

## MphasiS Placement Paper

1. In a class composed of  $x$  girls and  $y$  boys what part of the class is composed of girls

- A.  $y/(x + y)$
- B.  $x/xy$
- C.  $x/(x + y)$
- D.  $y/xy$

Ans. C

2. What is the maximum number of half-pint bottles of cream that can be filled with a 4-gallon can of cream (2 pt.=1 qt. and 4 qt.=1 gal)

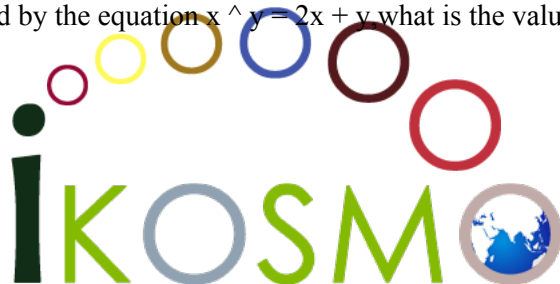
- A. 16
- B. 24
- C. 30
- D. 64

Ans. D

3. If the operation,  $\wedge$  is defined by the equation  $x \wedge y = 2x + y$  what is the value of  $a$  in  $2 \wedge a = a \wedge 3$

- A. 0
- B. 1
- C. -1
- D. 4

Ans. B



4. A coffee shop blends 2 kinds of coffee, putting in 2 parts of a 33p. a gm. grade to 1 part of a 24p. a gm. If the mixture is changed to 1 part of the 33p. a gm. to 2 parts of the less expensive grade, how much will the shop save in blending 100 gms.

- A. Rs.90
- B. Rs.1.00
- C. Rs.3.00
- D. Rs.8.00

Ans. C

5. There are 200 questions on a 3 hr examination. Among these questions are 50 mathematics problems. It is suggested that twice as much time be spent on each Maths problem as for each other question. How many minutes should be spent on mathematics problems

- A. 36
- B. 72
- C. 60
- D. 100

Ans. B

6. In a group of 15, 7 have studied Latin, 8 have studied Greek, and 3 have not studied either. How many of these studied both Latin and Greek

- A. 0
- B. 3
- C. 4
- D. 5

Ans. B

7. If  $13 = 13w/(1-w)$ , then  $(2w)^2 =$

- A.  $1/4$
- B.  $1/2$
- C. 1
- D. 2

Ans. C

8. If  $a$  and  $b$  are positive integers and  $(a-b)/3.5 = 4/7$ , then

- (A)  $b < a$
- (B)  $b > a$
- (C)  $b = a$
- (D)  $b \geq a$

Ans. A

9. In June a baseball team that played 60 games had won 30% of its games played. After a phenomenal winning streak this team raised its average to 50%. How many games must the team have won in a row to attain this average?

- A. 12
- B. 20
- C. 24
- D. 30

Ans. C

10.  $M$  men agree to purchase a gift for Rs.  $D$ . If three men drop out how much more will each have to contribute towards the purchase of the gift?

- A.  $D/(M-3)$
- B.  $MD/3$
- C.  $M/(D-3)$
- D.  $3D/(M^2-3M)$

Ans. D



11. A company contracts to paint 3 houses. Mr. Brown can paint a house in 6 days while Mr. Black would take 8 days and Mr. Blue 12 days. After 8 days Mr. Brown goes on vacation and Mr. Black begins to work for a period of 6 days. How many days will it take Mr. Blue to complete the contract?

- A. 7
- B. 8
- C. 11
- D. 12

Ans. C

12. 2 hours after a freight train leaves Delhi a passenger train leaves the same station traveling in the same direction at an average speed of 16 km/hr. After traveling 4 hrs the passenger train overtakes the freight train. The average speed of the freight train was?

- A. 30
- B. 40
- C. 58
- D. 60

Ans. B

13. If  $9x - 3y = 12$  and  $3x - 5y = 7$  then  $6x - 2y = ?$

- A. -5
- B. 4
- C. 2
- D. 8

Ans. D

