**Q-JSPIDERS**

**L&T Infotech TEST PATTERN AND IMPORTANT QUESTIONS**

**Pattern of Written Exam**:

|  |  |
| --- | --- |
| **Section** | **No. of questions** |
| Reasoning | 20 |
| Quant | 20 |
| Verbal | 20 |
| **Total** | **60** |

**Reasoning Topics:**

easy solving puzzles, graphs, charts, tables, line arrangements, statement-assumption, figure analogy, statements and conclusion figure analogy etc.

**Quantitative Aptitude:**

algebra, time & work, time, speed & distance, arithmetic, percentages, profit & loss, geometry, ratio and proportions, boats and stream, partnership, mixtures and allegation, Average, etc

**Verbal:**

easy paragraph, fill in the blanks with articles, antonyms and synonyms, sentence completion etc

what is diode?

how many type of biasing in diode and what are they?

what is zener diode?

what is clipper?

What is difference between zener diode and clipper?

Draw the o/p of clipper?

practicle use of clipper and zener diode?

what is transistor?

What is rectifier?

draw transistor?

Draw bridge rectifier?

waht is smicnductr mde of?

**Some Important Questions:**

1. Type A, 12 kg of rice worth Rs. 40/kg is mixed with Type B, rice worth Rs. 24/kg. What should be the quantity of Type B rice, if the mixture is sold at Rs. 45/kg with 25% profit added in it?

* 18 kg
* 48 kg
* 4 kg
* can't say

1. A person spends 1/7th of his salary on travel,1/3rd of the remaining on food, he then spends 1/4th of the remaining on rent. Finally he puts 1/6th of the remaining as a monthly savings, after which he has 25000 left. What is his salary (in Rs.)?

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* 70,000
* 14,000
* 84,000
* 26,000

1. Point C(x,y) divides the distance AB with point A(8,12) and point B(16, 18) in a ratio of 3:5, with AC being shorter than BC. What are the co-ordinates of C?

* (12,15)
* (14.5, 12.5)
* (14.5, 12.5)
* (11,14.25)

1. How many terms of the sequence -12, -8, -4,…so on, to make a sum of 120?

* 11
* 12
* 10
* 13

1. The value of a machine depreciates from Rs 32,768 to Rs 21,952 in three years. What is the rate % of depreciation?

* 11%
* 12.25%
* 12.5%
* 33%

1. A TV set listed at Rs 3200 is sold to a retailer at a successive discount of 25% and 15%. The retailer desires a profit of 20%, after allowing a discount of 10% to the customer. At what price should he list the TV set (in Rs.)?

* 2720
* 2448
* 2040
* 2133

1. A student is to answer 10 out of 12 questions in an examination such that he must choose at least 4 from the first five questions. The number of choices available to him is

* 140
* 280
* 196
* 346

1. A rectangular playground with the dimension of 50m X 30 m is surrounded by a 5 m wide road all the sides. What is the area of the road?

* 600 sq. m.
* 500 sq. m.
* 450 sq. m.
* 900 sq. m.

1. It takes 5 sec. for a clock to strike at 5’o clock. If the striking intervals are uniform how much time will it take to strike 9’o clock (in sec.)?

* 9
* 10
* 11
* 12

1. From the top of the Tower which is 240m high, if the angle of depression of a point on the ground is 30°, then the distance of the point from the foot of the Tower is

* 40 √ 3
* 80 √ 3
* 120 √ 3
* 240 √ 3
  1. If a boat is moving in upstream with velocity of 14 km/hr and goes downstream with a velocity of 40km/hr, then what is the speed of the stream?  
     (a) 13 km/hr  
     (b) 26 km/hr  
     (c) 34 km/hr  
     (d) none of these  
     Ans: A  
       
     2. Find the value of ( 0.75 \* 0.75 \* 0.75-0.001 ) / ( 0.75 \* 0.75-0.075 + 0.01)  
     (a) 0.845  
     (b) 1.908  
     (c) 2.312  
     (d) 0.001  
     Ans: A  
       
     3. A can have a piece of work done in 8 days, B can work three times faster than the A, C can work five times faster than A. How many days will they take to do the work together ?  
     (a) 3 days  
     (b) 8/9 days  
     (c) 4 days  
     (d) can,t say  
     Ans: B  
       
     4. A car travels a certain distance taking 7 hrs in forward journey,during the return journey increased speed 12km/hr takes the times 5 hrs.What is the distance travelled  
     (a) 210 kms  
     (b) 30 kms  
     (c) 20 kms  
     (c) none of these  
     Ans: B  
       
     5. Instead of multiplying a number by 7, the number is divided by 7. What is the percentage of error obtained ?  
       
     6. Find (7x + 4y ) / (x-2y) if x/2y = 3/2 ?  
     (a) 6  
     (b) 8  
     (c) 7  
     (d) data insufficient  
     Ans: C  
       
     7. A man buys 12 lts of liquid which contains 20% of the liquid and the rest is water. He then mixes it with 10 lts of another mixture with 30% of liquid.What is the % of water in the new mixture?  
       
     8. If a man buys 1 lt of milk for Rs.12 and mixes it with 20% water and sells it for Rs.15, then what is the percentage of gain?  
       
     9. Pipe A can fill a tank in 30 mins and Pipe B can fill it in 28 mins.If 3/4th of the tank is filled by Pipe Balone and both are opened, how much time is required by both the pipes to fill the tank completely ?  
       
     10. If on an item a company gives 25% discount, they earn 25% profit. If they now give 10% discountthen what is the profit percentage.  
     (a) 40%  
     (b) 55%  
     (c) 35%  
     (d) 30%  
     Ans: D  
       
     11. A certain number of men can finish a piece of work in 10 days. If however there were 10 men less itwill take 10 days more for the work to be finished. How many men were there originally?  
     (a) 110 men  
     (b) 130 men  
     (c) 100 men  
     (d) none of these  
     Ans: A  
       
     12. In simple interest what sum amounts of Rs.1120/-in 4 years and Rs.1200/-in 5 years ?  
     (a) Rs. 500  
     (b) Rs. 600  
     (c) Rs. 800  
     (d) Rs. 900  
     Ans: C  
       
     13. If a sum of money compound annually amounts of thrice itself in 3 years. In how many years will it become 9 times itself.  
     (a) 6  
     (b) 8  
     (c) 10  
     (d) 12  
     Ans A  
       
     14. Two trains move in the same direction at 50 kmph and 32 kmph respectively. A man in the slower train observes the 15 seconds elapse before the faster train completely passes by him.What is the length of faster train ?  
     (a) 100m  
     (b) 75m  
     (c) 120m  
     (d) 50m  
     Ans B  
       
     15. How many mashes are there in 1 squrare meter of wire gauge if each mesh is 8mm long and 5mm wide ?  
     (a) 2500  
     (b) 25000  
     (c) 250  
     (d) 250000  
     Ans B  
       
     16. x% of y is y% of ?  
     (a) x/y  
     (b) 2y  
     (c) x  
     (d) can,t be determined  
     Ans: C  
       
     17. The price of sugar increases by 20%, by what % should a housewife reduce the consumption of sugarso that expenditure on sugar can be same as before ?  
     (a) 15%  
     (b) 16.66%  
     (c) 12%  
     (d) 9%  
     Ans B  
       
     18. A man spends half of his salary on household expenses, 1/4th for rent, 1/5th for travel expenses, the man deposits the rest in a bank. If his monthly deposits in the bank amount 50, what is his monthly salary ?  
     (a) Rs.500  
     (b) Rs.1500  
     (c) Rs.1000  
     (d) Rs. 900  
     Ans C  
       
     20. The population of a city increases @ 4% p.a. There is an additional annual increase of 4% of the population due to the influx of job seekers, find the % increase in population after 2 years ?  
       
     21. The ratio of the number of boys and girls in a school is 3:2 Out of these 10% the boys and 25% of girls are scholarship holders. % of students who are not scholarship holders.?  
       
     22. 15 men take 21 days of 8 hrs. each to do a piece of work. How many days of 6 hrs. each would it take for 21 women if 3 women do as much work as 2 men?  
       
     (a) 30  
     (b) 20  
     (c) 19  
     (d) 29  
     Ans: A  
       
     23. A cylinder is 6 cms in diameter and 6 cms in height. If spheres of the same size are made from thematerial obtained, what is the diameter of each sphere?  
     (a) 5 cms  
     (b) 2 cms  
     (c) 3 cms  
     (d) 4 cms  
     Ans C  
       
     24. A rectangular plank (2)1/2 meters wide can be placed so that it is on either side of the diagonal of asquare shown below.(Figure is not available)What is the areaof the plank?  
     Ans :7\*(2)1/2  
       
     25. The difference b/w the compound interest payble half yearly and the simple interest on a certain sum lent out at 10% p.a for 1 year is Rs 25. What is the sum?  
     (a) Rs. 15000  
     (b) Rs. 12000  
     (c) Rs. 10000  
     (d) none of these  
     Ans C  
       
     26. What is the smallest number by which 2880 must be divided in order to make it into aperfect square ?  
     (a) 3  
     (b) 4  
     (c) 5  
     (d) 6  
     Ans: C  
       
     27. A father is 30 years older than his son however he will be only thrice as old as the son after 5 years what is father,s present age ?  
     (a) 40 yrs  
     (b) 30 yrs  
     (c) 50 yrs  
     (d) none of these  
     Ans: A  
       
     28. An article sold at a profit of 20% if both the cost price and selling price would be Rs.20/-the profit would be 10% more. What is the cost price of that article?  
       
     29. If an item costs Rs.3 in ,99 and Rs.203 in ,00.What is the % increase in price?  
     (a) 200/3 %  
     (b) 200/6 %  
     (c) 100%  
     (d) none of these  
     Ans: A  
       
     LOGICAL SECTION  
     Directions: For questions 30-39 fill the missing number or letter in the given series  
       
     30.a, c, e, g, \_  
     (a) h  
     (b) i  
     (c) d  
     (d) j  
     Ans: B  
     31. a, e, i, m, q, u, \_, \_  
     (a) y,c  
     (b) b,f  
     (c) g,i  
     (d) none  
     Ans: A  
     32. ay , bz , cw , dx ,\_\_  
     (a) gu  
     (b) ev  
     (c) fv  
     (d) eu  
     Ans: D  
       
     33. 1, 2, 3, 5, 7, 11, \_\_

34. A bus is hired at the rate of Rs. 320 per day for a picnic. Since some people did not turn up, the average contribution was Rs. 48 more per person per day than before. How many people were expected, and how many turned up?   
a.) 8, 5 b.) 5, 2 c.) 10, 4 d.) 5, 4  
  
35. A box contains 6 red beads and 5 blue beads. What is the smallest number of beads that must be picked at a time, without looking, to be sure of getting two of the same colour?  
a.) 3 b.) 7 c.) 2 d.) 11   
  
36. 1, 8, 9, 64, 25, 216, ‘?’, ‘?’  
  
a.) 49, 64 b.) 343, 64 c.) 343, 81 d.) 343, 512 e.) 49, 512  
  
37. 3X/5Y = 5Y/3X…..Find the value of X/Y  
a)3/5 b)5/3 c)2/5 d)5/2  
  
38. There are two water tanks A and B, A is much smaller than B. While water fills at the rate of 1 liter every hour in A, it gets filled up like, 10, 20, 40,80, 160…..in tank B. 1/8 th of the tank B is filled in 22 hours. What is the time to fill the tank fully?  
a) 26 B) 25 c) 5 d) 27  
  
39. In a group there are 4 men. The average age of the four before 2 years is 55, after some days one man is added and his age is 45. What is the average age of all?  
a) 55 b) 54.5 c) 54.6 d) 54.7  
  
40. A man travels from A to B at 4 mph over a certain journey and returns over the same route to A, at 5 mph. What is his average speed for the journey?  
a) 4.44 mph b) 4.8 mph c) 4.887 mph d)5 mph