1. In the aircraft propellers

a) the propulsive matter is ejected from within the propelled body

b)the propulsive matter is caused to flow around the propelled body

c) its functioning does not depend upon the presence of air

d) none of the above

2. The friction experienced by a body, when in motion, is known as

a) rolling friction
b) dynamic friction
c) limiting friction
d) static friction

3. The point, through which the whole weight of the body acts, irrespective of its position, is known as

a) moment of inertia
b) centre of mass
c)centre of percussion
d)centre of gravity

4. Which of the following is a scalar quantity?

a) Force
b) Speed
c) Velocity
d) Acceleration

5. The force applied on a body of mass 100 kg to produce an acceleration of 5 m/s^2, is

a) 500N b) 100N c)20N d)40N

6. One litre of water occupies a volume of

a) 100 cm^3 b) 1000 cm^3 c) 500 cm^3 d) 250 cm^3

7. The value of bulk modulus of a fluid is required to determine

a) Mach number b) Froude's number c)Reynold's number d) Euler's number

8. A rocket works with maximum overall efficiency when air-craft velocity is _____ the jet velocity.

a) equal to b) one-half c)double d) Triple

9. The maximum efficiency of transmission through a pipe is

a) 66.67% b) 56.7% c) 50% d) 76.66%

10. If a body floating in a liquid returns back to its original position, when given a small angular displacement, the body is said to be

a) stable equilibrium b) neutral equilibrium c) unstable equilibrium d) none of these

11. The specific gravity of an oil whose specific weight is 7.85 kN/m^3, is

a) 1.6 b) 1 c) 1.2 d) 0.8

12. If the depth of water in an open channel is less than the critical depth, the flow is called

a) torrential flow b) turbulent flow c) tranquil flow d) critical flow

13. The total head of a liquid particle in motion is equal to?

a) potential head - (pressure head + kinetic head)
b) pressure head - (kinetic head + potential head)
c) pressure head + kinetic head + potential head
d) kinetic head - (pressure head + potential head)

14. In a four stage compressor, if the pressure at the first and third stage is 1 bar and 16 bar, then the delivery pressure at the fourth stage will be
a) 1bar b) 64 bar c) 16 bar d) 256 bar

15. In the aircraft propellers
a) the propulsive matter is caused to flow around the propelled body
b) the propulsive matter is ejected from within the propelled body
c) its functioning does not depend upon the presence of air
d) none of the above

16. The type of rotary compressor used in aeroplanes, is of
a) centrifugal type b) centripetal type c) radial flow type d) axial flow type

17.For perfect intercooling in a two stage compressor,
a) $\frac{p_1}{p_3} = \frac{p_2}{p_1}$ b) $\frac{p_2}{p_1} = \frac{p_3}{p_2}$ c) $p_1 = p_3$ d)$p_1 = p_2\, p_3$

18. The amount of heat required to raise the temperature of the unit mass of gas through one degree at constant volume, is called
a) specific heat at constant Joule c) kilo Joule
b) specific heat at constant pressure d) specific heat at constant volume

19. The compression ratio for petrol engines is
a) 3 to 6 b) 20 to 30 c) 15 to 20 d) 5 to 8

20. Select the correct statement as per Charles' law
a) $p.v$ = constant, if T is kept constant c)v/T = constant, if p is kept constant
b) p/T = constant, if v is kept constant d)T/p = constant, if v is kept constant

21. The condition that causes vapour locking in a brake system is
a) Overheating of the fluid due to frequent brake application
b) Overcooling of the brakes during high speed driving
c) Keeping the vehicle without use for an extended period
d) An excessively high engine speed on a downhill road

22. The motion of the cam is transferred to the valves through
a) Pistons b) rocker arms c) camshaft pulley d) valve stems

23. The unit of energy is S. I. units is
a) Joule metre (Jm) b) Joule (J) c)Watt(W) d) Joule/metre (J/m)

24. The amount of heat generated per kg of fuel is known as
a) Calorific value b) heat energy c) lower calorific value d) higher calorific value

25. The entropy may be expressed as a function of
a) Temperature and volume c) heat and work
b) Pressure and temperature d) all of these

26. The _____ is obtained when carbonization of coal is carried out at 500° to 700° C.
a) pulverised coal b) hard coke c) soft coke d)bituminous coal

27. The chart which gives an estimate about the amount of materials handling between various work stations is known as
a) Flow chart b) process chart c) travel chart d) operation chart

28. A device used for lifting or lowering objects suspended from a hook at the end of retractable chains or cable is called
a) jib crane b) hoist c) portable elevator d) chain conveyor

29. A diagram showing the path followed by men and materials while performing a task is known as
a)flow process chart b) string diagram c) travel chart d) flow diagram

30. The specific fuel consumption per B.P. hour for a petrol engine is about
a) 0.2 Kg b) 0.3 Kg c) 0.25 Kg d) 0.35 Kg

31. Number of working strokes per min. for a two stroke cycle engine are _____ the speed of the engine in r.p.m.
a)equal to b) one-half c)twice d)four-times

32. A fuel of cetane number 40 has the same ignition quality as a mixture of
a)40% petrol and 60% diesel c)40% cetane and 60% alpha methyl napthalene
b)40% alpha methyl naphthalene & 60% cetane d)40% diesel and 60% petrol

33. In petrol engines, the delay period is of the order of
a)0.001 second b) 0.004 second c)0.003 second d)0.002 second

34.A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train?
a)150 metres b) 180 metres c)324 metres d)120 metres

35. Two trains are moving in opposite directions @ 60 km/hrand 90 km/hr. Their lengths are 1.10 km and 0.9 km respectively. The time taken by the slower train to cross the faster train in Seconds is:
a)48 b)45 c)36 d)49

36. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?
a)4 Years b)8 Years c)10 Years d) 14 Years

37. Q is as much younger than R as he is older than T. If the sum of the ages of R and T is 50 years, what is definitely the difference between R and Q's age?
a) Data inadequate b) 1 Year c)25 Years d) 2 Years

38. A can finish a work in 24 days, B in 9 days and C in 12 days. B and C start the work but are forced to leave after 3 days. The remaining work was done by A in:
a) 5 days b) 6 days c) 12 days d) 10 days

39. Pipes A and B can fill a tank in 5 and 6 hours respectively. Pipe C can empty it in 12 hours. If all the three pipes are opened together, then the tank will be filled in:
a)6 hours b) 7 hours c)9 hours d) 5 hours

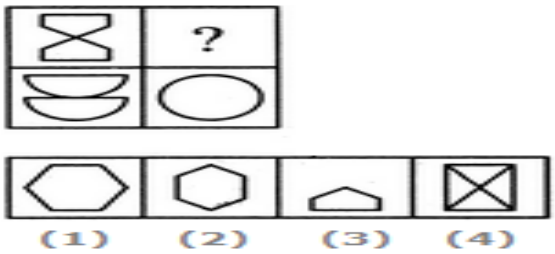
40. A man is 24 years older than his son. In two years, his age will be twice the age of his son. The present age of his son is:
a) 22 years b) 18 years c) 20 years d) 14 years

41.1of 2.We 3. Heard 4.Him 5.had
a)42351 b) 52341 c)25314 d) 25431

42. Tanya is older than Eric; Cliff is older than Tanya; Eric is older than Cliff.
If the first two statements are true, the third statement is
a)true b) uncertain c)false

43.Choose the alternative which is closely resembles the mirror image of the given combination.

44.Choose the alternative which is closely resembles the mirror image of the given combination.



a)1 b)2 c)3 d) 4

45.FURORE
a) Excitement b) Worry c)Flux d)Anteroom

46. MENDACIOUS
a) Full of Confidence b) Encouraging c)False d) Provocative

47. DEBACLE
a) Decline b) Collapse c) Defeat d) Disgrace

48. I told him that he was not working hard.
a) I said to him, "You are not working hard." c) I said, "You are not working hard."
b) I told to him, "You are not working hard." d) I said to him, "He is not working hard."

49. "Please don't go away", she said.
a) She said to please her and not go away. c) She told me to go away.
b) She begged me not to go away. d) She begged that I not go away.

50. The man said, "No, I refused to confers guilt."
a) The man refused to confers his guilt.
b) The man emphatically refused to confers guilt.
c)The man told that he did not confers guilt.
d) The man was stubborn enough to confers guilt.