

## IBPS PO Mock Test 1

**Q 1.** A bag contains 7 blue and 4 green balls and another bag contains 3 blue and 8 green balls. Two balls are drawn at random from any of these bags. What is the probability that both these balls are drawn are green?

- A.  $6/55$
- B.  $28/55$
- C.  $14/55$
- D.  $17/55$

Answer: D

### Solution 1:

Let us consider Bag with 7 blue and 4 green balls as B1.

Let Bag with 3 Blue and 8 green balls be B2.

When 2 balls are drawn at random, it means we could draw the ball from either B1 or B2.

Hence the probability of choosing B1 or B2 is  $\frac{1}{2}$ .

Suppose we draw Green balls from Bag B1, then the probability will be as per the below logic

Probability of selecting Bag B1 \* Probability of drawing Green Ball from Bag B1 ----- (1)

Probability of drawing Green Ball from B1 will be as follows:

(Choosing 2 green balls out of 4 green balls)/ (Choosing 2 balls from a total of 11 Balls in B1)

$${}^4C_2 / {}^{11}C_2$$

Hence the probability

$$= (1/2) * ({}^4C_2 / {}^{11}C_2)$$

$${}^4C_2 \text{ is } (4*3)/2 = 6$$

$${}^{11}C_2 \text{ is } (11*10)/2 = 11*5 = 55$$

Hence Probability of drawing Green Ball from B1 will be as follows:

$$(1/2) * (6/55) = 3/55$$

When the above logic is applied to B2 the probability is

$$(1/2) * ({}^8C_2 / {}^{11}C_2)$$

$${}^8C_2 = 28$$

$${}^{11}C_2 = 55$$

Hence the probability of drawing Green balls from B2 is

$$(1/2) * (28/55) = 14/55$$

Hence the total probability of drawing Green Ball from either B1 or B2 is  $(3/55) + (14/55) = 17/55$

**Q 2.** A bag contains white balls, green balls, and blue balls. The probability of drawing white balls is  $(1/3)$ , the probability of drawing green balls is  $(1/4)$ . What is the probability of drawing blue balls?

- A.  $6/12$
- B.  $7/12$
- C.  $5/12$
- D. None of the above

Answer: C

**Solution 2:** Sum of all the probabilities is 1.

Probability of drawing white balls + probability of drawing green balls + probability of drawing blue balls  
= 1  
 $(1/3) + (1/4) + x = 1$   
 $X = 1 - [(1/3) + (1/4)]$   
 $= 1 - (7/12)$   
 $= 5/12$

**Q 3.** Narendra's present age is one-fourth of his father's age 2 years ago. Narendra's father's age will be twice Amit's age after 10 years. If Amit's 12<sup>th</sup> birthday was celebrated 2 years ago, then what is Narendra's present age?

- A. 9 years
- B. 11 years
- C. 7 years
- D. None of the above

Answer: A

**Solution 3:**

Amit's 12<sup>th</sup> Birthday was celebrated 2 years ago, hence  
Amit's present age =  $12 + 2 = 14$  years.  
Narendra's father's age will be twice Amit's age after 10 years, hence  
Amit's age after 10 years is Amit's Present age + 10 years =  $14 + 10 = 24$  years.  
Narendra's father's age after 10 years =  $2 * 24 = 48$  Years.  
Narendra's father's present age =  $48 - 10 = 38$  years.  
Narendra's father's age 2 years ago = 36 years.  
Narendra's present age =  $\frac{1}{4} (36) = 9$  years.

**Q 4.** A rectangular garden having length and breadth as 120 m and 80 m, respectively has 5 m wide path around the sides inside the garden. Find the cost of gravelling the path at Rs 2 per square meter.

- A. 3600
- B. 4200
- C. 3800
- D. 3900

Answer: C

**Solution 4:**

Area of rectangle =  $120 * 80 = 9600$  square meter.  
When gravelling is done, the remaining area of a rectangle without gravelling  
 $= (120 - 10) * (80 - 10)$   
 $= 110 * 70$   
 $= 7700$  square meter.  
Hence area of gravelling =  $9600 - 7700 = 1900$  square meter  
Cost of gravelling =  $1900 * 2 = \text{Rs } 3800/-$

**Q 5.** For 4 successive years, the costs of petrol were Rs 15/litre, Rs 20/litre, Rs 25/litre, Rs 30/litre respectively. If a cab driver spent an average of Rs 15,000 per year on Petrol, then he spent what average cost of petrol per litre for the four years?

- A. Rs 22.50 /litre
- B. Rs 26.07 /litre
- C. Rs 21.05 /litre
- D. Rs 27.08 /litre

Answer: C

**Solution 5:**

Quantity of petrol used for 1<sup>st</sup> year =  $15,000/15 = 1000$  litres

Quantity of petrol used in 2<sup>nd</sup> year =  $15,000/20 = 750$  litres

Quantity of petrol used in 3<sup>rd</sup> year =  $15,000/25 = 600$  litres

Quantity of petrol used in 4<sup>th</sup> year =  $15,000/30 = 500$  litres

Total Quantity of Petrol used in 4 years =  $1000+750+600+500 = 2850$  litres

Total money spent in 4 years =  $15000 \times 4 = \text{Rs } 60,000$

The average cost of petrol per litre for 4 years is

(Total money spent in 4 years/ Total quantity of petrol used in 4 years)

$(60000/ 2850) = \text{Rs } 21.05/\text{Litre}$

**Q 6.** 2.2 Kg of flour contains wheat flour and rice flour in the ratio 8: 3. How much more rice flour is to be added to the mixture containing wheat flour and rice flour to get a new mixture containing wheat flour and rice flour in the ratio 8:5.

- A. 300 gram
- B. 200 gram
- C. 400 gram
- D. 450 gram

Answer: C

**Solution 6:**

Quantity of wheat flour =  $(8/11) \times 2200 \text{ gram} = 1600 \text{ gram}$ .

Quantity of rice flour =  $(3/11) \times 2200 = 600 \text{ gram}$  or u can simply calculate it as

$2200 \text{ gram} - 1600 \text{ gram} = 600 \text{ gram}$ .

Let the quantity of rice flour added = X

Quantity of rice flour in new mixture =  $600 + X$

$(8/5) = (1600 / 600+X)$

$X = 400 \text{ gram}$

**Q 7.** The average weight of a class of 30 students is 60 kg. If the weight of the teacher is to be included, the average weight of the class increases by 300 gm. Find out the weight of the teacher.

- A. 67 Kg
- B. 68.5 kg
- C. 69.3 Kg
- D. 70 Kg

Answer: C

**Solution 7:**

By adding the teacher's weight, the average weight of the class is increased by 300 gm.

Total increase in weight is  $31 \times (300/1000) = 9.3$  grams.

Hence the weight of teacher

= old average + total increase in weight

=  $60 + 9.3 = 69.3$  Kg

**Q 8.** An amount of money is to be divided between A, B and C in the ratio 5:9:11. If the difference between the shares A and C is Rs 7800, what will be the difference between the shares of A and B.?

- A. Rs 5000
- B. Rs 6500
- C. Rs 4500
- D. Rs 5200

Answer: D

**Solution 8:**

$$11x - 5x = 6x.$$

$$6x = 7800$$

$$X = \text{Rs } 1300$$

Difference between shares of A and B is

$$9x - 5x = 4x = 4 \times 1300 = \text{Rs } 5200$$

**Q 9.** Find the next number in series 11, 12, 20, 47, 111, x

- A. 236
- B. 245
- C. 317
- D. 436

Answer: A

**Solution 9:**

$$12 = 11 + 1^3$$

$$20 = 12 + 2^3$$

$$47 = 20 + 3^3$$

$$111 = 47 + 4^3$$

$$X = 111 + 5^3 = 236$$

**Directions (10-14):** A family has 6 members. A, B, C, D, E, F. There is only 1 married couple in the family. A has only 2 sons. B is the mother of C. D is the brother of A. E is the sister in law of B.

**Q 10.** How is F related to B

- A. Mother
- B. Daughter
- C. Son
- D. Cannot Be Determined
- E. None of these

Answer: C

**Solution 10:**

The question says B is the mother of C and A has only 2 sons. Further, it says there is only 1 couple. Hence we can conclude the A and B is the only couple in the group as both have kids. A has 2 sons, C is one of them, as we can relate rest of the members to A, the only remaining family member is F. Hence F has to be the son of B.

**Q 11.** How many female members are there in the family

- A. 4
- B. 2
- C. 3
- D. Cannot be determined
- E. None of these

Answer: B

**Solution 11:**

B is the wife of A.

E is the sister in law of B.

The above 2 members are the female members of the group.

**Q 12.** How is E related to A?

- A. Sister in law
- B. Mother
- C. Wife
- D. Sister
- E. None of these

Answer: D

**Solution 12:**

E is the sister in law of B. B is the wife of A. Hence E is the sister of A.

**Directions (13-17):** In the following questions, the relationship between different elements is shown in the statements. The statements are followed by two conclusions. Mark answer as

1. If only conclusion I is true
2. If only conclusion II is true
3. If either conclusion I or II is true
4. If neither conclusion I nor II is true
5. If both the conclusions I and II are true.

**Q 13. Statement:**

$$P = T \geq U < S > L$$

Conclusions:

- I.  $L < U$
- II.  $T > S$

Answer: (4)

**Solution 13:**

As per the given statement  $S > L$  and  $S > U$ . But it is not possible to conclude the relationship between  $L$  and  $U$ ,  $L$  could be bigger or smaller than  $U$  or even equal to  $U$ . Hence there is no definite conclusion. From the statement, it is not possible to conclude the relationship between  $T$  and  $S$ .

**Q 14. Statement:**

$$P = M \leq N > S \geq Q$$

Conclusions:

- I.  $M < Q$
- II.  $Q \leq N$

Answer: (4)

**Solution 14:**

From the statement, we can conclude,  $N > Q$ , when  $M = N$ ,  $M > Q$ . Hence Conclusion I is not true. From the statement,  $S$  could be greater than  $Q$ , then  $N > Q$ . If  $S = Q$ ,  $N > Q$ . Hence the conclusion  $N$  is greater than or equal to  $Q$  is false.

**Q 15. Statement:**

$$R > S = C \leq D; E > C$$

Conclusion:

- I.  $R < D$
- II.  $S < E$

Answer: 2

**Solution 15:**

From the statement, as  $B = C$ , B is less than or equal to D. When S is equal to D, R is greater than D. When  $S < D$ , there are 3 possibilities, R could be less or equal or greater than D. Hence there is no definite conclusion that  $R < D$ .

$S < E$  is true as  $S = C$  and  $E > C$ , hence  $E > S$ .

**Q 16.** Statement:

$$M > B \leq C = D = N$$

Conclusion:

- I.  $M < N$
- II.  $M = N$

Answer: 2

**Solution 16:**

As  $C = N$ , B could be less than N or equal to N.

**Q 17.** Statement:

$$A \geq B < R = T; U < B > Y$$

Conclusions

- I.  $A > U$
- II.  $Y > T$

Answer: 1

**Solution 17:**

B is greater than U. A is greater or equal to B, in both the scenarios P is greater than U as B is always greater than U. Hence Conclusion I is true. Conclusion II is false, B is always less than T and B is always greater than Y.

**Directions (18-20):** Choose the word which is the most similar in meaning to the word given in bold.

**Q18. Hazard**

- A. Peril
- B. Safety
- C. Security
- D. Safeguard

Answer: A

**Q 19. Gruelling**

- A. Wearing
- B. Easy
- C. Plain sailing
- D. Trouble free

Answer: A

**Q 20) Vague**

- A. Indeterminate
- B. Unambiguous
- C. Clear
- D. Certain

Answer: A

**Directions (21-25):** Choose the word which is opposite in meaning to the word mentioned in Bold.

**Q 21. Candid**

- A. Forthright
- B. Outspoken
- C. Downright
- D. Guarded

Answer: D

**Q 22. Jovial**

- A. Good-humoured
- B. Genial
- C. Amiable
- D. Gloomy

Answer: D

**Q 23. Naïve**

- A. innocent
- B. childlike
- C. trusting
- D. Sophisticated

Answer: D

**Q 24. Reluctant**

- A. Unwilling
- B. Unenthusiastic



- C. Resistant
- D. Ready

Answer: D

**Q 25) Argue**

- A. Altercation
- B. Brawl
- C. Clash
- D. Polite

Answer: D

