UNIVERSITY
OF
JOHANNESBURG

FACULTY	: Education
DEPARTMENT	: Science and Technology Education
CAMPUS	: APK
MODULE	: ITS10A1 SCHOOL ICT SUPPORT SPECIALIST
SEMESTER	: First Semester
EXAM	: July 2018

ASSESSOR(S)	: Dr R DISEKO		
MODERATOR	: PROF G LAUTENBACH		
DURATION	: 3 HOURS	**MARKS**	: 150

NUMBER OF PAGES: 8 PAGES

INSTRUCTIONS:

Read the following instructions carefully before answering the questions:

1. This examination is taken in a computer venue. All questions are to be completed using the indicated computer software tools. No handwritten answers may be submitted.

2. Answer ALL the questions.

3. You are strongly advised to save the files that you are working on at regular intervals as to minimise the effect of computer malfunctions. For this purpose, you may access an online file repository system (for example 'Drop Box' or 'Google Drive') and temporarily store your files there. You may not access the Internet for any other purpose than this.

4. Source files are available for download in the ULink online environment. Use the link "Exam Source Files".

5. Attach all completed files using the link "Submit Exam Files" in the ULink online environment.

6. Strictly name the files as indicated in each question.

QUESTION 1: MS Word basic skills

As a School ICT Specialist, demonstrate your MS Word skills, download the files "Word_Exam.txt" and "Word-Exemplar.pdf" from the Ulink online environment at the link "Exam Source Files". Use your skills to edit and format the document so that it resembles the contents of the file "Word-Exemplar.pdf". **(30)**

[30]

Save this file with the following filename: Surname and initial_Q1 (e.g. Botha-S_Q1)

QUESTION 2: ICT integration and MS PowerPoint skills

There are several barriers preventing teachers to integrate ICTs successfully in their daily teaching practice. However, Groff and Mouza (2008) developed a framework called "i5 framework" to help teachers predict the likelihood of success of technology-based projects in the classroom. Use a PowerPoint presentation with FIVE to slides answer the following questions:

2.1 Give a full meaning of "**i5**" as explained by Groff and Mouza. **(2)**

2.2 Name and discuss the four factors that teachers can directly use in addressing barriers that can hinder them to integrate ICTs successfully in their daily teaching practice. **(10)**

The presentation must have the following:

2.3 The title presentation of the slide – **i5** framework and sub-title – Your surname and student number. **(2)**

2.4 Title and content: Heading of the slide – Give a full meaning of "i5" **(1)**

2.5 Four - Title and content slides: Presentation about four factors that teachers can use in addressing barriers that can hinder them to integrate ICTs. Each slide must have its own heading. **(2)**

2.6 Apply any design template to the slide. **(1)**

2.7 One slide must make use of transition. **(1)**

2.8 One slide must make use of animations. **(1)**

[20]

Save this file with the following filename: Surname and initial_Q2 (e.g. Botha-S_Q2)

QUESTION 3: Computer hardware components and Software

You are employed as a School ICT Support Specialist at a new local school, your Head of Department tasked to produce a document in which you identify all the relevant *hardware components* of a computer and possible *software* that are suitable for use in a school environment to the School Management Team. You are required to give explanatory notes.

Using MS-Word, draft the exemplar table below to help you structure your report to the SMT. (Note that not all cells will have information, and other cells may have more than one piece of information). Complete the missing information: **(20)**

Components	Function/Purpose	Specifications (speed/size/capacity)	Notes/additional facts
Example: Monitor	*Display text, image and video*	*Resolution of 800X600 (Super-VGA) to 1024 X 768 (XGA) as example*	*Older - Cathode-Ray-Tube (CRT) technology. New Liquid Crystal Display (LCD technology*
RAM	**a)**	**b)**	Double data rates (DDRs)
DVD	**c)**	**d)**	----------
e)	Permanent storage	Between 500GB & 3.5Tb **f)**	Contains a magnetic aluminium disk
CD	**g)**	750MB	----------
ROM	**h)**	----------	**i)**
j)	Controls all activities in a computer	Between 900 or 2.2 of **k)** or speed to executes instructions	"Brain" of a computer
l)	Contains many electronic silicone "chips"	----------	**m)** of a computer
Software	**Function/Purpose**	**Specifications – file extension**	**Notes/additional facts**
Web browser	**n)**	**o)**	Superhighway
p)	Mathematical functions	.xlsx	**q)**
r)	Letter writing	**s)**	Track changes
Notepad	----------	**t)** .	Text file

[20]

Save this file with the following filename: Surname and initial_Q2 (e.g. Botha-S_Q2)

QUESTION 4: Troubleshoot a computer and MS PowerPoint skills

Although you are not trained as a computer technician, it will often be expected of you as School ICT Support Specialist, to solve minor problems on computers. Explain how you will teach the teacher how to troubleshoot computers. Use a PowerPoint presentation to do this. Develop this presentation containing all the necessary information. A slideshow should have FOUR slides.

4.1 The heading of the title slide must be troubleshooting computers and sub-title – Your surname and student number. **(2)**

4.2 Three titles and content slides. Each slides must have an appropriate heading and each point or fact must be briefly explained in the content slides about troubleshooting computers. **(10)**

4.3 Apply the design template to the slide show called "Main Event". **(1)**

4.4 One slide must make use of transition. **(1)**

4.4 One slide must make use of animations. **(1)**

[15]

Save this file with the following filename: Surname and initial_Q4 (e.g. Botha-S_Q4)

QUESTION 5: Personal Digital Identity to Digital Citizenship

Social media refer to a range of online services and tools used for publishing, sharing and promoting learning in the classroom. These social media tools, namely Google+, Twitter, LinkedIn, Diigo or Scoop.it, create enriching learning experiences in learners' learning process. As a School ICT Support Specialist, how would you teach learners to be *InCtrl* in developing their personal digital identity, upholding the key concepts such as *Cyberbullying, Ethics/Copyright, Privacy, Media Literacy, Information Literacy, Communication and Collaboration*, as outlined by Cable in the Classroom in a subject that you teach?

5.1 In order to answer the above question, you need to design a complete and a coherent website using Google site as a "Resource-kit". The resource- kit should have a theme or topic, learning outcomes and digital citizenship concepts that need to be integrated into a theme. **(6)**

5.2 Briefly sketch how the Digital Citizenship concepts can be integrated into a theme that you teach by completing the table below: **(6)**

Digital Citizenship concepts	*How Digital Citizenship concepts were integrated into the theme*	
Cyberbullying		1
Ethics/Copyright		1
Privacy		1
Media Literacy		1
Information Literacy		1
Communication & Collaboration		1

5.3 Based on how digital citizenship concepts could be integrated into a theme, create an assessment task using a Google form to assess learners in the theme that you have selected in addressing the concepts of digital citizenship. **(7)**

[19]

5.4 In the development of professional digital identity, explain how these social media namely Google +, Twitter, LinkedIn, Diigo and Scoop.it, could be integrated into the teaching and learning context (within the theme that you teaching in 6.1 above). Your Google site should have appropriate links to these social media. **(31)**

Social media	***How social media could be integrated into the teaching and learning context***	
Google +		
• Personal profile with your photo		1
• Three circles with specific name		3
• Each circle with 10 members each		2
• Circles with posts and comments		2
Twitter		
• Personal profile with your photo		1
• Tweets		1
• Retweets		1
• Photos, videos and links		3
LinkedIn		
• Complete Personal profile with your photo		1
• Contacts		1
• Recommendations		1
Diigo		
My Library – with Tags and Lists		2
• Highlighted text with different colours		1
• Stick notes		1
• Tags		1
My Networks – Add three people that you follow		1

My Groups – Create a group for your classmate		2
Scoop.it		
• New Scoop		1
• Name your topic/theme		1
• Descriptions		1
• Add five articles that you have scooped with images		2
• Share your scoop in Twitter		1

Attach or send your URLs website to Blackboard/ULink in the space provided. **[31]**

QUESTION 6: Short answer questions

Access the Blackboard online learning environment for this module and navigate to the links "Assessment" and "Theory Quiz" to answer the questions electronically. Make sure that after answering all the questions you click on the submit button. **(15)**

[15]

Total [150]