Marks: 200

PAPER-I

WELDER, WELDER (GWAW & GTAW), WELDER PIPE, WELDER STRUCTURAL, WELDER (WELDING & INSPECTION, WELDER (FABRICATION & FITTING) (THEORY & EMPLOYABILITY SKILLS)

SEMESTER - I

(SESSION 2017-2018)-NSQF LEVEL-4

Time: 3	Hrs.	,

Attempt all the questions. All questions carry equal marks.				
PART-	A (Theory)	Marks: 150		
Choose the correct answer:				
I. What is the point angle of dot punch?				
a) 40°	b) 50°			
c) 90°	d) 60°			
2. Which material is used to manufacture	chisel?			
a) Stainless steel	b) Low carbon steel			
c) High carbon steel	d) Medium carbon steel			
3. Name the term, the metal chips are clo	gged in file.			
a) Tinning	b) Logging			
c) Glazing	d) Pinning			
4. Which instrument is used to check the	square and flatness?			
a) Try square b) S	Steel rule			
c) Weld gauge	d) Depth gauge			
5. Name the tool is used to align the hole:	s to be riveted.			
a) Drift	b) Dolly			
c) Snap	d) Combined rivet set			
6. Which gas valve is closed first in gas v	velding at the end of work?			
a) Acetylene valve	b) Oxygen valve			
c) Both valve at the same time	d) Both regulators at same time			
7. What is the colour of acetylene cylinde	er?			
a) Red	b) Blue			
c) Maroon	d) Black			
8. How to determine the nozzle size in ox	cy-acetylene cutting process?			
a) Thickness of metal to be cut	b) Purity of oxygen			
c) Purity of acetylene	d) Duration of cut			
	,	Contd		

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a) Spatter

c) Excess deposition

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9. What is the process of sudden opening ar before attaching regulator to the cylind	nd closing of the cylinder valve for 2 to 3 seconds er?			
a) Cracking	b) Opening			
c) Bursting	d) Closing			
0) 2 4. 6. 1. 6	-,			
10. What is the ratio of oxygen and acetylene for complete combustion?				
a) 2:5:1	b) 3:1			
c) 2:1	d) 2:1:5			
11. Which thickness of mild steel plate is welded by rightward welding technique?				
a) Above 5 mm	b) Above 3 mm			
c) Above 1.5 mm				
c) Above 1.5 IIIII	d) Above 10 mm			
12. What is the capacity of oxygen gas in manifold system?				
a) 160 m^3	b) 120 m ³			
c) 150 m ³	d) 90 m ³			
c) 130 III	d) 70 III			
13. What is indicated by 18/8 in austenitic s				
a) 18% chromium, 8% nickel b) 189	% carbon, 8% nickel			
	d) 18% iron, 8% nickel			
-,	ay rove mon, overmonor			
14. Which is the suitable filler rod for fusion welding of east iron?				
a) Super silicon cast iron filler rod	b) Copper silver alloy filler rod			
c) Manganese bronze filler rod	d) Cast iron filler rod			
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15. What is the melting point of aluminium oxide?				
a) 1930°C	b) 1083°C			
c) 1300°C	d) 659°C			
-,	4) 007 0			
16. Name the joint of the plates to be welded are placed in the same line.				
a) T joint	b) Lap joint			
c) Edge joint	d) Butt joint			
,	a) swifting			
17. Which are length promote more surface tension effect?				
a) I ong Arg				
a) Long Arc	b) Short Arc			
c) Normal Arc	d) Medium Arc			
18. Name the force that increases the depos				
a) Electromagnetic force	b) Surface tension			
c) Gas expansion force	d) Gravity force			
,	a, simily tolor			

19. Which defect is prevented by using columbium added electrodes in stainless steel welding?

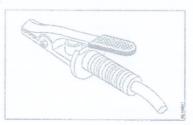
b) Distortion

d) Weld decay

Contd...3/-



20. Name the welding accessory.



- a) Earth cable
- c) Electrode holder

- b) Earth clamp
- d) Power cable
- 21. Which material is used to manufacture gas cutting blow pipe?
 - a) Copper
 - c) Aluminium

- b) Brass
- d) Stainless steel
- 22. Which problem is reduced by "Run ON and Run OFF" plates in DC welding?
 - a) Crack

b) Arc blow

c) Distortion

- d) Weld decay
- 23. Name the joint setup for welding plates with perfect alignment and root gap.
 - a) Tack weld

b) Dressing

c) Skip weld

- d) Penning
- 24. Which is the function of coating in electrode?
 - a) Prevent rusting
 - c) Control distortion

- b) Stabilize the arc
- d) Increase the current
- 25. Which electrode contain large amount of iron powder in their coating?
 - a) Deep penetration electrode
- b) Contact electrode
- c) Cutting and gauging electrode
- d) Low hydrogen electrode welding
- 26. Name the process of hammering the weld bead immediately after it is deposited.
 - a) Pinning

b) Peening

c) Pickling

- d) Dressing
- 27. Which letter indicates the property of radio graphic quality in coding of electrodes?
 - a) R

b) C

c) X

- d) A
- 28. What is the cause of hair line crack in welded joint?
 - a) Lack of preheating and post heating
- b) Skip welding

c) Medium arc length

- d) Slow cooling
- 29. What does the 2nd digit number "4" represent in the classification of electrode EB5426HIJX?
 - a) Current range

b) Percentage of elongation

c) Welding position

- d) Tensile strength
- 30. Which type of arc is to avoid undercut and reinforcement?
 - a) Arc blow

b) Short arc

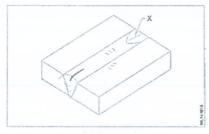
c) Medium arc

d) Long are

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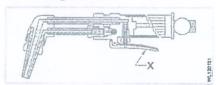
- 31. Which remedial measure to eliminate the undercut defect in arc welding?
 - a) Increase the welding speed
- b) Proper welding speed
- c) Increase the welding current
- d) Pre heat the plates to be welded
- 32. Which factor causes the defect of porosity in welding?
 - a) Damp electrode
- b) Light coated electrode
- c) Over sized electrode
- d) Small diameter electrode
- 33. Name the defect marked 'x' in welding -



a) Blow hole

b) Porosity

- c) Crater crack
- d) Under cut
- 34. What is the advantage of extrusion method of flux coating?
 - a) Prevent distortion
- b) Deoxidising agent
- c) Uniform melting of electrode
- d) Prevent slag formation
- 35. Identify the part marked 'x' in cutting torch.



- a) Oxygen lever
- c) Oxygen valve

- b) Oxygen pipe
- d) Mixing chamber
- 36. Name the defect marked 'x' in welding.



- a) Reinforcement
- c) Toe of weld

- b) Leg length
- d) Overlap
- 37. Name the welding defect.



- a) Crack
- c) Blow hole

- b) Porosity
- d) Burn through

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38. Name the weld joint.



- a) Strap joint
- c) Edge joint

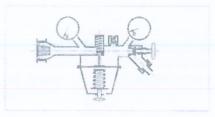
- b) Corner joint
- d) Groove joint
- 39. Name the tool used to clean the nozzle orifice of the blow pipe.
 - a) Needle file

b) Tip cleaner

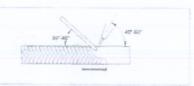
c) Weld gauge

d) Feeler gauge

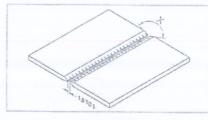
40. Name the device.



- a) Constant regulator
- c) Double stage regulator
- b) Single stage regulator
- d) Variable stage regulator
- 41. Name the gas welding technique.



- a) Vertical welding technique
- b) Forward welding technique
- c) Leftward welding technique d) Rightward welding technique
- 42. What is the groove angle marked 'x' in welding joint?



- a) 60°
- c) 80°

- b) 70°
- d) 90°

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18/B/C/S-1/2/E/L-4

-6-

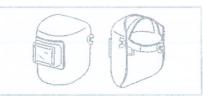
43. Which factor causes the gas cutting fault?



- a) Tip too close
- c) Too high cutting speed

- b) Too slow cutting speed
- d) Correct cutting speed

44. Name the safety apparel -



- a) Hand screen
- c) Welding helmet

- b) Grinding shield
- d) Chipping shield

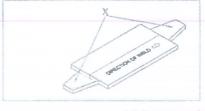
45. Name the polarity in welding set up -



- a) DCSP
- c) DCEN

- b) DCNP
- d) DCEP

46. Name the plates marked 'x'-



- a) Tack plates
- c) Run off plates

- b) Run on plates
- d) RUN ON and RUN OFF plates
- 47. What is the purpose of normalizing?
 - a) Induce toughness
 - c) Control distortion

- b) Soften the metal
- d) Stress relieving
- 48. What is the purpose of tempering the steel in heat treatment?
 - a) Induce hardness
 - c) Regulate softness

- b) Induce brittleness
- d) Regulate hardness and toughness



18/B/C/S-1/2/E/L-4

-7-

- 49. What is the purpose of alloying elements that added in the metal?
 - a) Increase physical properties
- b) Increase the mechanical properties
- c) Decrease physical properties
- d) Decrease the mechanical properties
- 50. Which type of flux coated electrode suitable for general purpose fabrication work?
 - a) Rutile electrode

b) Cellulosic electrode

c) Iron powder electrode

d) Basic coated electrode

