

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

23-0005-AB

Time Allowed: 1 hr

TEST BOOKLET
PAPER-II
WELDER (FABRICATION & FITTING)

Maximum Marks: 50

INSTRUCTIONS TO CANDIDATES

Read the instructions carefully before answering the questions: -

1. This Test Booklet consists of 08 (eight) pages and has 50 (fifty) questions.
2. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
3. Please note that it is the candidate's responsibility to fill in the Roll Number and other required details carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the OMR Answer Sheet liable for rejection.
4. Do not write anything else on the OMR Answer Sheet except the required information. Before you proceed to mark in the OMR Answer Sheet, please ensure that you have filled in the required particulars as per given instructions.
5. Use only Black Ball Point Pen to fill the OMR Answer Sheet.
6. Each question comprises of 04 (four) responses (answers). You are required to select the response which you want to mark on the OMR Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose *ONLY ONE* response for each item.
7. After you have completed filling in all your responses on the OMR Answer Sheet and the examination has concluded, you should hand over to the Invigilator *only the OMR Answer Sheet*. You are permitted to take the Test Booklet with you.
8. Penalty for wrong answers in case of Multiple Choice based Questions:
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE.
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to the question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to the question.
 - (iii) If a question is left blank. i.e., no answer is given by the candidate; there will be no penalty for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

WELDER (FABRICATION & FITTING)

1. In gas welding how many flames generated?
 - (a) One
 - (b) Two
 - (c) Three
 - (d) Four

2. The gas flame is generally used in gas welding is -
 - (a) Oxygen acetylene
 - (b) Oxygen natured
 - (c) Oxygen cool gas
 - (d) None of these

3. Which type of welding transformer is used in electric arc welding?
 - (a) Step up type
 - (b) Step down type
 - (c) Combination of both
 - (d) None of these

4. Which flame is commonly used for welding of cast iron?
 - (a) Natural flame
 - (b) Oxidizing flame
 - (c) Carburizing flame
 - (d) None of above

5. Number of black glass in a face shield-
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4

6. Filler rod is used in -
 - (a) Electric arc welding
 - (b) Seam welding
 - (c) Forge welding
 - (d) Gas welding

7. Consumable electrode is used in -
 - (a) TIG welding
 - (b) Spot welding
 - (c) MIG welding
 - (d) Friction welding

8. Spot welding is a -
 - (a) TIG welding
 - (b) Resistance welding
 - (c) MIG welding
 - (d) Electric arc welding

9. In Flux Cored Arc welding -
 - (a) Flux coating is over the electrode
 - (b) Flux is inside the hollow electrode
 - (c) No flux is used
 - (d) None of above

10. Electrode used in resistance welding is made out of -
(a) Cu base alloys
(b) Al base alloys
(c) Stainless steel base alloys
(d) M.S. based
11. Electron beam welding can be carried out in -
(a) Open air
(b) Shielding gas environment
(c) Vacuum
(d) A pressurized inert gas chamber
12. Function of flux in welding -
(a) To increase the rate of welding
(b) To clean the joint
(c) To prevent oxidation of metal during welding
(d) All of these
13. Temperature of a carburizing flame in gas welding is _____ of a natural or oxidizing flame
(a) Lower than
(b) Equal to
(c) Higher than
(d) None of these
14. Which one is the very easy welding position?
(a) Horizontal position
(b) Vertical position
(c) Over head position
(d) Flat position
15. Colour of acetylene and oxygen cylinder is -
(a) Black and maroon
(b) Maroon and black
(c) Black and blue
(d) Blue and black
16. The main constituents of soldering alloys are -
(a) Tin and lead
(b) tin and copper
(c) tin, copper and lead
(d) tin, lead and magnesium
17. What is the percentage of tin in soft solder?
(a) 30%
(b) 42%
(c) 50%
(d) 63%
18. Acetylene gas is produced from -
(a) Carbon
(b) calcium chloride
(c) calcium carbonate
(d) calcium carbide

19. In oxy-acetylene gas welding, the temperature at the inner cone of the flame is around -
- (a) 3200°C
 - (b) 3500°C
 - (c) 1290°C
 - (d) 3000°C
20. Which one of the following is not a fusion welding process?
- (a) Electric arc welding
 - (b) Resistance welding
 - (c) Friction stir welding
 - (d) Gas welding
21. In electric arc welding, eyes are protected with -
- (a) Sparks
 - (b) Ultra violet rays
 - (c) Infrared rays
 - (d) Both b and c
22. Vacuum environment is used in -
- (a) Plasma arc welding
 - (b) resistance welding
 - (c) electron beam welding
 - (d) ultrasonic welding
23. Electronic components are usually joined by -
- (a) Soldering
 - (b) Brazing
 - (c) Forge welding
 - (d) Resistance welding
24. Weld spatter is a /an
- (a) electrode
 - (b) defect
 - (c) flux metal used in soldering
 - (d) electrode for brazing
25. Pinch effect in welding is due to -
- (a) Electric force
 - (b) surface tension of the molten metal
 - (c) expansion of gases in the arc
 - (d) electro-magnetic force
26. The main criteria for selection of electrode diameter in arc welding is-
- (a) Thickness of the material
 - (b) work piece material
 - (c) type of welding process
 - (d) voltage used
27. Open circuit voltage for arc welding is of the order of -
- (a) 18-40V
 - (b) 40-95V
 - (c) 130-170V
 - (d) 100-125V

28. In resistance welding, voltage used for heating is -
(a) 18V
(b) 40V
(c) 10 V
(d) 500V
29. Pre heating is essential in welding of
(a) German silver
(b) cast iron
(c) high speed steel
(d) M.S. based
30. In arc welding, temperature of the following order may be generated
(a) 1100 °C
(b) 5500 °C
(c) 1500 °C
(d) 8000 °C
31. Arc below is encountered in
(a) Gas welding
(b) gas cutting
(c) arc welding when straight polarity is used
(d) welding of stainless steel
32. Two MS plates of 20 cm thick for boiler drum are to be butt welded by
(a) electroslog welding
(b) plasma arc welding
(c) submerged arc welding
(d) resistance welding
33. The melting point of the filler metal in brazing should be above
(a) 600 °C
(b) 500 °C
(c) 420 °C
(d) 800 °C
34. Ratio of iron oxide and aluminium in thermit welding is -
(a) 1:1
(b) 3:1
(c) 1:3
(d) 1:2
35. The vacuum of the following order is maintained in the electron beam welding machine -
(a) 1 torr
(b) 10^{-2} torr
(c) 10^{-3} torr
(d) 10^{-5} torr
36. Thermit welding is a form of -
(a) Resistance welding
(b) fusion welding
(c) arc welding
(d) gas welding
37. A soldering iron "bit" is made of -
(a) Brass
(b) bronze
(c) steel
(d) copper

38. Neutral flame is used to weld metal like -
(a) Steel
(b) Cu + brass
(c) neutral metal
(d) none of above
39. The flux in brazing process is used in the form of -
(a) Powder
(b) liquid
(c) paste
(d) any one of above
40. Metal like Cu and brass can be welded by -
(a) Natural flame
(b) Oxidizing flame
(c) Carburizing flame
(d) None of above
41. Spelter is same as -
(a) Spatter
(b) tin
(c) zinc
(d) silver
42. Brazing is the process of -
(a) joining protracted section by melting
(b) hard soldering using brass spelter
(c) casing in brass
(d) all of this
43. What is the working principle of resistance welding?
(a) $H=I^2RT$
(b) $H=IRT^2$
(c) $H=IR^2T$
(d) none of above
44. LBW is a/an -
(a) arc welding
(b) gas welding
(c) solid state welding
(d) fusion welding
45. Which one is a NDT?
(a) Tensile testing
(b) impact testing
(c) hardness testing
(d) none of above
46. FCAW stands for -
(a) Flux coated arc welding
(b) flux cover arc welding
(c) flux consumed arc welding
(d) flux contaminated arc welding
47. What is the maximum power supply needed for spot welding?
(a) 135 kVA
(b) 150 kVA
(c) 140 kVA
(d) 145 kVA

48. Aluminium is best welded by -
- (a) MIG welding
 - (b) Submerged arc welding
 - (c) TIG welding
 - (d) gas welding
49. In reverse polarity welding -
- (a) holder is positive and work piece is earthed
 - (b) work is negative and folder is earthed
 - (c) electrode folder is connected to the positive and workpiece to negative
 - (d) electrode folder is connected to the negative and workpiece to positive
50. Which of the following carbon steel is most weldable?
- (a) 0.75 % carbon steel
 - (b) 0.50 % carbon steel
 - (c) 0.30 % carbon steel
 - (d) 0.15 % carbon steel
-

Space for rough work