ✓ Integer ✓

6.2 Conditional loop ✓ Unconditional loops execute a fixed✓ number of times; Conditional loops execute while a condition is met✓

6.3 Initialise – 1 ✓  
 Test -3 ✓  
 Change – 7 ✓

6.4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Grade | Total | While Grade<=12 | Output |
| C:\Users\Shireen.Steytler\AppData\Local\Microsoft\Windows\INetCache\IE\TJH69SDE\339px-OCR-A_char_Right_Curly_Bracket.svg[1].png1 | 8 |  |  |  |
| 2 |  | 0 |  |  |
| 3 |  |  | True |  |
| 6 ✓ |  | 150 |  |  |
| 7  Correct repetition | 9 |  |  |  |
| 3 |  |  | True |  |
| 6 |  | 315 |  |  |
| 7 | 10 |  |  |  |
| 3 |  |  | True ✓ |  |
| 6 |  | 475 |  |  |
| 7 | 11 |  |  |  |
| 3 |  |  | True |  |
| 6 |  | 630 |  |  |
| 7 | 12 |  |  |  |
| 3 |  |  | True |  |
| 6 |  | 800 ✓ |  |  |
| 7 | 13 ✓ |  |  |  |
| 3 |  |  | False ✓ |  |
| 9 ✓ |  |  |  | Total learners in school 800✓ |

6.5 3. While Grade <= 0 (or 9999) - any out of range value ✓  
 5. Ask ‘How many learners in grade’ + Grade , ‘Enter 0 to end’ ✓

6.6 Edit box ✓

6.7 Presence check or required field. ✓

6.8 Radiogroup/buttons or Combobox or List ✓

6.9 Logical error ✓

6.10 else if (strtoint(sID[7]) > 4) and (SGender = 'M') then or ✓  
 else if (strtoint(sID[7]) > =5) and (SGender = 'M') then

6.11 error

6.12 verification

6.13 algorithm – determine ages

count1 0 ✓

count2 0✓

count3 0✓

Input N✓

Do I from 1 to N ✓

Input AGE✓

If AGE >= 18 AND AGE <= 25 THEN✓

count1 count1 + 1

endif

If AGE >= 26 AND AGE <= 65 THEN✓

Count2 count2 + 1

endif

If AGE > 65 THEN✓

Count3 count3 + 1

endif

enddo

output count1, count2, count3 ✓