

# Previous Year NHPC Question Paper

## GENERAL AWARENESS

1. who won the US open 2008 womens title.....serena williams
2. who got the highest price in IPL 08 bid of players...MSD
3. world rank of india in cotton production...2 or 3 according to diff books.
4. writer of Enchantrance of Florence .....sulman rushdie
5. writer of argumentating Indian.....amartya sen
6. satyamev jayte has been taken from ....Mundaka upnishad
7. in april 2008 Pak tested .....shaheen 2
8. UN gen secretary is chosen by.....General assembly
9. which of the following has the description about kalinga war...13th rock edict 261 B.C.
10. amartya sen got Nobel prize for branch of economics.....development economics
11. first women president in any org. in india.....Anne Besent
12. which planet is known as red planet..... mars
13. members of nobel prize foundation belongs to.....sweden
14. plants absorb during photo synthesis.....CO<sub>2</sub>
15. which one belongs to Yamini krishnamurti.....Bharat natyam
16. first factory in india.....
17. New games in SAF games 2010.....
18. which government body take decision about revenue distributionbetween state and central government.....finance commission.
19. higest legal officer in union government.....attorney genral
20. how many are the fundamental duties of a Indian citizens
21. which is not categorized in infrastructure ...1 power sector 2 food sector 3....4....
22. whre is rajiv Gandhi youth welfare centre.....name the state

## Technical Aptitude

There were very standard and basic questions in this section covering the entire syllabus of mechanical engineering (B Tech/B E) but some subjects got more emphasis with 8 to 12 questions from each subject like theory of machines, engineering mechanics, production technology, strength of materials, IC engines, thermodynamics. Apart from it 2 or 3 questions were from each of 30 to 40 subjects .

Some questions.....

1. Zeroth law of thermodynamics
2. Why moderators are used in nuclear power plant
3. Glass plate is opaque for..?
4. Pelton wheel is best suited for....high head low discharge
5. A circular plate of half the radius of larger circular plate( $r=6$ ) is cut from it(crescent shape). Find the location of new C.G.
6. APF for HCP
7. If width of cantilever beam is halved deflection would be.....

# Previous Year NHPC Question Paper

8. Area under stress strain curve up to fracture point .....toughness
9. Bearing characteristics.....
10. Break even point is intersection of following lines.....
11. Enthalpy remains constant during.....throttling
12. Vegetable oil can be employed in ....type of IC engine
13. Name the circle from which involute profile is generated
14. Question on Newton s law of viscosity
15. Fluid is .....four options describing fluids
16. Question on coeff of thermal expansion, thermal stress, ratio in young mod was given
17. What do we do with queing theory
18. Why does white metal is used in bearings.....
19. 8 to 12 Qs were from heat treatment , steel compositions and iron carbon diagram
20. What is effort of governor?
21. Function of bleeding steam in boilers.
22. Does shaft weight affect torque transmitted?
23. More CO will be produced in 1 idling 2 cruising 3 slowdown 4 accelerating
24. Pascal law is applicable to .....static fluids
25. Which one of following is a 1.thermodynamic 2. Intensive property...4 options each Q
26. Type of tress in torque transmission....
27. Why crowning in pulleys is done
28. Hydrodynamic lubrication
29. PERT stands for.....
30. Al Ni Co is magnetic or not
31. Shear angle in metal cutting..
32. Why Ni is added to steel ,copper?
33. Why Ni+cu is added to steel n iron
34. What are allotropic changes...
35. What happened at recrystallisation temperature
36. In cupola furnace molten metal accumulates in.....
37. What are fully killed steels?
38. Question on screw thread angle?
39. What does radius of mohr circle indicate?
40. In uniaxial stress max shear stress .....
41. No of elastic coefficient.....
42. Q on creep and fatigue
43. If helical spring is halved , deflection will be.....
44. Q on projectile motion ....at 45 deg highest point was given...range?
45. Why only rocket engines are used in satellite lauch....4 option
46. String diagrams are used in.....
47. Water hammer occurs in.....
48. Various pipes connected in series...4 conditions
49. What is surging?
50. Velocity of fluid layer adjacent to flat surface in laminar flow

## Previous Year NHPC Question Paper

51. How do we measure the velocity of fluid in pipe...name the correct instrument
52. Question on Archimedes principle ..condition of floating body
53. Condition of irrotational flow...
54. Condition of stream line flow...
55. Wet bulb depression is....
56. Internal energy is a function of temp only
57. Isentropic process....reversible adiabatic process
58. Higher octane no. means.....
59. Thermocouple works on.....sebeck effect
60. Name the insulator material used in spark plug
61. Ball socket joint is.....type of pair
62. Which of following is a lower pair
63. Q,s from theories of failure