

## FOUNDRY TECHNOLOGY

1. **Scope of automation in foundry process is \_\_\_\_\_**
  - a) Low
  - b) High
  - c) Minimum
  - d) Maximum
  
2. **Which of the following is an advantage of the Green sand molding process used in a foundry?**
  - a) Appropriate for long production run
  - b) Very low cost process
  - c) Sand is reusable
  - d) All of the mentioned
  
3. **The castings in formed in foundry produced are accurate in dimensions.**
  - a) True
  - b) False
  
4. **The \_\_\_\_\_ energy consumption is a drawback of the foundry.**
  - a) High
  - b) Optimum
  - c) Intensive
  - d) Low
  
5. **Foundry process is used to make intricate parts.**
  - a) True
  - b) False
  
6. **The \_\_\_\_\_ directional properties are imparted to the castings made in foundries.**
  - a) Single
  - b) Double
  - c) Spherical
  - d) Multiple
  
7. **\_\_\_\_\_ forms a seat in mold on which the sand core rests during pouring.**
  - a) Pattern
  - b) Sand
  - c) Core
  - d) Core Print
  
8. **Which of the following is a property of core material used in a foundry?**
  - a) Appropriate for long production
  - b) Low Weight
  - c) Reusable
  - d) Core Print
  
9. **The \_\_\_\_\_ is responsible for cavities in castings in the foundry.**
  - a) Patterns
  - b) Sand

- c) Cores
  - d) Riser
- 10. A core is a disposable item but it can be reused from time to time.**
- a) True
  - b) False
- 11. The number of cores to be used to form castings is \_\_\_\_\_**
- a) One
  - b) Ten
  - c) Depends on the sand
  - d) Depends on the design
- 12. \_\_\_\_\_ cores cannot make long narrow features.**
- a) Green Sand
  - b) Dry-Sand
  - c) Metallic
  - d) Lost
- 13. Which of the following process is not used to remove the cores from the finished casting?**
- a) Blowing
  - b) Melting
  - c) Washing
  - d) Chemical Dipping
- 14. Binders are added to increase the strength of the core.**
- a) True
  - b) False
- 15. Which of the following is not used for the formation of the molding sand?**
- a) Silica Sand
  - b) Binders
  - c) Additives
  - d) Coal
- 16. The \_\_\_\_\_ is responsible for the impact strength in the molding sand.**
- a) Aggregates
  - b) Refractoriness
  - c) Impurities
  - d) Permeability
- 17. Molding sand can withstand chemical reactions on it and prove it to be beneficial for the casting formation.**
- a) True
  - b) False
- 18. Binding property of the sand increases because of the \_\_\_\_\_ property.**
- a) Cohesiveness
  - b) Collapsibility

- c) Flow ability
- d) Permeability

**19. Which of the following is the most important property of the molding sand in cores?**

- a) Dry Strength
- b) Green strength
- c) Collapsibility
- d) Cohesiveness

**20. The adhesiveness and cohesiveness are the same properties of the molding sand.**

- a) True
- b) False

**21. Flow ability increases with increase in the green strength.**

- a) True
- b) False

**22. The molding sand is prepared by \_\_\_\_\_ method.**

- a) Sand Mueller
- b) Manual work
- c) Sand sieve
- d) Rotator

**23. The samples of the moisture test are prepared in \_\_\_\_\_ heater bulb.**

- a) Infrared
- b) X-ray
- c) Radio
- d) Ultraviolet

**24. The top sieve of the sand sieve analysis is the finest.**

- a) True
- b) False

**25. The Sand Sieve Analysis is used for \_\_\_\_\_**

- a) Grain Fitness test
- b) Grain Size test
- c) Green strength test
- d) Compressive strength test

**26. If dross and slag along with the liquid metal reach the mould cavity they produce the defect known as \_\_\_\_\_?**

- A. Misrun
- B. Inclusions
- C. Blow holes
- D. All of the above

**27. Slag and dross can be removed by \_\_\_\_\_?**

- A.skimming from the molten metal
- B.using bottom pouring ladle
- C.using pouring basin in place of a pouring cup
- D.any of the above

**28. The methods of casting for producing ornamental pieces are \_\_\_\_\_?**

- A.pressed and slush casting
- B.slush and gravity casting
- C.gravity and semi-permanent mould casting
- D.none of the above

**29. Metal moulds are used in all of the following EXCEPT:**

- A.Die casting process
- B.Investment casting
- C.Permanent mould casting
- D. Centrifugal casting

**30. Mixing coal dust with moulding sand results in**

- A. blackening of the mould
- B. strong mould
- C. good air venting
- D.none of the above

**31. Hot spots are generally found in castings**

- A. having abrupt variation in section
- B .with uniform cross-section
- C. symmetrical about two axes
- D. small in weight but large in volume

**32. Flux used in cupola while melting cast iron is**

- A. lime stone
- B. coke slurry

C. molasses

D.any of the above

**33. Which of the following defect may occur due to improper design of gating system?**

A. Cold shuts

B. Rough surfaces

C. Misruns

D.any of the above

**34. On drying, wood**

A. bexpands

B. shrinks

C. changes colour

**35. If an old casting is to be used as a pattern, to account for various allowances.**

A. casting is shaken while withdrawing from mould

B. the surfaces are lagged with thin strips of wood or leater

C. the castings are cleaned and made smooth

D.to provide draw screws, holes can be drilled and tapped in the casting Gated patterns are normally used for

**36. Gated patterns are normally used for**

A. mass production of small castings

B. production of castings which do not require machining

C. castings having several hollow spaces

D. castings for light metals

**37. The contraction allowance for magnesium is around**

A.1 mm/metre

B.5 mm/metre

C.14 mm/metre

D.25 mm/metre

**38. The solidification shrinkage of carbon steel is around**

A.0.1 to 0.2 percent

B.0.5 to 1 percent

C.2 to 4 percent

D.8 to 10 percent

**39.Permeability of sand decreases as**

A. permeability increases

B. moisture content increases

C. bonding content increases

D. all of the above

**40.Blow holes in castings are due to**

A. high moisture content of the sand

B. low permeability of sand

C. excessive fine grains and gas producing ingredients

D.any of the above

**41.The contraction allowance for pattern depends on**

A. composition of the metal

B. method of moulding used

C. pouring temperature

D. all of the above

**42. There is no need for the withdrawal of pattern from the mould in case of**

A. wax patterns

B. hollow patterns

C. pattered with core

D. consumable patterns

**43. Which of the following is very powerful carbide former in cast iron?**

A. Silicon

B. Vanadium

C. Chromium

D. Nickel

**44. Which of the following holes appear on the surface of the casting when it is machined?**

- A. Blow holes
- B. Pin holes
- C. Gas holes
- D. Slag holes

**45. In case of carbondioxide moulding, the binder used is generally**

- A. sodium silicate
- B. china clay
- C. coal dust
- D. graphite