
Lesson 8 Self-Check Questions

1. The material of mould used in die casting process is generally made of
 - a. plaster of paris
 - b. some metal
 - c. sand mixed with some binder
 - d. thermosetting resin
2. In case of hot chamber die casting machine
 - a. the furnace is an integral part of the machine
 - b. the furnace is not an integral part of the machine
 - c. the chamber of the machine is actually not heated.
 - d. aluminium and its alloys can be cast at a very fast rate
3. In gravity die casting process
 - a. casting comes out of the die under the gravitational force
 - b. die is made to fall under the force of gravity before it is filled
 - c. die cavity is filled with molten metal flowing under the influence of gravity
 - d. die as well as casting are constantly under the influence of gravity
4. In gravity die casting, the life of mould can generally be increased by coating 1 face of the cavity with some
 - a. oil or grease
 - b. thermosetting resin
 - c. refractory material
 - d. meehanite with large graphite flakes
5. A cold chamber machine used for die casting is the one in which
 - a. chamber is water cooled
 - b. a separately located furnace is used to melt the metal
 - c. the temperature of chamber is never allowed to rise above 200 °C
 - d. the temperature of chamber is always maintained below 100°C
6. Which one of the following is not a variant of Centrifugal casting process?
 - a. True centrifugal casting
 - b. False centrifugal casting
 - c. Semi-centrifugal casting
 - d. Centrifuging
7. In which one variant of Centrifugal casting process the axis of rotation of the mould coincides with the axis of the casting?
 - a. True centrifugal casting.
 - b. Semi-centrifugal casting.
 - c. Profiled centrifugal casting.
 - d. Centrifuging.

8. In which one variant of Centrifugal casting process the centre of the casting is mostly solid, but central core can be used if central hole is needed?

- a. True centrifugal casting
- b. False centrifugal casting
- c. Semi-centrifugal casting
- d. Centrifuging

9. In which one variant of Centrifugal casting process the axis of rotation does not coincide with the axis of the mould but it coincides with the axis of the whole set-up?

- a. True centrifugal casting
- b. False centrifugal casting
- c. Semi-centrifugal casting
- d. Centrifuging

10. Which one variant of Centrifugal casting process uses relatively low rotational speeds and is adaptable to stack moulding?

- a. True centrifugal casting
- b. False centrifugal casting
- c. Semi-centrifugal casting
- d. Centrifuging

11. Which of the following casting processes uses a rotating mould?

- | | |
|-------------------------|------------------------------|
| (a) Shell-mould casting | (b) Centrifugal casting |
| (c) Investment casting | (d) Permanent mould casting. |

12. Mechanical properties of the cast parts are superior in

- | | |
|-------------------------|------------------------------|
| (a) Shell-mould casting | (b) Centrifugal casting |
| (c) Investment casting | (d) Permanent mould casting. |

13. Which of the following casting processes uses pressure to feed the molten metal?

- | | |
|-------------------------|-------------------------|
| (a) Shell-mould casting | (b) Centrifugal casting |
| (c) Investment casting | (d) Die casting |

14. Zinc alloys are preferentially cast by

- | | |
|-------------------------|-------------------------|
| (a) Investment casting | (b) Die casting |
| (c) Centrifugal casting | (d) Shell-mould casting |

15. Which of the following materials will give maximum die life?

- | | | | |
|-----------|---------------|---------------|----------|
| (a) Brass | (b) Aluminium | (c) Cast iron | (d) Zinc |
|-----------|---------------|---------------|----------|

16. Arrange the following materials in order of their increasing die life

- (a) brass, cast iron, zinc and aluminium
- (b) brass, cast iron, aluminium and zinc
- (c) cast iron, brass, aluminium and zinc
- (d) cast iron, brass, zinc and aluminium.

17. Bronze is best cast by

- (a) Shell-mould casting
- (b) Plaster mould casting
- (c) Die casting
- (d) Centrifugal casting

18. Permanent mould casting is also known as

- (a) Corthias casting
- (c) Pressure die casting
- (b) Gravity die casting
- (d) Slush casting.

19. Which of the following casting processes uses a bottomless mould?

- (a) Slush casting
- (b) Continuous casting
- (c) Centrifugal casting
- (d) Investment casting.

20. Which of the following pairs is not correctly matched?

- (a) Aluminium alloy — Pressure die casting
- (b) Jewellery — Lost wax process
- (c) Large pipes — Centrifugal casting
- (d) Large bells — Loam moulding.

21. Most commonly used materials cast by using hot-chamber die casting include

- (a) Zinc
- (b) Tin
- (c) Lead
- (d) All of the above.

22. Most commonly used materials cast by using cold-chamber die casting include

- (a) Aluminium
- (b) Magnesium
- (c) Copper
- (d) All of the above.

23. Dynamic action is involved in

- (a) Slush casting
- (b) Investment casting
- (c) Centrifugal casting
- (d) Die casting.

Possible answers to self-check questions

- | | |
|-------|-------|
| 1. b | 2. a |
| 3. c | 4. c |
| 5. b | 6. b |
| 7. a | 8. c |
| 9. d | 10. d |
| 11. b | 12. b |
| 13. d | 14. b |
| 15. d | 16. c |
| 17. b | 18. b |
| 19. b | 20. d |
| 21. d | 22. d |
| 23. c | |