 Province of the

EASTERN CAPE

EDUCATION

**DIRECTORATE SENIOR CURRICULUM MANAGEMENT (SEN-FET)**

**HOME SCHOOLING SELF-STUDY WORKSHEET answer sheet**

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| **SUBJECT** | INFORMATION TECHNOLOGY THEORY | **GRADE** | 12 | **DATE** | 30 March to 3 April 2020 |
| **TOPIC** | Consolidation on Cloud Computing | **TERM 1**  **REVISION** | (Please tick) | **TERM 2 CONTENT** | ✓ |
| **TIME ALLOCATION** | 1hr | **TIPS TO KEEP HEALTHY**  1. **WASH YOUR HANDS** thoroughly with soap and water for at least 20 seconds. Alternatively, use hand sanitizer with an alcohol content of at least 60%.  2. **PRACTICE SOCIAL DISTANCING** – keep a distance of 1m away from other people.  3. **PRACTISE GOOD RESPIRATORY HYGIENE**: cough or sneeze into your elbow or tissue and dispose of the tissue immediately after use.  4. **TRY NOT TO TOUCH YOUR FACE.** The virus can be transferred from your hands to your nose, mouth and eyes. It can then enter your body and make you sick.  5. **STAY AT HOME.** | | | |
| **INSTRUCTIONS** | Resources used   * Its gr8! @ grade12 theory, Study Opportunities * Information Technology Theory Book Grade 12 , DBE * Past Exam Papers   Answer all questions |

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|  | 1 The manager of a video editing company has indicated that his company is considering using ‘*Cloud Computing’*.  a) What does it mean to store data ‘in the cloud’?  a) It means storing data on a remote server on the Internet.  b) Cloud computing includes cloud applications such as Google Docs.  Explain how cloud applications work in general.  b) Cloud applications are software where most (if not all) of the processing of the software is done ‘in the cloud’ – i.e. by one or many servers on the Internet. Such an application may have an installable front-end or ‘interface’ part of the program that is stored and run locally on your device, or it might run entirely as a page in a web browser (in which case even the app interface is created and managed in the cloud).  c) The manager has read an article on SaaS (Software as a Service) and wants to know what this is about.  Briefly describe the difference between SaaS and more traditional (‘older’) software licensing models.  c) Before SaaS you never owned software that you bought – you only paid a once-off fee for the right (or license) to use that software for the rest of your life. That license only applied to the version of the software that you bought and not to any future upgrades of the software.  SaaS means that you have the right to use the latest, most up-to-date version of a program for as long as you are paying a monthly subscription fee.  d) Briefly discuss the ways in which cloud computing may affect the future hardware and connectivity needs of a company.  d) When you use cloud computing, your local hardware does not need huge amounts of storage or processing power, as those functions are transferred to the computing resources on the Internet. When you use cloud computing, data communications and a fast, stable, reliable broadband connection becomes more important. Cost wise, this means that you can pay much less for your hardware (usually a once-off expense) but have much higher running costs because you have to pay monthly for both the broadband connection and the cloud services that you are using.  2. List the advantages cloud computing has for its users.  3. Create a debate for and against cloud computing. Include the effects on hardware and advantages or  disadvantages on businesses  4. Itumeleng is a young writer who recently started working for a large newspaper. On the first day of work, he  received a work laptop that he could use to write articles for the newspaper. According to his supervisor, the  company has recently started using cloud applications for most of their work, especially for the work of writers  and editors.  Based on this information, answer the following questions.   1. Explain in your own words what SaaS is. 2. Besides Office 365, research and give two examples of SaaS (software as a service). 3. What software do you need to have installed to use SaaS? 4. What are three advantages for a company to use SaaS over a normal software application?   **Buying or Renting??**  Here is an example that will help you see how important it is to consider all factors before making a decision to buy or rent.  Every month, 3 people from your company travel to Cape Town for a 7 day business trip (the three people generally never go at the same time). You need to make a decision whether to buy a car or rent a car. The costs and expenses are as follows:   Car rental is R300 / day for a small car with power steering and air-conditioning.   The car itself costs R200 000   During a 7 day business trip you  o use R2000 in fuel  o travel 1000 km   The car needs to be serviced every 15 000 km at an average cost of R1 700 per service   The car needs its tyres replaced every 50 000 km at an average cost of R 5000 for a set of tyres  You are now planning the budget for the next 5 years. Use a spreadsheet (or pen, paper and calculator or even write a program) to calculate and compare the costs of renting the car VS owning the car. Be sure to include all the information mentioned above.  Now use the results of your calculations to answer the following questions:  1. Do you keep renting cars for the business trips or do you buy a car that is kept in your Cape Town offices for travellers to use?  2. How does the scenario change if you have to finance the car (i.e. borrow money from the bank to buy it) and so end up paying R250 980 in total (after interest and fees)?  3. What if, on top of the finance fees for the car, you have to pay R2000 / month for car insurance?  4. Finally, how does the scenario change if business trips overlap (more than one person travels at the same time)?  Hopefully this exercise will help you understand that choosing between renting and buying is not necessarily simple. |