Quality Engineer QP Code: ELE/Q7901 Version: 3.0 NSQF Level: 5										
S.No.	NOS Name	Nos Details	PC stated	English Question	English Ans1 Choice	English Ans2 Choice	English Ans3 Choice	English Ans4 Choice	Correct Answer	Marking
1			PC1. receive specifications and design details of the medical device under development from the R&D team	The R&D team has provided detailed design schematics of the medical device. What is an essential aspect you need to verify?	The accuracy and completeness of the design schematics	The device's compatibility with existing software	The availability of the device in different colours	The number of devices to be produced	1	7
2	1. ELE/N7901:	Provide quality support for product development	PC6. design functional and electrical safety test procedures for newly developed medical device	The quality engineer needs to select appropriate test equipment for the functional testing of the blood pressure monitor. Which of the instruments would be MOST suitable for testing the accuracy of blood pressure readings in a blood pressure monitor?	Oscilloscope	Leak detector	Multimeter	Calibrated blood pressure reference standard	4	7
3			PC16. arrange necessary tools and equipment required for performing functional and electrical safety tests on newly developed medical device	What is the main purpose of arranging necessary tools and equipment for functional and electrical safety tests on newly developed medical devices?	. To make the device look professional	To ensure the device meets safety standards	To improve the device's marketability	To increase the cost of the device	2	5
4			PC4. perform Dose-kVp Linearity test, Dose-mAs Linearity test, kVp Accuracy and repeatability test, HVL (Half Value Layer) test, Radiation output test, reproducibility test and reciprocity test using test software, Digital multimeter and Digital Storage Oscilloscope (DSO)	Identify the following equipment 	Analog multimeter	Digital Storage Oscilloscope (DSO)	Radiation output meter	Digital thermometer	3	5
5	2. ELE/N7902:	Perform quality tests and root-cause analysis	C8. put ultrasound machine on operation mode and conduct Monitor resolution test, Spatial distortion test, Grey scale uniformity test, Depth of visualization test, Low contrast visibility test, Display artefacts, Distance measurement test, Area estimation test and String object test as per the model specific SOP using Tissue Mimicking Phantoms	The quality engineer needs to perform a monitor resolution test on a new ultrasound machine model. This test verifies the ability of the display to distinguish between fine details. Which of the tests phantoms is most appropriate for a monitor resolution test on an ultrasound machine?	Bar pattern phantom	Uniform water bath	Tissue-mimicking phantom with cysts	Cylindrical test object with varying diameters	1	10
6			PC18. perform root-cause analysis on the failed medical devices as per the SOP	The quality engineer needs to follow the established Standard Operating Procedure (SOP) for root cause analysis of the failed pacemakers. Which of the steps is typically NOT included in an SOP for root cause analysis of medical devices?	Performing a detailed visual inspection of the failed devices	Conducting additional electrical or functional testing	Documenting the investigation process and identified root cause(s)	Assigning blame to specific personnel involved in the manufacturing process	4	10
7			PC2. set the temperature and humidity level of cyclical chamber as per the SOP	During a routine check, you notice that the temperature in the cyclical chamber fluctuates beyond the set limits. What is the appropriate action to take?	Record the fluctuation and proceed without changes	Decrease the humidity to stabilize the temperature	Investigate and adjust the temperature controller settings as per the SOP	Increase the airflow to the chamber	3	5
8	3. ELE/N7903:	Perform incoming and outgoing material testing	PC9. check that the bar code mentioned on the label is correct	What should be done if the bar code on the label is incorrect?	Change the colour of the label	Correct the bar code to match the product	Use the product without a label	Ignore the mistake	2	7
9			PC13. complete the incoming and outgoing material testing within the agreed time	As a Quality Engineer-Electronics, you receive incoming materials for a production run. Some of the materials have damaged packaging. What action should you take?	Reject the damaged materials and inform the supplier for replacements.	Ignore the damaged packaging and proceed with production.	Use the damaged materials to avoid delays.	Wait for someone else to notice the damaged packaging.	1	10
10			PC2. assist colleagues where required	Your team is facing a tight deadline, and a colleague needs help completing their tasks. What is the appropriate action?	Ask your colleague to work overtime to finish their tasks.	Refuse to help and focus on your own tasks.	Assist your colleague to ensure the team meets the deadline.	. Ignore your colleague's request for help.	3	7
11	4. ELE/N9905:	Work effectively at the workplace	PC6. prioritise and plan work in order to achieve goals and targets	What is a key benefit of effective planning in the role of a Quality Engineer-Electronics?	Increased errors	Meeting deadlines	Reduced efficiency	Procrastination	2	5
12			PC20. demonstrate responsible and disciplined behaviour at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behaviour at all times, adopting environment- friendly practices, etc.	As a Quality Engineer-Electronics, you are responsible for attending a daily morning meeting. How can you demonstrate responsible and disciplined behaviour in this situation?	Arrive late occasionally to show flexibility.	Skip the meeting if you have a busy schedule.	Rely on a colleague to provide your updates.	Attend the meeting on time and be prepared with your updates.	4	5
13			PC6. avoid damage of components due to negligence in electrostatic discharge (ESD) procedures	How can negligence in ESD procedures impact product quality?	It reduces manufacturing costs	It speeds up production	It leads to component failures	It improves product durability	3	5
14	5. ELE/N1002:	Apply health and safety practices at the workplace	PC13. administer appropriate first aid to victims in case of bleeding, burns, choking, electric shock, poisoning etc.	What is this first aid technique applied to help the victims in case of choking? 	CPR (Cardiopulmonary Resuscitation)	Heimlich manoeuvre (Abdominal thrusts)	Applying pressure to stop bleeding (Direct pressure)	Immobilizing fractures (Splinting)	2	5
15			PC17. identify recyclable and non-recyclable, and hazardous waste generated	During the testing phase of a new circuit board, you have leftover wires and components. What should you do with them?	Sort them into recyclable and non-recyclable materials	Throw them away in the regular trash	Leave them on the workbench for future use	Let your co-workers decide what to do with them	1	7
				Nos Total						100