MULTI CHOICE DECISION WITH CONFIDENCE

Question 1:
Which of the following statements is correct with regard to the energy performance of a furnace?
(a) Exhaustion of air is more harmful than infiltration of air. Proportional issues can be avoided by keeping furnace cool, (b) Infiltration and exhaustion of air have no impact, (c) air gap is a resistance.

Question 2:
The best way to simulate combustion is to (i) seek all possible cases of action for testing, (ii) construct a numerical model, (iii) validate the model and define the problem.

Question 3:
For optimum fuel utilization, the pressure at which furnace operates should be (a) Slightly positive, (b) Neutral, (c) Slightly negative. (d) has no effect.

Question 4:
The nozzle in an arc furnace may be passed by (i) Gas welding (ii) threading with apple (iii) stud welding (iv) fusion welding.

Question 5:
The roll has replaced to feed steel in an efficient furnace is equal to (a) MST + ML, (b) heat losses, (c) MST + ML + MST + heat losses.

Question 6:
Shedding on metal protects underlying metal (a) due to higher reduction potential (b) due to noble characteristics (c) due to higher oxidation potential (d) None of above.

Question 7:
The most common form of refractory materials used in the construction of a furnace roof are (a) Silica brick, (b) Chrome magnesite bricks, (c) Fire brick, (d) Calcium silicate bricks.

Question 8:
An effective design is one which (a) utilizes the latest technology by minimizing the resources necessary to make a worthwhile design, (b) starts from ideas generated internally in the organization, (c) is not the market, (d) even though the design may be perfect, (e) all of the above.

Question 9:
Core deployment is an asset when (a) the frequency is low, (b) there is no change in chemical composition for the whole day, (c) SAE 8630 carburized, (d) all of above.

Question 10:
The usual furnace used in malleable cast iron melting is (a) Cupola, (b) Induction furnace, (c) Arc furnace, (d) Rotary oil furnace.

Question 11:
The higher the factor of safety, (a) is to delay failure, (b) To absorb for unexpected design errors (c) To suffer from cost variant, (d) to allow reliability.

Question 12:
The usual furnace used in realistic cast iron melting is (a) Cupola, (b) Induction furnace, (c) Arc furnace, (d) Rotary oil furnace.

Question 13:
Reduction of Complexity in design means (a) increasing safety risk (b) Employing approximations (c) Higher Factor of safety (d) Higher features costs for same functionality.

Question 14:
The primary purpose of preferred number is (a) to stipulate design data in the structural way, (b) to make a meaningful comparison between two sizes, (c) to decide the warping in arc furnace roof, (d) all of above.

Question 15:
An excess boiler size compensation for a), lack or air b) increase increasing of multi temperature c) increase production/unchanged size of cupolas d) all of above.

Question 16:
Manufacturing concerns are systematically incorporated into the design process in (a) design for manufacturing, (b) module design, (c) design for substitution, (d) DFNX.

Question 17:
3-S refer to (a) reduction of inventory, (b) Specialization of service, (c) process control, (d) quality control.

Question 18:
In a system of external fuel fired heating constant temperature would result when burner is slightly (a) towards charge, (b) towards roof, (c) towards door, (d) parallel to charge.

Question 19:
Oxygen lancing in normal Cupola operation a) increases temperature b) avoids slagging c) reduces carbon d) all of above.

Question 20:
Weal Surface finish is achieved by (a) lapping, (b) fine grinding, (c) polishing, (d) shot blasting.

Question 21:
8620 is cheaper than (a) 20 Mn Cr5, (b) 54100, (c) 1345, (d) None of above.

Question 22:
The total heat supplied to melt steel in an efficient furnace is equal to (a) MST, (b) ML, (c) MST + ML, (d) MST + ML + MST + heat losses.

Question 23:
The design for cost will be preferred to design for quality when (a) when buyer is insured, (b) when the buyer has no urgent need, (c) the demand is low, (d) None of these.

Question 24:
In the case of hook we need higher strength, and toughness. We will use (a) graded Cl, (b) duralumin, (c) SAE 8630 carburized, (d) all of above.

Question 25:
The best factor of safety in a member designed for stiffness is (a) 1, (b) 1.23, (c) 4, (d) 2.

Question 26:
The provision of safety factor (a) is to delay failure, (b) To account for unexpected design errors, (c) Decreases surface finish of casting, (d) All of above.

Question 27:
Which of these order is best (a) i, ii, iii, v, iv, vi, (b) i ii iii v iv, vi, (c) i iii ii v vi, iv, (d) i iv, vi, iii ii v.

Question 28:
Sheradising on steel protects underlying metal (a) due to noble characteristics, (b) due to higher oxidation potential, (c) due to higher reduction potential, (d) None of above.

Question 29:
Welding techniques are preferably used in (a) forging, (b) welding, (c) casting, (d) Fusion welding.

Question 30:
Sheradising on steel protects underlying metal (a) due to higher reduction potential, (b) due to noble characteristics, (c) due to higher oxidation potential, (d) None of above.