

BHEL PAPER ON 10th AUGUST AT SECUNDERABAD

Hi friends today I have taken BHEL exam. I would like to give u the details of the written test. It comprises of 2 sections technical (120) and aptitude (120), total 240 (Test duration 150 minutes). Here I will post the questions as far as I remember. I am from mechanical stream. Paper is easy and many are direct questions, only factor concerned is the time.

SECTION-I----TECHNICAL

1. Critical load acting axially on a long column

Ans: $(\pi)^2 * E * I / L^2$

2. Relation between moment of area and radius of gyration

Ans: $I = AK^2$

3. Cup shaped components are produced using which operation

Ans: drawing

4. A sheet of Al alloy having 2mm thickness is welded using which process

Ans: TIG

5. Two gears having teeth 18 and 40 and center distance 56...what is the module?

6. In thick cylinders, which of the following is true[*S stands for sigma*] (a) $\sigma_t > \sigma_r$ (b) $\sigma_t = \sigma_r$ (c) $\sigma_t < \sigma_r$

7. In a plane stress condition, if the centre of Mohr's circle coincides with the origin then which is true...
....the relation between σ_x and σ_y is asked

8. Lame's theorem.... $F_1/\sin A = F_2/\sin B = F_3/\sin C$

9. Young's modulus value for steel=200Gpa

10. Thermal conductivity of silver=400w/m0K

11. Fouling factor formula..... $F.F = 1/U_{dirty} - 1/U_{clean}$

12. Relation between notch sensitivity factor and theoretical stress concentration factor

13. Effectiveness of heat exchanger definition

14. Reynolds's number formula

15. Clinical thermometer is which order system0,1,2, or 3

16. Piezometric transducer is used to find which signals—static or.... dynamic

17. Peclet number formula= $Re \cdot Pr$
18. Radiation energy emitted, $E_{emitted} = S \cdot A \cdot T^4$
19. Which of the following is not related to CI engine
(a) Fuel pump (b) carburetor (c).. (d) none
20. Two connected in series having stiffness's K_1, K_2
 $K_{equivalent} = \frac{K_1 \cdot K_2}{K_1 + K_2}$
21. Magnification factor at resonance, $MF = \frac{1}{2\zeta}$
22. Corioli's component value, $= 2v\omega$
23. Hooks law holds good upto
(a)elastic point (b)UYP(c)LYP(d)Failure
24. Meshing of two gears fail if
(a)materials are different(b)
25. A beam whose one end is fixed and other is free is
(a)cantilever (b)ss(c)Udl(d)none
26. Deflection at the free end of cantilever $= \frac{PL^3}{3EI}$
27. Shear stress, twisting moment given ,find diameter....
28. Formula for polar moment of inertia of a hollow shaft
29. Formula for logarithmic decrement
30. A problem based on the above formula
31. Two question on transmissibility($\frac{W}{W_n}$ ratio)
32. Question from vibration...mass,k given ...cal frequency
33. Two more questions, one each from riveted joints and cotterjoint
34. $1BHN = N/m^2$
35. Temperature limits, given to find Carnot's efficiency
36. Metacentric height is the distance between Metacentre and -----

Ans: Centre of gravity

37. Force and displacement vector given to find out the work done

38. Rota meter is used to find

(a)flow(b)velocity(c)pressure(d)density

In addition, 10-12 were asked from electrical basics.

SECTION-II----- APTITUDE

VERBAL

Antonyms (5)-Facetious, Benign...

Synonyms (5)-very easy

Fill in the blanks (5):-a bit tough

2 Comprehension passages

Correction of sentences-(5)

Reasoning (5)

This section is very easy that u can start of the exam with.

Hope this is helpful to u all.