

Worksheet - CH-1

Number System

Answers :-

Ans of 1. 12(c) sol: Largest 5 digit number = 9999
 Largest 5 digit number with 3 distinct digits = 99987
 \therefore Their difference is $99999 - 99987 = 12$

Ans of 2. 9965

Ans of 3. 99987 sol: Largest three digits are 9, 8, 7
 When arranged in largest 5 digit is - 99987

Ans of 4. $952420 < 9528420$

Ans of 5. Top smallest digits :- 1, 2, 3
 Smallest 3 digit number using these digits \Rightarrow 123

Ans of 6. If we write no. 111 its reverse it stays 111 only
 and thus its the smallest 3 digit no. which does not
 change when written reverse

Ans of 7: 756496 : 3578160 : 3808761 ; 5446837 ; 5949107
5174985 ; 9524420

Ans 8. 9798934 ; ~~3440557~~, 5977333, 5655237, 3446116
3440557; 2049014, 544696

Ans 9. (i) 99987

(ii) 999,876

(iii) 9,999,876

(iv)

Ans 10. (i) False Reason: Largest telephone no. ~~with~~ using digit - 53,2,7,0
~~is 8~~

Ans 10. (i) True

Ans 10. (ii) True

Ans 10. (iii) True

Ans 11. (i) Smallest - 18 Largest - 59785

(ii) Smallest - 100 Largest - 89423

(iii) ~~(iv)~~ Smallest - 111 Largest - 7528

(iv) Smallest - 124 Largest - 44401002

Ans 12. (i) 4017, 6732, ~~19547~~, 15012, 19547, 25134

(ii) 2019, 2199, 5674, 56107, 76906

Ans 13. (i) 65137, ~~56488~~ 43850, 261197, 25091, 3019

(ii) 73317, ~~7326~~, 82253, 732614972, 2417

Ans 14

Ans 14. average screws manufactures in a day = 2825

" " " " 30 days = 2825 x 31

∴ The average screws manufactures in mth of Jan 2006 is 87,575

Ans. 15. Difference is 983563
Greater no. is 1398357
smaller no. = $1398357 - 983563 = 414,794$

Ans. 16. Total mass of 8 packets = 42400g
each packet's mass = $\frac{42400}{8} \text{ g} = 5,300$

Ans. 17. ₹250 per month so in 3 yr ~~3 x 365 days~~ 3 x 12 mt.
the saving is $250 \times 350 \times 12 = 1050,000$

Ans. 18. Total money with her = Merchant = 78592
40 gms dia each price = 1200
40 gms dia price = 48000
Total money left after purchase = $48078592 - 48000 = 30,592$

Ans. 19. One box weight = 4kg 500g
No. of boxes that can be loaded in cart = 177
because $177 \times 4500 = 796500 \text{ g} = 796.5 \text{ kg}$
and cart limit is 800kg
∴ 177 boxes can be loaded

Ans. 20. Till now his runs is = 6980
His goal is = 10000
Runs he need more = $10000 - 6980 = 3020$

Ans of 21-

Capacity of glass = 25ml
" " vessel = 41500ml
= 4500ml

No. of glass that can be filled = $\frac{4500}{25} = 180$

∴ 180 glasses can be filled when capacity of glass is 25ml

When capacity of glass is 50ml then,

Capacity of glass = 50ml

Capacity of vessel = 41500ml = 4500ml

No. of glasses can be filled = $4500 \div 50 = 90$

Ans of 22

• First four are = 9987

• Last three are = 355

• Remaining are distinct so they are = 642

~~• Phone no. is 9987642355~~

• For greatest possible phone number, we need to consider the greatest of digit all three distinct and arrange them in descending order it will be 642
∴ Possible largest no. is 9987642355

Ans of 23

No. of tickets sold on first day = 1094

No. of tickets sold on second day = 1812

" " " " " third " = 2050

No. of tickets sold on 4th day = 2751

Total tickets sold = $1094 + 1812 + 2050 + 2751 = 7707$

∴ Total tickets were sold on all four days = 7707

Ans of 24 Total money with merchant = 78592
40 radio are there.
1 radio price = 1200
40 radio price = 4800
Money left with merchant = $78592 - 4800 = 30,592$

Ans of 25 ~~A~~ Incorrect answer is = $7236 \times 65 = 470340$
correct answer is = $7236 \times 56 = 405216$
~~B~~ Difference = $470340 - 405216 = 124$

∴ Incorrect Answer is 124 more than correct answer