

## Brakes India Placement Paper - 1

BRAKES INDIA LIMITED

STAGE I:

TEST I : GENERAL APTITUDE : 15 MINS : 25 QUESTIONS

IN THE BELOW QUESTIONS BLOCKED WORDS WERE ANSWERS)

Commerce minister of India, -----( Arun jaitley)

First car using CRDI is-----(hyundai Accent, Skoda Octavia,)

First Indigenous car sold in European market------(tata indica, M&M scorpio, fiat palio)

Selection Committee Leader of Indian cricket team ------(kiran more, syed kirmani, brijesh patel)

Governor of RBI(Reserve Bank of India)------(s.rangarajan, sivathanu pillai, y.v.reddy, bimal jalan)

WTO meeting recently held at -----(Cancun, Jakarta, Geneva)

Economic Growth Rate is measured by------(GDP,inflation,GNP)

HAL's(Hindustan Aeronautical Limited) indigenous aircraft ------(Tejas,trishul,danush)

Which European country does not have the same currency------(U.K,spain,france,germany)

Meaning of URGE------(desire,strength,forceful demand)

Opposite of PHENOMENAL------(ordinary)

Find in which part Grammatical /idiomatic error occurs in the sentence

Yesterday while/crossing the road/he was/ run out by a lorry

A B C D

13.ISRO chairman------(madhavan nair)

14.opposite of "obscure"(explicit)

15.Meaning of apprehend (fear)

16. what is the name of the robot presented by japan to Indonesia- azimo Honda

17. it is very cold outside. You must take some clothes with you.

Ans: combined sentence will start with

As it is very cold outside.

18. By the time we reached the station the train had departed.(ans )

STAGE II:

TEST II : TECHNICAL TEST : 30 min : 75 QUESTIONS

In V belt drive contact is made on

1) bottom 2) sides 3)bottom and sides

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Section modulus of hollow shaft  
 $\frac{\pi}{32}(D^4-d^4)/D$

3. Down milling is also called Climb milling
4. Drilling is an example of Oblique cutting
5. Section view of 'C' washer
6. Deflection of simple supported beam carrying UDL  $\frac{5}{384} \frac{Wl^4}{EI}$
7. Flexible coupling is used because
8. Washer is used to provide bearing area
9. Initial tension is considered in
  - 1) tension springs 2) Compression springs 3) Both
10. Kelvin plank law deals with 1) Conservation of work into heat 2) conservation of heat into work
11. Soldering alloy consists of Tin and lead
12. Why chromium is used in steel alloys? Corrosive resistance
13. High cutting speed is obtained while machining
  - 1) HSS 2) carbide 3) CBN
14. Metal forming is an example of chipless machining
15. Top rake angle is provided for Easy removal of chip
16. Alloying is done for increased strength and application
17. Transformer is used welding 1) to convert AC to AC
  - 2) AC to DC 3) DC to AC
18. spheroidal cast iron is getting from Grey cast iron by adding Mg
19. In throttling process Enthalpy constant
20. 70 cc of engine means swept volume
21.  $\tan(\alpha) = \mu$  coefficient of friction
22. Geneva mechanism is used for Intermittent motion
23. In NC system for profile machining
  - 1) point to point 2) contour motion 3) paraxial m
24. In centreless grinding, the grinding wheel and the regulating wheels rotate in the same direction .

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25. Centroidal distance of a semi circle  $\frac{4r}{3\pi}$

26. Highest packing factor: FCC

27. Which chart takes care of control attributes : P chart, C chart, R chart

28. Fixture is used for holding the workpiece without disturbing the tool path

29. Code for circular interpolation G 02

30. Order of transmission in a car: EFCPD

Engine Flywheel Clutch propeller shaft Differential

31. Reverse gear has less speed because

1. More speed is not necessary in reverse gear  
2. Steering is difficult in the reverse direction  
3. less space availability  
4. Design simplification

32. which of the following has no unit: specific gravity

33. use of annealing : to relieve stresses

34. question on stress concentration

4 figures: one with the notch is the answer

35. how many squares are there in this figure: 14

36. pulley question:  $w = f/2$

37. equivalent stiffness of springs in series:  $k_1 k_2 / (k_1 + k_2)$

38. Deflection = 5 mm. stiffness = k, then applied load is

5 k

39. bevel gear is used in differential

Diagram Questions (Technical) 20 Questions like

what is the stress in xx section? 1) bending 2) axial loading 3) both

General Aptitude questions like

1) What is the no of straight lines in this diagram,

2) Find NO of Triangles

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1st 20 questions : Diagrammatic questions from SOM,E-MECH,DESIGN,ENGG DRAWING

STAGE III:

GROUP DISCUSSION:

Quality will improve marketing of a product.

Elimination round....Those who have dominated were shortlisted. Same topic for all the groups. ....12 out of 25 were shortlisted.

STAGE IV:

Interview Questions :

TECH INTERVIEW 1 : MANUFACTURING : 20- 30 MINS

TECH INTERVIEW 2 : DESIGN : 20-30 MINS

HR INTERVIEW : 15 MINS

NO ELIMINATION AT THE END OF EACH INTERVIEW...CUMMULATIVE....

1. Questions on field of interest

2.stress-strain diagram

Heat treatment –All processes

Types of springs

What is spring constant

What is Pascal's Law?

Bernoulli's theorem and it's application

Newton's three laws of motion

Reynolds no? where is it used? Can it be used in brakes?

Boyle's law,charles law

In a balloon, both pressure and volume varies when u blow it. How will u apply boyle's law in this situation ?

favourite subject in +2(physics)

focal Length, unit of power of lens(dioptre)

Types of protective coating

specific gravity? Unit?

what is 1 micron?

screw guage and vernier caliper

what r the CAD software u know?

Given a component,asked the material and the manufacturing process

HR Questions :

what is ur caste?

family details

who inspired u to study?

achievements

smoking?drinking?

Personality traits