

## Huawei Model Paper

1. A beats B by 50m in a race of 500m, then B beats C by 25m in a race of 500m. Find the distance by which A beats C in a race of 400?

- A. 53 m
- B. 60 m
- C. 58 m
- D. 55 m

Explanation:

A beats B in 500m race by 50m

so, for every 10 m race A beat B by 1m.

So, in 400 m race A beat B by 40m.

In a case of B & C, B beats C by 25m in 500m race.

So, B beats C by 1m in 20 m race.

Now, in a 400m race B Beats C by 18m.

In a 400m race, A beats B by 40m & B beats C by 18m...

So, A beats C by 58m.

2. Pipe A takes 16 min to fill a tank. Pipes B and C, whose cross-sectional circumferences are in the ratio 2:3, fill another tank twice as big as the first. If A has a cross-sectional circumference that is one-third of C, how long will it take for B and C to fill the second tank? (Assume the rate at which water flows through a unit cross-sectional area is same for all the three pipes.)

- A.  $\frac{32}{13}$
- B.  $\frac{1}{13}$
- C.  $\frac{20}{13}$
- D. none

Explanation:

Let the cross sectional circumference of A is  $x$  so its area will be proportional to  $x^2$ ,

Now it is given that A has a cross-sectional circumference that is one-third of C,

so cross sectional circumference of C will be  $3x$ , and its area will be proportional to  $9x^2$ .

According to the given condition, cross sectional circumference of B will be  $(\frac{2}{3}) * 3x = 2x$ , so its area will be proportional to  $4x^2$ .

Since pipe A for which cross sectional area is proportional to  $x^2$ , fills the tank in 16 min.

So pipe B and C for which sum of cross sectional area is proportional to  $13x^2$ , will fill the same tank in  $\frac{16}{13}$  min.

but second tank is twice big in size so time required =  $2 * \frac{16}{13} = \frac{32}{13}$  min.

3. HCL prototyping machine can make 10 copies every 4 seconds. At this rate, how many copies can the machine make in 6 min.?

- A. 900
- B. 600

- C. 360
- D. 240
- E. 150

Explanation:

10 copies--4 sec

10/4 copies--1 sec

$(10/4) * 6 * 60$ --  $1 * 6 * 60$  sec

900 copies--6 min.

4. If  $2p/(p^2-2p+1) = 1/4$ ,  $p \neq 0$ , then the value of  $p+1/p$  is:

- A. 4
- B. 5
- C. 10
- D. 12

Explanation:

$P^2-2p + 1 = 8p$  (given)

$\Rightarrow P + (1/p) = (p^2 + 1)/p = (p^2 + 1 + 2p - 2p)/p$ .

$\Rightarrow 10p/p=10$ .

5. Find out the ratio of milk to that of water, if a mixture is formed after mixing milk and water of 3 different vessels containing the mixture of milk to that of water in the proportion 3:2, 7:3, 9:2 respectively.

- A. 110:97
- B. 233:97
- C. 77:97
- D. None

Explanation:

Let total mix of milk and water =110 liter.

So, in vessel v1 =  $110/5 \times 3=66$ -liter milk and  $110/5 \times 2=44$ -liter water.

Similarly, in v2 = 77-liter milk and 33-liter water, in v3=90-liter milk and 20-liter water.

So, the total ratio of milk and water is=233:97.

6. A warehouse had a square floor with are 10,000 sq. meters. A rectangular addition was built along one entire side of the warehouse that increased the floor by one-half as much as the original floor. How many meters did the addition extend beyond the original building?

- A. 10
- B. 20
- C. 50
- D. 200
- E. 500

Explanation:

length=100, b=?

area of rectangle= $l*b$

original floor=10,000 sq. meters

increasing the original floor by half of the original floor= $10000+1/2(10000)$

=15000

so  $15000 - 10000 = 5000$  (area of rectangular portion)

$l \cdot b = 5000$

$l = 100$  so  $100 \cdot b = 5000 \rightarrow b = 50$

so extended part is of 50 meters.

7. If the sum of two numbers is 55 and the H.C.F. and L.C.M of these numbers are 5 and 120 respectively, then the sum of the reciprocals of the numbers is equal to:

A.  $55/601$

B.  $601/55$

C.  $11/120$

D.  $120/11$

Explanation:

Given,  $a + b = 55$ .

Also, their hcf and lcm is 5 and 120 respectively.

Since,  $a \times b = \text{lcm} \times \text{hcf}$

$\Rightarrow 600 = 120 \times 5$ .

$\Rightarrow 1/a + 1/b = a + b/ab$

$\Rightarrow 55/600 = 11/120$ .

8. There are 5 questions in a question paper. In an examination 5% students answer all questions and 5% answered none. 50% of the rest answered 3 questions and 20% answered 2 questions and 300 answered only 1 question. How many students appeared for the test?

A. 1500

B. 1325

C. 1450

D. 1520

Explanation:

Let total no. of students be  $x$ .

$\Rightarrow x = (x \cdot 5/100) + (x \cdot 5/100) + (x \cdot 50/100) + (x \cdot 20/100) + 300$ .

$\Rightarrow 100x = (5 \cdot x) + (5 \cdot x) + (50 \cdot x) + (20 \cdot x) + 30000$ .

$\Rightarrow 100x = 80x + 30000$ .

$\Rightarrow 20x = 30000$ .

$\Rightarrow x = 1500$ .

9. A was born when B was 1 year and 3 months old. C was born when A was 2 years 1 month old. What is the age of B when C is 4 years and 6 months old?

A. 7yr 10 month

B. 7yr

C. 8yr 10 month

D. none

Explanation:

When C is 4yr 6 month i.e. 54 months old, A is 79 months old.

Given, B is 15 months older than A.

When A is 79 months old then, B is 94 months old i.e. 7yr 10 month.

10. If an article is bought at a profit of 15% and sold at a loss of 15% what is my total profit percent or loss percent?

- A. 3.45%
- B. 1.25%
- C. 0.25%
- D. 2.25%

Explanation:

If profit and loss are successive then the solution is: -

assume CP = 100.

after 15% profit it becomes 115.

again after 15% loss it become  $85 \times 115 / 100 = 97.75$ .

So overall loss

Loss % =  $100 - 97.75 = 2.25\%$ .

## Huawei Logical Reasoning Test

11. If CONTRIBUTE is written as ETBUIRNTOC, which letter will be in the sixth place when counted from the left if POPULARISE is written in that code?

- A. L
- B. A
- C. I
- D. D

Answer: A.

12. A tourist drives 10 km towards East and turns to right-hand side and takes a drive of another 3 km. He then drives towards West (turning to his right) another 3 km. He then turns to his left and walks another 2 km. Afterwards, he turns to his right and travels 7 km. How far is he from his starting point and in which direction?

- A. 10 km East
- B. 9 km North
- C. 8 km West
- D. 5 km South

Answer: D.

13. Seema told Sanjiv, "The girl I met yesterday at the beach was the youngest daughter of the brother-in-law of my friend's mother." How is the girl related to Seema's friend?

- A. Niece
- B. Friend
- C. Aunt
- D. Cousin

Answer: D.

14. Pointing to a girl, Arvind said "She is daughter of the only child of my father," How is Arvind's wife related to that girl?

- A. Daughter
- B. Mother
- C. Aunt
- D. Sister
- E. None of these

Answer: B.

15. Statement: Should colleges be given the status of a university in India?

Arguments:

(I). Yes. Colleges are in a better position to assess the student's performance and therefore the degrees will be more valid.

(II). No. It is Utopian to think that there will not be nepotism and corruption in awarding degrees by colleges.

- A. Only argument I is strong
- B. Only argument II is strong
- C. Either I or II is strong
- D. Neither I nor II is strong
- E. Both I and II are strong

Answer: D.

16. Statement: Should the prestigious people who have committed crime unknowingly, be met with special treatment?

Arguments:

A. Yes. The prestigious people do not commit crime intentionally.

II. No. It is our policy that everybody is equal before the law.

- B. Only argument I is strong
- C. Only argument II is strong
- D. Either I or II is strong
- E. Neither I nor II is strong
- F. Both I and II are strong

Answer: B.

17. Statements: All those political prisoners were released on bail who had gone to jail for reasons other than political dharnas. Bail was not granted to persons involved in murders.

Conclusions:

A. No political - prisoner had committed murder.

II. Some politicians were not arrested.

- B. Only conclusion I follows
- C. Only conclusion II follows
- D. Either I or II follows
- E. Neither I nor II follows
- F. Both I and II follow

Answer: A.

18. Statements: Modern man influences his destiny by the choice he makes unlike in the past.

Conclusions:

- A. Earlier there were fewer options available to man.
- II. There was no desire in the past to influence the destiny.
- B. Only conclusion I follows
- C. Only conclusion II follows
- D. Either I or II follows
- E. Neither I nor II follows
- F. Both I and II follow

Answer: A.

19. In a code language if POSE is coded as OQNPRTDF, then the word TYPE will be coded as

- A. SUXZOQFD
- B. SUXZQOFD
- C. SUXZOQDF
- D. SUXZQODE

Explanation:

The word has been coded in such a way that codes for letter P are OQ (One letter behind and one letter ahead of P in alphabet). Similarly, codes for O are NP and so on.

20. Bhavika and Sunaina start simultaneously towards each other from two places 100 m apart. After walking 30 m. Bhavika turns left and goes 10m, then she turns right and goes 20 m and then turns right again and comes back to the road on which she had started walking. If both Bhavika and Sunaina walk with the same speed, what is the distance between them at this point of time?

- A. 70 meters
- B. 40 meters
- C. 10 meters
- D. 20 meters

Answer: D.

## Huawei Verbal Ability Test

21. Justice should be \_\_\_\_\_ Even-handed.

- A. Discharged
- B. performed
- C. administered
- D. Declared

Answer: C.

22. Ordering of Sentence:

S1: My daughter was born in the year 2005.

S6: She was one of the brightest kids in her whole class.

P: She was a quick learner from the beginning.

Q: She could recite poems at two years of age.

R: We put her in kindergarten when she was two and a half years old.

S: She started walking when she was eleven months old.

- A. RQSP
- B. SQPR
- C. QSRP
- D. PSQR

Answer: D.

23. Synonym:

INTRUSION

- A. Invasion
- B. Retreat
- C. Inflation
- D. Defense

Answer: A.

24. Antonym:

PRANKISH

- A. Whimsical
- B. Machiavellian
- C. Impish
- D. Serious

Answer: B.

25. Sentence Correction:

The government requires that these forms should be submitted before the end of the financial year.

- A. that these forms should be submitted
- B. that these forms be submitted
- C. for these forms to be submitted
- D. these forms submission
- E. these forms should be submitted

Answer: B.

26. Pick the odd man out:

- A. Warm
- B. Hot
- C. Humid
- D. Cool
- E. Sultry

Answer: D.

27. Error in sentence:

(A) At the end of the year/(B) every student who had done adequate work/(C) was automatically promoted. /(D) No error.

- A. A
- B. B
- C. C
- D. D

Answer: D.

Organizations are institutions in which members compete for status and power. They compete for resource of the organization, for example finance to expand their own departments, for career advancement and for power to control the activities of others. In pursuit of these aims, grouped are formed and sectional interests emerge. As a result, policy decisions may serve the ends of political and career systems rather than those of the concern. In this way, the goals of the organization may be displaced in favor of sectional interests and individual ambition. These preoccupations sometimes prevent the emergence of organic systems. Many of the electronic firms in the study had recently created research and development departments employing highly qualified and well paid scientists and technicians. Their high pay and expert knowledge were sometimes seen as a threat to the established order of rank, power and privilege. Many senior managers had little knowledge of technicality and possibilities of new developments and electronics. Some felt that close cooperation with the experts in an organic system would reveal their ignorance and show their experience was now redundant.

28. The theme of the passage is

- A. groupism in organizations
- B. individual ambitions in organizations
- C. frustration of senior managers
- D. emergence of sectional interests in organizations

Answer: D.

29. "Organic system" as related to the organization implies its

- A. growth with the help of expert knowledge
- B. growth with input from science and technology
- C. steady all around development
- D. natural and unimpeded growth

Answer: B.

30. Policy decision in organization would involve

- A. cooperation at all levels in the organization
- B. modernization of the organization
- C. attracting highly qualified personnel
- D. keeping in view the larger objectives of the organizations

Answer: C.