

CAT Grade 10, Theory, June 2012, MEMORANDUM

Examination papers and memoranda can sometimes 'date' with time, especially in a dynamic subject such as CAT. In some cases additional options or answers may now be applicable, while others may no longer be applicable.

Section A

Question 1

1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10
C	B	B	D	A	B	C	D	B	B
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

[10]

Question 2

2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10
E	N	J	O	R	H	D	M	G	L
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

[10]

Section B

Question 3

- 3.1 Tooltip ✓
Rest / hover the mouse pointer on the icon ✓ (2)

- 3.2 Any ONE of: ✓
 - It could damage files that are still open
 - Computer might not save changes to documents and settingsShould use the shut-down facility/procedure ✓ of the operating system.
(Accept an explanation of the procedure that must be followed as well). (2)

- 3.3.1 Restore the file ✓ from the Recycle Bin ✓ (2)

- 3.3.2 Project would not go to the Recycle Bin, i.e. it would not be recoverable by this means. ✓
If a backup of the project had been made, e.g. on the hard drive, you could revert to the backup copy.
OR
If there was a hard copy, you could scan and OCR it. ✓ (2)

- 3.4 Any TWO of: ✓✓
- Saving file with a different name
 - Saving file in a different location (folder or drive)
 - Saving the file as a different type of file
 - Adding or removing a password from the file, etc. (2)
- 3.5 It refers to the keyboard. ✓
It indicates a 'full' keyboard – one with a separate key for every letter. ✓
(Also accept reference to the 'first six letters on the top row of alphabetic keys'). (2)

[12]

Question 4

- 4.1 A plug-in is a program / software. ✓
It allows one to view 'special'/multimedia effects. ✓ (2)
- 4.2.1 Widget / gadget ✓ (1)
- 4.2.2 Accept any one other example (*not weather forecast*): ✓
- Displaying the calendar or the time on a clock
 - Giving the latest news (feed headlines)
 - System resource meters (such as CPU, battery)
 - Games (such as Picture Puzzle)
 - Running a slideshow of all your pictures, etc. (1)
- 4.3 Any TWO of: ✓✓
- Managing all the hardware and software on the computer
 - Input and output control
 - Maintaining security
 - Providing the user interface etc.
- (Accept specific examples that fall under these categories). (2)
- 4.4.1 To allow the user to access the menu option without using a mouse
(Also accept the term short-cut key) ✓ (1)
- 4.4.2 Use Alt+O keystroke combination ✓ (1)
- 4.5 Control A allows the user to select only one of the three options. ✓
Control B allows the user to select one or more of the three options. ✓ (2)
- 4.6 Use a snipping tool or take a screenshot of the error message with Print Screen. ✓
Then paste the captured image into a *Word* document. ✓ (2)

[12]

Question 5

- 5.1 The file extension indicates to the operating system what program it must use to open the file. ✓
Changing the file extension may cause the operating system not to know which program to use to open the file, and try to open it in another / incorrect program, generating an error message ✓ (2)
- 5.2.1 Path ✓ (1)
- 5.2.2 Folders ✓ (1)
- 5.2.3 Excel ✓ (1)
- 5.3 Zipping a file means to make it smaller or compress it. ✓
Any ONE reason: ✓
- To save disk space
 - To reduce the size of a file you are sending to someone electronically (e.g. via e-mail), in order to save download time / cap / money (2)
- 5.4.1 A shortcut is a link to a resource (file or program or hardware etc). ✓ (1)
- 5.4.2 They are useful to quickly access items that you use frequently. ✓ (1)
- 5.4.3 It happened because the shortcut is just a file that describes the location of the *Word* document, but is not the document itself. Since only the shortcut was copied, and not the *Word* document, the document could not be located and an error message was generated. ✓
She should have copied the *Word* document to her flash drive, not the shortcut to it. ✓ (2)
- 5.5 Any TWO of: ✓✓ (2)
- Plan what you would like your basic folder structure to look like.
 - Identify the main 'categories' under which you would need to save your files.
 - Keep on refining each folder level. If you find you start having too many files in one folder, you should 'sub-divide' the folder by adding subfolders.
 - Use meaningful names for your folders and files so that they are easily identifiable.
 - If you move between computers (say at school and at home) it is a good idea to use the same structure on both computers for ease of use, etc. (2)
- 5.6.1 Copy makes a copy of the file / folder, leaving the original one in place. ✓
Cut also makes a copy of the file / folder, but when you have pasted it in the new location, it deletes the original. ✓ (2)
- 5.6.2 The function of the clipboard is to store objects (temporarily) that are 'waiting' to be pasted, i.e. in copy and cut operations. A deleted object does not need to be pasted anywhere, so it does not go to the clipboard. ✓ (1)

[16]

Question 6

6.1.1 Any TWO of: ✓✓

- No guarantee of quality or that it works correctly
- Often different versions of the same product, i.e. lack of standardisation
- Often available only from the Internet
- Not as widely used (hence possible compatibility issues with proprietary software, training issues, etc.)
- Obtaining documentation / manuals / support may be problematic (2)

6.1.2 The source code is free (*also accept 'the program'*) ✓ (1)

6.2 A site licence agreement allows the school an unrestricted number ✓ of installations of the software, but only within the school / organisation itself. ✓ (2)

6.3 Any TWO features: ✓✓

- The programs have similar user interfaces – if you know one, it is easier to learn to use another program in the package.
- It is designed for easy data exchange between the programs. (2)

6.4.1 Software piracy refers to the *illegal* installation/copying/distributing of software. ✓ (1)

6.4.2 License agreements generally allow one to make one copy for backup purposes. ✓ (1)

6.5 The shareware program may be programmed to stop working when the trial period has expired. ✓
The trial version also sometimes does not include all of the features of the full version – you need to pay to get the 'full' version. ✓ (2)

6.6 Any TWO reasons: ✓✓

- Files can be accidentally deleted or overwritten.
- Files can sometimes become corrupt.
- Computers can be stolen (especially portables), or destroyed by fire.
- Hardware such as a disk drive can fail, etc. (2)

[13]

Question 7

7.1 Technology that measures something biologically unique to the user. ✓

Any ONE example: ✓

- Fingerprints
- Voice recognition
- Iris patterns in the eye, etc. (2)

7.2.1 Any TWO functions: ✓✓ (2)

- Scanning (including scanning to a PDF document format)
- Fax/e-mail facilities
- Photocopying

7.2.2 Any TWO advantages: ✓✓ (2)

- Saves desktop space.
- Costs much less than buying separate pieces of equipment.
- Only one USB port needed on computer.

7.3 Any TWO reasons: ✓✓ (2)

- E-mail is quicker than fax.
- E-mail has cheaper 'running costs' (no fax paper needed, and no fax machine; you only need an Internet connection).
- E-mail is less cumbersome (no paper filing, save desktop space, etc.)
- E-mail can guarantee much higher level of security.
- E-mail can be used both to send and to receive from traditional fax machines ('fax-to-email' and vice versa).
- E-mail attachments can be in full colour, and have much higher resolution than faxes.
- Multimedia e-mail attachments transcend paper faxing capabilities (e.g. music and video files).
- E-mail attachments can comprise much larger documents than may ordinarily be sent via fax (e.g. one cannot easily send a 200 page fax), etc.

7.4 No, ✓ since a Blu-ray writer will read and write both CDs and DVDs. ✓ (2)

(Do not accept NO on its own)

7.5.1 A card reader allows you to plug in a variety of memory cards, and to transfer data between these cards and e.g. a desktop or other portable computer / device. ✓ (1)

7.5.2 Connect via a USB cable, plugged into a USB port on the computer ✓ (1)

7.5.3 Any ONE practical use of a memory card: ✓ (1)

- Copy photos from digital camera to computer
- Transfer data from a computer to a portable device (e.g. for backup, or emergency transfer – rather similar to use of a flash drive)

(Accept any valid practical application)

7.6 Paragraph on CPU must include:

- Basic function: processes data and carries out instructions (*accept references to the same concept, e.g. performs numerical calculations*) ✓ (1)
- Unit of speed: gigahertz (*also accept simple hertz*) ✓ (1)
- Where found: plugs into a socket on the motherboard ✓ (1)
- Appearance: small, square, flat 'chip' (*gauge whether learner would be able to recognise one or not*) ✓ (1)

7.7.1 Before any program can be run or any data can be processed it must be loaded into RAM first. ✓

Any appropriate explanation about storage: ✓

Storage is used to keep all data and programs while the computer is not busy processing anything / Storage is where all the 'saved' work and programs are stored while the computer is switched off / Permanent storage is necessary because RAM is volatile, i.e. it loses its contents when it has no power (2)

7.7.2 TWO differences (other than function): ✓✓

RAM is faster than storage

RAM is electronic and storage is largely mechanical (although flash drives do employ non-mechanical 'flash memory').

RAM is expensive (it costs more per GB than storage)

Storage has a much larger capacity than memory (RAM)

RAM is volatile, i.e. it loses its contents when it has no power; storage is not (*if not used in 7.7.1*). (2)

[21]

Question 8

8.1.1 Any TWO advantages: ✓✓

- Sharing of hardware resources
- Fast, efficient communication (e-mail, chat, video conferences, etc.)
- Increased control and security
- Flexible access (access info from any network PC, access during any time, etc.)
- Centralisation of data (avoid duplicate files, facilitate backups, etc.)
- Transfer of files

(*Do not accept playing of games / leisure activities*) (2)

8.1.2 Any TWO possible disadvantages: ✓✓

- A higher level of expertise is necessary to manage a network/need a network administrator
- A high level of security needs to be set up – potential loopholes if incorrectly done
- Harmful software such as viruses can spread quickly via a network.

- If the network develops a problem, potentially no users can work, print or access their data.
 - A central fault in the network such as the server crashing can cause a loss of data. (2)
- 8.2 Portability (smaller size) ✓ and can work on battery power if needed ✓ (2)
- 8.3.1 Provide resources and services to other computers in the network ✓ (1)
- 8.3.2 Any TWO server hardware specifications ✓✓
- More RAM / memory
 - More hard drive space / storage
 - Faster CPU (2)
- 8.4.1 Using computers in a way that is friendly / sensitive to the environment ✓ (1)
- 8.4.2 Any TWO practical tips: ✓✓
- Switch off computers / devices not currently in use.
 - Avoid unnecessary waste of paper (proof-read, print back-to-back / 2-on-1, etc.)
 - Donate / repair / upgrade / recycle hardware instead of throwing it away.
 - Send ink and toner cartridges back to manufacturer to dispose of them in an environmentally friendly way.
 - Investigate refilling / re-using ink and toner cartridges. (2)
- 8.5.1 RSI is the name given to injuries resulting from fast, repetitive actions; ✓
OR In this case it refers to wrist injuries as a result of constant or incorrect typing / mouse habits. (1)
- 8.5.2 Any ONE tip: ✓
- Use ergonomic hardware (comfortable keyboards and mice)
(also accept specific features, e.g. palm rests, curved keyboards, etc.)
 - Sit correctly / adopt correct posture.
 - Ensure mouse and keyboard are on the same level, and within easy reach, etc. (1)

[14]

Question 9

- 9.1.1 All occurrences of the letters 'cat' were replaced with the letters 'dog' ✓ (1)
- 9.1.2 She should have selected the 'whole word' option ✓ (1)
- 9.2.1 The proofing language is set to English (U.S.) ✓ (1)
- 9.2.2 Any ONE solution to prevent future occurrence: ✓
- Set the proofing language to English (U.K.) or English (South Africa)
 - Set AutoCorrect option
 - Add to dictionary (1)

9.3 Why not a good approach: Pressing repeated <Enter> keys simply creates a series of 'empty' paragraphs, and does not ensure that the heading will remain at the top of the page if any of the preceding text is deleted (or added to). ✓ (1)

What she should rather do: Insert a Page Break (Ctrl+Enter) ✓ (1)

9.4 Any TWO reasons pertaining to use of functions / formulas: ✓✓

- Greater variety of functions / formulas
- Immediate recalculation of results if data changes
- Function Library is available, helping one to set up functions correctly
- Functions / formulas can easily be copied to other cells, thus reducing labour and mistakes
- Easier to reference cells, etc. (2)

9.5 = A2 ✓ + A3 ✓ (2)

9.6 Why incorrect answers:

Cells are formatted as percentage and answers are multiplied by 100 ✓

Method to fix problem:

Either remove the *100 from the formula OR do not format cells as percentage ✓ (2)

[12]

TOTAL : 120