Aptitude

1) Find the Next Number 2,6,12,20?

A. 24

B. 29

C. 42

D. 30

E. None of these

Solution: 30

Explanation: 2, 6, 12, 20 1 x 2, 2 x 3, 3 x 4, 4 x 5, (5 x 6) Answer is 30. Product of two consecutive natural numbers

2) The marked price of a radio is 30% more than its cost price. If a discount of 10% is given on the marked price, find the gain percent.

A. 20%

B. 17%

C. 19%

D. 21%

E. None of the above

Solution: B

Explanation: Given Let Cost Price = 100 Rs Marked price = 30 % more than Cost Price = 30 % of C.P + C.P = ((30 / 100) x 100) + 100 = 30 + 100

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= 130 Rs
Given Discount = 10 % of marked price
= (10 / 100) x 130
= 13 Rs
Selling Price = Marked Price - Discount
= 130 - 13
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3) There are two sections in a question paper each contains five questions. A student has to answer 6 questions. The maximum number of questions that can be answered from any section is 4. How many ways he can attempt the paper?

a) 50

b) 100

c) 120

d) 200

Solution: 200

Explanation: Possible ways in which he can attempt 6 questions are 5C4*5C2 = 50 5C3*5C3 = 100 5C2*5C4 = 5050+100+50 = 200

4) The HCF of two numbers is 24. The number which can be their LCM is

A. 84 B. 128 C. 120 D. 274

Solution: D

Explanation: Let the two numbers be x and y , HCF = 24 LCM = 1344

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HCF x LCM = xxy

24 \times 1344 = xy

xy = 32256

(x-y) = 80

x = 80+y

(80+y)xy = 32256

y^2 +80y -32256 = 0

y^2 +224y -144y -32256 = 0

y(y+224) -144(y+224) = 0

y = 114 \& -224

x = 80+114

x = 194

x+y = 194+80 = 274
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6) A person receives a sum of Rs. 2100 as interest for investing some amount at 10% p.a compounding annually for 2 years. Find the amount invested at the beginning?

A. 9000 B. 10000 C. 9500 D. 10500

Solution: B

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Explanation: Given Compound Interest = Rs.2100

Rate of Interest (r) = 10 % p.a

No.of years (n) = 2

To find , amount received at the beginning => principal

Compound Interest = P [ 1 + (r / 100)n- 1 ]

=> 2100 = P[ 1 + (10 / 100)2- 1 ]

=> 2100 = P[ (11 / 10)2- 1 ]

=> 2100 = P[ (11 / 10)2- 1 ]

=> 2100 = P[ (121 / 100) - 1 ]

=> 2100 = P[ 21 / 100 ]

=> 2100 x (100 / 21) = P
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Principal = Rs. 10000 Amount invested at the beginning = Rs. 10000

7) What is the value of c, If 8 is 4% of a, and 4 is 8% of b. c equals b/a.

A. 12 B. 1/4 C. 0.155 D. None of these

Solution: B

Explanation: Let be the 4% of a is 4a/100. Since this equals 8, we have 4a/100=8. Solving for a yields $a=8\times(100/4)=200$. Also, 8% of b equals 8b/100, and this equals 4. Hence, we have (8/100)×b=4. Solving for b yields b = 50. Now, c=b/a=50/200=1/4.

8) P, Q and R can do a work in 20, 30 and 60 days respectively. How many days does it need to complete the work if P does the work and he is assisted by Q and R on every third day?

A. 10 days B. 14 days C. 15 days D. 9 days

Solution: C

Amount of work P can do in 1 day = 1/20Amount of work Q can do in 1 day = 1/30Amount of work R can do in 1 day = 1/60 P is working alone and every third day Q and R is helping him Work completed in every three days = $2 \times (1/20) + (1/20 + 1/30 + 1/60) = 1/5$ So work completed in 15 days = $5 \times 1/5 = 1$ That is, the work will be done in 15 days

9) Manu, Manju and Maya can do a work in 90, 30 and 45 days respectively. If they work together, in how many days will they complete work?

A. 15

B. 10

C. 20

D. 25

Solution: A

Explanation: Manu, Manju and Maya together can do the work = 1/90 + 1/30 + 1/45 =1+3+2 /90= 1/15

So, They will complete the work in 15 days.

10) Ravi's salary was reduced by 25%. Percentage increase to be effected to bring the salary to the original level is

A. 20% B. 25% C. 33 1/3% D. 30%

Solution: C

Verbal Ability

Directions 1-5 : Pick out the most effective word from the given words to fill in the blank to make the sentence meaningfully complete

1. While facts are ______and data hard to come by, even scientists occasionally throw side the professional pretense of ______and tear into each other with shameless appeals to authority and arguments that shameless appeals to authority and arguments that are unabashedly ad hominid.

- a. elusive...objectivity
- b. establish...courtesy
- c. demonstrate .. neutrality
- d. ineluctable...cooperation
- ANS: (A)

2. While the disease is in ______state it is almost impossible to determine its existence by _____.

- a. a dormant ..postulate
- b. a critical...examination
- c. an acute ...analysis
- d. a latent...observation
- ANS: (d)
- 3. The storehouse was infested.....rats.
- A) by
- B) of
- C)
- D) in
- Ans: C

4. Please distribute these sweets.....the children

- A) in
- B) between
- C) amid
- D) among
- Ans: D

5. This custom seems to have originated.....and East European country A) in

B) from

C) by D) with Ans: A

6. Synonym:-Opulous

A. Popular

- B. Respectful
- C. Populated(thickly)
- D. hard working

Solution: C

7. Read the following passage carefully and answer the questions given below it. Certain words are printed in bold to help you to locate them while answering some of the questions.

The yearly festival was close at hand. The store room was packed with silk fabrics. Gold ornaments, clay bowls full of sweet curd and platefuls of sweetmeats. The orders had been placed with shops well in advance. The mother was sending out gifts to everyone. The eldest son, a government servant, lived with his wife and children in far off lands. The second son had left home at an early age. As a merchant he travelled all over the world. The other sons had split up over petty squabbles, and they now lived in homes of their own. The relatives were spread all across the world. They rarely visited. The youngest son, left in the company of a servant, was soon bored and stood at the door all day long, waiting and watching. His mother, thrilled and excited, loaded the presents on trays and plates, covered them with colourful kerchiefs, and sent them off with maids and servants. The neighbours looked on.

The day came to an end. All the presents had been sent off. The child came back into the house and dejectedly said to his mother, "Maa, you gave a present to everyone, but you didn't give me anything !" His mother laughed, "I have given all the gifts away to everyone, now see what's left for you." She kissed him on the forehead. The child said in a tearful voice, "Don't I get a gift ?" "You'll get it when you go far away."

"But when I am close to you, don't I get something from your own hands ?" His mother reached out her arms and drew him to her. "This is all I have in my own hands. It is the most precious of all."

Why did the woman's second son travel?

- A. He was restless by nature
- B. He did not want to stay at home
- C. He was rich and could afford to travel
- D. His job was such that he had to travel
- E. None of these

Solution: D

- 8. What did the youngest child do while his mother was busy?
- 1. He waited for a chance to steal some sweetmeats.
- 2. He pestered his mother to give him a present.
- 3. He stood at the door with servants.
- A. Only 1
- B. Only 2
- C. Both 1 and 3
- D. Only 3
- E. None of these

Solution: D

9. Although he puts in......of overtime and takes few holidays, he......cannot support his family.

- A. sufficient, however
- B. lot, besides
- C. much, thus
- D. plenty, still

E. frequency, yet

Solution: D

10. ANTONYM:-EXODUS

A. Influx

B. Home-coming

C. Return

D. Restoration

Solution: A

Reasoning

1) If "football" is "cricket" ,"cricket" is "basketball" ,"basketball" is "volleyball","volleyball" is "khokho" and "khokho" is cricket, which is not a ball game?

- A. cricket
- B. football
- C. khokho

D. basketball

Answer: A

2) Which of the following is a recursive set of production

A. S --> a|A, A --> S B. S --> a|A, A --> b C. S -->aA, A-->S D. None of these

Solution: C

3) 3 Which term of the series 5, 10, 20, 40, is 1280?

- A. 10th
- B. 9th
- C. 8th
- D. None of these

Solution: B

Explanation: Ann ,Ben ,Charlie ,David ,Elle ,Feynman ,Gyle and Harry are sitting in a row facing North.

(i) Ann is fourth to the right of Elle

(ii) Harry is fourth left of David

(iii) Charlie and Feynman , which are not at the ends are neighbours of Ben and Elle respectively.

(iv) Harry is immediate left of of Ann and Ann is the neighbour of Ben.

4) In following question, a number series is given with one term missing. Choose the correct alternative that will same pattern and fill in the blank spaces.: 0.5, 1.5, 4.5, 13.5,

- A. 45.5
- B. 39.5
- C. 30.5
- D. 40.5

Solution: D

5) The 'M' state government has decided hence forth to award the road construction contracts through open tenders only. Courses of action:

I. The 'M' state will not be able to get the work done swiftly as it will have to go through tender and other procedures.

II. Hence forth the quality of roads constructed may be far better.

A. If only I follows

B. If only II follows

C. If either I or II followsD. If neither I nor II followsE. If both I and II follow

Solution: D

6) Find the next term in this series -2,3,6,18,108,?

A. 54

B. 1002

C. 216

D. 1944

Solution: D

7) In a certain language, RIPPLE is written as 785514. What is the code of PILLER in that language?

A. 561147 B. 561174 C. 581174 D. 581147

Solution: D

8) Pointing to a girl in the photograph, Amar said, "Her mother's brother is the only son of my mother's father." How is the girl's mother related to Amar?

- A. Mother
- B. Sister

C. Aunt

- D. Grandmother
- E. None of these

Solution: E

9) The product of 4 consecutive even numbers is always divisible by:

- A. 600
- B. 768
- C. 864
- D. 384

Solution: D

To solve this question, we need to know two facts.

Fact 1: The product of 4 consecutive numbers is always divisible by 4!.

Fact 2: Since, we have 4 even numbers, we have an additional 2 available with each number.

Now, using both the facts, we can say that the product of 4 consecutive even numbers is always

divisible by, =(24)×4!=(24)×4! =16×24=16×24 =384

10) If the sum of 4 times a number A and 3 times a number B is equal to the sum of number B and seven times the number A, then what is the value of A:B?

A. 2:3 B. 3:2 C. 4:3 D. 3:4

Solution: A