



## **Brief Synopsis**

### **Manual Metal Arc Welding/ Shielded Metal Arc Welding Welder**

**Qualifications Pack-** Manual Metal Arc Welding/ Shielded Metal Arc Welding Welder

**QP Code:** CSC/ Q 0204

**NSQF Level:** 3

#### **Applicable NOS**

1. CSC/N0204 Manually weld carbon and low alloy steels in 1G/1F, 2G/2F and 3G/3F welding positions using Manual Metal Arc Welding/ Shielded Metal Arc Welding
2. CSC/N0201 Perform simple manual cutting operations on Carbon steels using oxy fuel gas
3. CSC/N1335 Use basic health and safety practices at the workplace
4. CSC/N1336 Work effectively with others

**SECTOR/S:** CAPITAL GOODS

#### **SUB-SECTOR:**

1. Machine Tools
2. Dies, Moulds and Press Tools
3. Plastic Manufacturing Machinery
4. Textile Manufacturing Machinery
5. Process Plant Machinery
6. Electrical and Power Machinery
7. Light Engineering Goods

**OCCUPATION:** Welding and Cutting

**REFERENCE ID:** CSC/Q0204

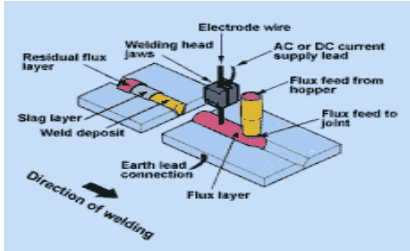
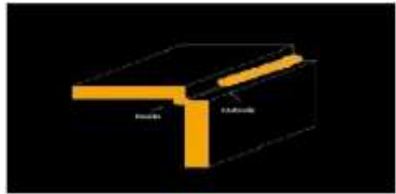
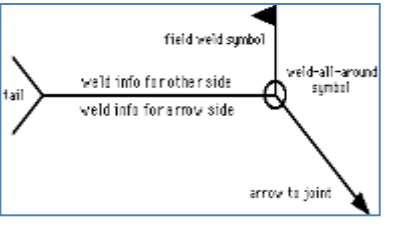
**ALIGNED TO:** NCO-2004/NIL


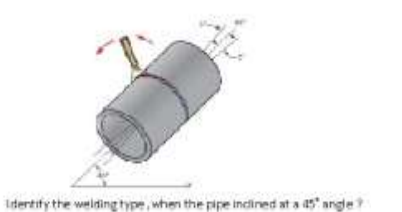
**Brief Job Description:** Perform these above mentioned operations as per WPS (Welding Procedure specification) and can set-up and prepare for operations interpreting the right information from the WPS, obtaining the right consumables and raw materials, etc. and the candidate must know how to use the same in a safe manner following practices that ensure safety for self, others and the work environment and and assess weld quality through visual inspection.


**Personal Attributes:** Basic communication, numerical and computational abilities. Openness to learning, ability to plan and organise own work and identify and solve problems in the course of working. Understanding the need to take initiative and manage self and work to improve efficiency and effectiveness.

**Note:** Please refer QP for complete details <http://cgsc.in/pdf/MMAW%20SMAW%20Welder.pdf>

Test Paper Questions (Sample)

S. No	NOS	Question	Option A	Option B	Option C	Option D
1	CSC/ N 0204	<p>Identify, which type of welding process?</p> 	Shielded metal arc welding	Gas metal arc welding	Flux core arc welding	Submerged arc welding
2	CSC/ N 0204	<p>Identify the joint welding type?</p>  <p>Identify the joint (welding) type?</p>	Butt joint	Lap joint	Corner joint	Edge joint
3	CSC/ N 0204	The shielded metal arc process is commonly used to weld material at the thick as...	100mm	150mm	200mm	250mm
4	CSC/ N 0204	The term Backing-ring is generally used in the welding of...	Square surfaces	Piping	L-shape surfaces	None of the above
5	CSC/ N 0204	<p>Identify below symbol represents.</p> 	Break in arrow	Arrow line	Field weld symbol	All the way around
6	CSC/ N 0204	An operation that produces a hole through the root face, the pipe wall, or thickness of the base metal is called...	Burn through	Worm holes	Crater pipe	None of these

7	CSC/ N 0204	If too much heat is given on the weld area, what will happen?	Root Crack	Under cut	Over lap	Excessive penetration
8	CSC/ N 0204	Identify the device shown below. 	Stabilizer	Generator	Transformer rectifier	Inverter
9	CSC/ N 0201	Which of the following is not welding consumable?	Electrode	Gases	Table	Wires
10	CSC/ N 0201	Identify the welding type, when the pipe inclined at 45 degree angel? 	1g	6g	2g	None of these
11	CSC/ N 0201	Which of the following conditions causes a backfire?	When the flame ignites the gases inside the nozzle & extinguishes itself	This may happen when the torque is held too far to the work piece	When oxygen cylinder is empty	All of them
12	CSC/ N 0201	Which of the following color code is used for acetylene gas hoses?	Black	Blue	Green	Red

13	CSC/ N 0201	How do you prevent the occurrence of slag inclusion?	By using proper joint preparation	By using proper type of electrode	By using proper welding techniques	All of them
14	CSC/ N 0201	A lifting lug requires 1600mm <sup>2</sup> of fillet weld to provide the necessary strength. What length of 10mm <sup>2</sup> fillet weld is required?	228mm	320mm	328mm	358mm
15	CSC/ N 0201	Weld preparation is commonly applied by...  A) Machining B) Grinding C) Sharing D) oxy-flame or plasma cutting	C-B-A-D	A-B-C-D	D-C-B-A	B-C-A-D
16	CSC/ N 0201	What is the electrical efficiency of alternative current (AC)?	40-50%	50-60%	70-90%	30-40%
17	CSC/ N 1335	Identify type of warning.  	Radiation	Electric shock	Fire & Explosion	Fumes
18	CSC/ N 1335	What is an important measure to avoid tripping?	The work place must be clean & neat	Do not clean work floor too often	Electric shock from faulty equipment	Poor housekeeping of materials
19	CSC/ N 1335	What are the most common welding injuries?	Arc eye, Burns	Heart attack	Brain stroke	None of them
20	CSC/ N 1335	How do you protect yourself from electric shock?	Machines should be switched OFF and unplugged when changing leads or carrying out maintenance.	All connections should be clean and tight	Isolate your body from metal	All of them

21	CSC/ N 1335	Which of the following can reduce vibration during welding operation?	Selecting appropriate tools	Wearing gloves	Tools should be in good condition	All of them
22	CSC/ N 1335	Ensuring a safe working environment is responsibility of the.....	An organization head	Supervisor	All the persons working in an organization	Only maintenance department
23	CSC/ N 1335	Which of the following is an example of Non-ionizing radiation?	a. X-rays	b. Ultraviolet	c. Infrared	d. Both (b) & (c)
24	CSC/ N 1335	Identify safety sign below given figure. 	Arc welding under progress	Danger from chemical	Assembly area	None of them
25	CSC/ N 1336	What are three common reasons you may have a conflict with a colleague?	Pressure of work	Prejudices	Difference in beliefs	All of them
26	CSC/ N 1336	What is a benefit of maintaining a positive and co-operative manner?	Create an initial friendly atmosphere	Smooth over a potentially problematic situation	Demonstrate your willingness to resolve the issue as opposed to ignoring it or dismissing it out of hand	All of them
27	CSC/ N 1336	How do you build trust and respect in the workplace?	a. Do not support decisions that colleagues have made	b. Blaming any work mates for anything	c. Never participating in gossip or talking negatively about any staff member	d. Both (a) & (b)
28	CSC/ N 1336	Answer 'True' or 'False' to the following statement: Providing support means to offer guidance as opposed to completing a task for someone.	TRUE	FALSE		
29	CSC/ N 1336	What are the types of feedback you can receive from colleagues?	Positive	Negative	Neutral	All of them



30	<b>CSC/ N 1336</b>	What are two things you should do when handling an unexpected problem?	Use common sense	If a solution is clear, put this into place	If no solution is clear, seek the assistance from the necessary colleagues	All of them
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