



**EDUCATIONAL QUALITY AND  
ASSESSMENT PROGRAMME**



# ***Assessment Schedule 2020***

**South Pacific  
Form  
Seven  
Certificate**

**I  
N  
F  
O.  
&  
C  
O  
M.  
T  
E  
C  
H.**

© Educational Quality and Assessment Programme, 2020  
3 Luke Street, Nabua, Private Mail Bag, Suva, Fiji.  
Telephone: (679) 3370733 Fax: (679) 3370021

All rights reserved. No part of this publication may be reproduced by any means without the prior permission of the Educational Quality and Assessment Programme.

## STRAND 1: DIGITAL MEDIA

Item No.	Skill Level	Evidence	Response Level				
			Extended Abstract	Relational	Multistructural	Unistructural	Weak
1.1	1	<p>A software that can be freely accessed and modified</p> <p>A. middleware. B. packaged software. C. proprietary software. D. <b>open source software.</b></p>				<b>D</b>	<i>Incorrect, irrelevant</i>  <i>A, B, C</i>
1.2	1	<p><b><i>State the purpose of digital media.</i></b></p> <p>Digital media allows for the exchange of information in a wide range of forms such as entertainment, illustration or communication.</p>				<i>Correctly states the purpose of digital media.</i>	<i>Incorrect, irrelevant</i>
1.3	2	<p>Graphics cards take data from CPU and turn it into picture. <b><i>Describe one important feature of a graphics card that a PC Gamer will look at when buying the card.</i></b></p> <ul style="list-style-type: none"> <li>• Price- needs to be reasonable</li> <li>• Space &amp; Cooling - GPU's produce a lot of heat. This heat output is displayed in the TDP value, which plays a large role in deciding on a suitable GPU.</li> <li>• Power - whether or not your power supply has enough 8-pin or 6-pin connectors for your graphics card.</li> <li>• Memory - Most graphics cards come with between 2 and 12 gigabytes of video RAM and plays a very important role in image quality because it allows you to play games at higher resolutions</li> <li>• Bandwidth - Bandwidth is the amount of memory the GPU is able to access at any given time.</li> <li>• Clock speed - Clock speed is measured in Mhz and affects input lag, frame rate, and latency.</li> </ul>			<p><i>Fully describes one feature of graphics card.</i></p> <p><i>(two or more ideas without linkage)</i></p>	<p><i>States one feature.</i></p> <p><i>(one idea)</i></p>	<i>Incorrectly defined</i>

1.4	1	<p><b>Identify a key feature of a graphics design tool.</b></p> <p>Proofhub-Proofing tool – can make changes in the file instantly, add comments, highlight flaws.</p> <p>Filestage – is an online review and approval tool.</p> <p>PicArts – is an all-in-one photo editor with feature like editing tools to create professional grade content.</p> <p>Photoshop – enhance photos and designs.</p> <p>( any other graphics tool students may have learnt)</p>				<p>Correctly identifies a key feature.</p> <p>(any one correct idea)</p>	<p>Incorrect, irrelevant</p>
1.5	4	<p>Graphic designers create visual concepts, by hand or using computer software. <b>Discuss the importance of using appropriate software for graphics design tasks.</b></p> <p>Using appropriate software will allow you to:</p> <ul style="list-style-type: none"> <li>- communicate ideas that inspire, inform, or captivate consumers.</li> <li>-allows you to make a positive first impression on those looking on.</li> <li>- convey a message of credibility and professionalism</li> <li>- summarizes an idea with consistent imagery that resonates, great graphic design software summarizes these ideas in a way that’s pleasing to the eye.</li> </ul>	<p>Discusses one importance with example of graphics software</p> <p>(two or more ideas with linkage; uses examples to justify ideas)</p>	<p>Explains one importance with an example of graphics software.</p> <p>(two or more ideas with linkage)</p>	<p>Describes one importance without example.</p> <p>(two or more ideas without linkage)</p>	<p>Candidates states the importance without an explanation.</p> <p>(any one idea)</p>	<p>Incorrect, irrelevant</p>
1.6	3	<p><b>Explain the process for designing and implementing an animated object.</b></p> <p>Start with an audit – look at what currently exists</p> <p>Create guiding principles – how to use motion</p> <p>Develop building block – relationship between object, time and</p>		<p>2 or more processes are listed and explained</p> <p>(answers why &amp;</p>	<p>2 or more processes are listed</p> <p>(two or more ideas without linkage)</p>	<p>States one process/idea</p>	<p>Incorrect, irrelevant</p>

		effect. Preparing translation Specs – translate presentation files to match production code.		<i>how aspects of the processes).</i>  <i>(Two or more ideas with the relationship between the ideas very clear.</i>			
--	--	---	--	--	--	--	--

## STRAND 2: WEBSITE DEVELOPMENT

Item No.	Skill Level	Evidence	Response Level				
			Extended Abstract	Relational	Multistructural	Unistructural	Weak
2.1	1	<b>Define website.</b>  A website is a collection of web pages and related content that is identified by a common domain name and published on at least one web server.				<i>Correctly defines a website.</i>	<i>Incorrect, irrelevant</i>
2.2	2	The success of any website entirely depends on how it's designed. <b>Outline two principles of good website design.</b>  A good website design should fulfill its intended function by conveying its particular message whilst simultaneously engaging the visitor. Factors that contribute to a good website design is consistency, colours, typography, imagery, simplicity and functionality.			<i>Outlines two principles of a good web design.</i>	<i>States one principle only.</i>	<i>Incorrect, irrelevant</i>
2.3	1	HTML stands for:  A. Hypertext Main Language B. Hypertext Mark-up Language C. Hypertext Machine Language D. Hyperlink Textual Mode Language				<b>B</b>	<i>Incorrect, irrelevant</i>  A, C, D

2.4	3	<p>CSS style sheets are preferred by web designers for website development. <b>Explain two advantages of using CSS in designing websites.</b></p> <ul style="list-style-type: none"> <li>• CSS saves time – You can write CSS once and then reuse the same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.</li> <li>• Easy maintenance – To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.</li> <li>• Global web standards – Now HTML attributes are being deprecated and it is being recommended to use CSS. So it's a good idea to start using CSS in all the HTML pages to make them compatible with future browsers.</li> <li>• Platform Independence – The Script offer consistent platform independence and can support latest browsers as well.</li> </ul>		<p>Explains two advantages of using CSS.</p> <p>(Two or more ideas with the relationship between ideas very clear.)</p>	<p>Two advantages of using CSS are listed or</p> <p>One advantage is described</p> <p>(two or more ideas without linkage between ideas)</p>	<p>States only one advantage (one idea)</p>	<p>Incorrect, irrelevant</p>
2.5	1	<p><b>State one advantage of validating a website. (any one answer)</b></p> <ul style="list-style-type: none"> <li>• Help Improve Rankings in Search Engines</li> <li>• Teaches and encourages best practices for web design</li> <li>• Make Website Browsers Friendly</li> <li>• Multiple Device Accessibility</li> <li>• Validation help for easy Coding and Maintenance</li> <li>• Validators tell you where you have errors in your code</li> </ul>				<p>States one advantage</p>	<p>Incorrect, irrelevant</p>
2.6	2	<p>The validation process of a website involves five steps. List the five steps involved in the validation process of websites</p> <p>The validation process consists of five steps; analyze the job, choose your tests, administer the tests, relate the test and the criteria, and cross-validate and revalidate.</p>			<p>Outlines 2-5 steps.</p>	<p>Outlines 1 step only</p>	<p>Incorrect, irrelevant</p>

### STRAND 3: PROGRAMMING

Item No.	Skill Level	Evidence	Response Level				
			Extended Abstract	Relational	Multistructural	Unistructural	Weak
3.1	1	<p><b><i>Define problem solving</i></b>                      Problem solving is the act of defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution.</p>				<i>Correctly defines problem solving</i>	<i>Incorrect, irrelevant</i>
3.2	2	<p><b><i>Outline the steps of the problem-solving process.</i></b>                      Read the problem several times until you can explain it to someone else                      Solve the problem manually                      Make your manual solution better                      Write pseudo code                      Replace pseudo-code with real code</p> <p>Or</p> <p>Defining the problem.                      Planning the solution.                      Coding the program.                      Testing the program.</p>			<p><i>Correctly outlines all the steps of problem solving</i>   <i>(2 or more ideas without linkage)</i></p>	<p><i>Outlines one step.</i>   <i>(1 idea)</i></p>	<i>Incorrect, irrelevant</i>
3.3	1	<p><b><i>Define top-down design approach in computer programming.</i></b>                      Top down program design is an approach to program design that starts with the general concept and repeatedly breaks it down into its component parts. In other words, it starts with the abstract and continually subdivides it until it reaches the specific.</p>				<i>Correctly defines top-down design approach.</i>	<i>Incorrect, irrelevant</i>

3.4	1	<p><b>State one effectiveness of top-down design tools in programming.</b></p> <ul style="list-style-type: none"> <li>• computer resources is utilized in a proper manner according to the project.</li> <li>• Testing and debugging is easier and efficient.</li> <li>• project implementation is smoother and shorter.</li> <li>• It is good for detecting and correcting time delays.</li> </ul>				Correctly states one effectiveness of top-down design tools.	Incorrect, irrelevant
3.5	1	<p><b>Define programming language.</b></p> <p>A programming language is a computer language that programmers use to develop software programs, scripts, or other sets of instructions for computers to execute.</p>				Correctly defines a programming language	Incorrect, irrelevant
3.6	1	<p><b>State an example of a programming language.</b></p> <p>Java, C++, Ruby, Python, JavaScript, PHP</p>				Correctly gives one example of programming language	Incorrect, irrelevant
3.7	2	<p>There are three basic types of logic structures in programming. List any two types of logic structures.</p> <p>The three basic types of control structures are sequential, selection and iteration.</p>			Lists two logic structures.	Correctly states one logic structure	Incorrect
3.8	3	<p>Write a simple algorithm for a program that accepts two numbers from the user and computes the sum. <b>Algorithm to calculate the sum of two Numbers:</b></p> <p>Step1: Start  Step2: Read/input two numbers  Step3: Sum = Num1 + Num2 // sum of two numbers  Step4: Print sum  Step5: Stop  or  1. Start  2. Print "Enter the two numbers"</p>		Clearly indicates Beginning, Input, Processing, Output, End	Beginning and End, Input & Output	Beginning & End or Input & Output	Incorrect, irrelevant

		3. Accept Num input 4. Calculate sum 5. Print "sum" 6. Stop					
--	--	--	--	--	--	--	--



## STRAND 4: MICROPROCESSOR CONTROL

Item No.	Skill Level	Evidence	Response Level				
			Extended Abstract	Relational	Multistructural	Unistructural	Weak
4.1	1	<p><b><i>State an example of an embedded device.</i></b></p> <p>Some examples of embedded systems are MP3 players, mobile phones, video game consoles, digital cameras, DVD players, and GPS. Household appliances, such as microwave ovens, washing machines and dishwashers, include embedded systems to provide flexibility and efficiency.</p>				States at least one example of embedded device	Incorrect, irrelevant
4.2	2	<p><b><i>Outline the need for programmable microprocessors.</i></b></p> <p>Controls all other parts of the machine and sending timing signals.            Transfers data between memory and I/O devices.            Fetches data and instructions from memory.            Decodes instruction.            Performs arithmetical and logical operations.            Executes programs stored in memory.            Performs communication among the I/O devices etc.</p>			Clearly outlines 2 or more need for programmable microprocessors.  (2 or more ideas without linkage)	States one need for programmable microprocessors without any reasoning (1 idea)	Incorrect, irrelevant
4.3	3	<p><b><i>Why are programmable microprocessors important? Give examples to support your answer.</i></b></p> <p>A device that uses a microprocessor is normally capable of many functions, such as word processing, calculation, and communication via Internet or telephone. However, for the device to work properly, the microprocessor itself has to communicate with other parts of the device. For example, a microprocessor would need to communicate with the video display to control the output data that a program may produce. Therefore, a microprocessor would act as device's "brain" in that it transmits, receives and interprets the data needed to operate a device.</p>		Explains the importance with examples  (2 or more ideas with linkage between ideas very clear)	Describes the importance without using an example  (2 or more ideas without linkage)	States the importance  (any one idea)	Incorrect, irrelevant

## STRAND 5: ISSUES IN ICT

Item No.	Skill Level	Evidence	Response Level				
			Extended Abstract	Relational	Multistructural	Unistructural	Weak
5.1	1	<p>An ethical issue relating to using another person’s work and ideas as your own without giving credit to the original source is</p> <p>A. cookies.            B. malware.            C. phishing.            D. <b>plagiarism.</b></p>				D	<p><i>Incorrect, irrelevant</i></p> <p>A, B, C</p>
5.2	1	<p><b><i>State an ethical concern with privacy.</i></b></p> <ul style="list-style-type: none"> <li>• Privacy breaches,</li> <li>• disturb trust and run the risk of diluting or losing security;</li> <li>• it is a show of disrespect to the law and a violation of ethical principles.</li> <li>• Data privacy (or information privacy or data protection) is about access, use and collection of data, and the data subject's legal right to the data.</li> </ul>				<p><i>Correctly states one concern.</i></p>	<p><i>Incorrect, irrelevant</i></p>
5.3	2	<p>Many organisations constantly compile information about people. <b><i>Outline the ethical concerns with corporate confidentiality.</i></b></p> <p>Spread of information without personal consent.</p> <p>Identity theft, e.g. Illegally obtaining a driver’s license and credit card under your name.</p> <p>Spreading of inaccurate information.</p>			<p><i>Outlines at least two ethical concerns</i></p>	<p><i>States one ethical concern</i></p>	<p><i>Incorrect, irrelevant</i></p>

5.4	2	<p>The essential element that controls how computers are used today is ethics. <b>Outline two appropriate measures that can be used to minimize the effect of ethical concerns in ICT.</b></p> <p>Restricting access – use of password File encryption Use of Virtual Private network. Use of biometric devices. Use of fire wall</p>			<i>Outlines at least two appropriate measures</i>	<i>Outlines one appropriate measure</i>	<i>Incorrect, irrelevant</i>	
5.5	1	<p><b>State an environmental concern caused by the growing use of ICT.</b></p> <ul style="list-style-type: none"> <li>• Pollution of soil, water and air in the present as well as for the future.</li> <li>• During the use phase of ICT hardware, energy consumption impacts the environment.</li> <li>• At the end of life of ICT hardware, recycling, disposing as e-waste in landfills or disassembling are additional impacts that affect the environment.</li> </ul>				<i>Correctly states one environmental concern.</i>	<i>Incorrect, irrelevant</i>	
5.6	1	<p><b>State one challenge faced by Pacific Island Countries in addressing the environmental concerns associated with ICT.</b></p> <p>There is no local company that can recycle discarded ICT materials thus the hardware is thrown in the land fill creating pollution and leakage of chemicals in the environment.</p>				<i>Correctly states the challenge faced by Pacific Island country</i>	<i>Incorrect, irrelevant</i>	
5.7	3	<p><b>Explain effective ways that technology can be used to address environmental concerns associated with ICT.</b></p> <ul style="list-style-type: none"> <li>• ICTs reduce manufacturing needs by replacing material goods with virtual products, such as online music downloads.</li> <li>• They provide the means for virtual meetings (to replace or reduce travelling), and intelligent transport systems to cut emissions and traffic congestion.</li> <li>• ICTs are part of smart electricity grids that help distribute and use power more efficiently and to integrate renewable</li> </ul>			<p><i>Clearly explains effective ways to address environmental concerns using examples</i></p> <p><i>(2 or more ideas with linkage between ideas</i></p>	<p><i>Describes one effective way to address environmental concerns without using examples</i></p> <p><i>Or lists two or more effective ways of addressing</i></p>	<p><i>States one effective way to address environmental concerns.</i></p> <p><i>(1 idea only)</i></p>	<i>Incorrect, irrelevant</i>

		<p>sources.</p> <ul style="list-style-type: none"> <li>• They underpin e-governance, e-health and e-education projects that reach many more members of the community.</li> <li>• ICTs are widely employed for environment and climate monitoring including weather forecasting, and are crucial in early-warning and disaster relief communications.</li> </ul>		<i>very clearly shown)</i>	<i>environmental concerns</i> <i>(2 or more ideas without linkage)</i>		
5.8	4	<p><b>Discuss two health issues that are directly related to using ICT equipment.</b></p> <ul style="list-style-type: none"> <li>• Eyestrain and headache: Our eyes were made for most efficient seeing at a distance. However, monitors require using the eyes at closer range for a long time, which can create eyestrain, headaches, and double vision.</li> <li>• Back &amp; neck strain, Carpel Tunnel Syndrome.</li> <li>• Repetitive Strain Injury: Repetitive strain injury (RSI) also called repetitive motion injury and cumulative trauma disorder is the name given to a number of injuries.</li> <li>• Effects of electromagnetic fields - EMFs are electromagnetic fields—invisible lines of force that emanate from any electrical or wireless device.</li> <li>• Techno stress is the tension that arises when we have to unnaturally adapt to computers rather than having computers adapt to us.</li> </ul>	<p><i>Clearly discusses two health issues with examples</i> <i>(2 or more ideas with linkage between ideas. Uses examples to justify)</i></p>	<p><i>Explains two health issues without example</i> <i>(2 or more ideas with linkage between ideas)</i></p>	<p><i>Describes one health issue without using examples</i> <i>Or</i> <i>List 2 or more health issues</i> <i>(2 or more ideas without linkage)</i></p>	<p><i>States one health issue</i> <i>(1 idea only)</i></p>	<i>Incorrect, irrelevant</i>
5.9	1	<p><b>Identify a computer safety or security concern in ICT.</b> Computer Security is concerned with four main areas:</p> <ol style="list-style-type: none"> <li>1. Confidentiality:- Only authorized users can access the data resources and information.</li> <li>2. Integrity:- Only authorized users should be able to modify the data when needed.</li> <li>3. Availability:- Data should be available to users when needed.</li> <li>4. Authentication:- are you really communicating with whom you think you are communicating with</li> </ol>				<p><i>States one safety or security concern.</i></p>	<i>Incorrect, irrelevant</i>

5.10	1	<p>Computer criminals who create and distribute malicious programs are</p> <p><b>A. crackers.</b>  B. antispies.  C. cyber traders.  D. identity thief's.</p> <p>A crackers</p>				A	<i>Incorrect, irrelevant B, C, D</i>
5.11	3	<p><b><i>Explain two major goals of specific cyber legislation.</i></b></p> <p>(a) confidentiality – any important data you have should only be accessible to people or by systems to who you have given permission;</p> <p>(b) integrity – the assets themselves and information they contain must continue to be complete, intact and uncorrupted and;</p> <p>(c) availability – all systems, services and information must be accessible when required by the business or its clients.</p>		<p><i>Explains two major goals of cyber legislation</i></p> <p><i>(2 or more ideas with linkage between ideas clearly shown)</i></p>	<p><i>Describes one major goal</i></p> <p><i>Or</i></p> <p><i>Lists 2 or more major goals</i></p> <p><i>(2 or more ideas without linkage)</i></p>	<p><i>States one major goal</i></p> <p><i>(1 idea only)</i></p>	<i>Incorrect, irrelevant</i>

**The End**