Quantitative Aptitude – NICL AO Prelims 2019

Directions (31–35): What will come in place of the question mark (?) in the following number series?

31. 7, 15, 31, 63, ?, 255

A) 121

B) 127

C) 129

D) 131

E) 133

32. 19, 38, 76, 152, ?, 608

A) 228

B) 288

C) 304

D) 318

E) 324

33. 2, 3, 10, 38, 172, ?

A) 640

B) 684

C) 720

D) 744

E) 756

34. 13, 17, 26, 42, 67, ?

A) 92

B) 105

C) 109

D) 112

E) 117

35. 81, 162, 324, 648, 1296, ?

A) 2192

B) 2492

C) 2592

D) 2692

E) 2792

Directions (36–40): Simplify the following and find the value.

36. 23% of 350 + 35% of 230 = ?

- A) 136
- B) 138
- C) 141
- D) 143
- E) 145

37. $45 \times 35 \div 15 + 36 = ?$

- A) 120
- B) 141
- C) 147
- D) 152
- E) 156

38. $(15)^2 - (12)^2 + (11)^2 = ?$

- A) 212
- B) 214
- C) 216
- D) 218
- E) 220

39. (3/7) of 672 + 128 = ?

- A) 416
- B) 416
- C) 416
- D) 416
- E) 416

40. 25% of 720 + 45% of 480 = ?

- A) 356
- B) 368
- C) 372
- D) 384
- E) 396

Directions (41–45): Data Interpretation – Table

The following table shows the number of students in five different colleges and the ratio of boys to girls in each college. Answer the questions accordingly.

Colleg e	Student s	Boys Girls
Α	1200	7:5
В	1500	3:2
С	1800	5:4
D	2000	2:3
E	2400	3:5

- **41.** What is the total number of girls in colleges B and D together?
- A) 1400
- B) 1500
- C) 1600
- D) 1700
- E) 1800
- **42.** The number of boys in college A is approximately what percent more than the number of girls in college E?
- A) 10%
- B) 15%
- C) 20%
- D) 25%
- E) 30%
- **43.** What is the average number of boys in colleges C and D?
- A) 920
- B) 940
- C) 960
- D) 980
- E) 1000
- **44.** What is the ratio of boys in college B to the girls in college C?
- A) 3:2
- B) 4:3
- C) 5:4
- D) 6:5
- E) 7:6
- 45. What is the total number of students in colleges A, C, and E together?
- A) 5200
- B) 5300
- C) 5400

E) 5600

Directions (46–50): Each question below consists of a question and two statements numbered I and II. You have to decide whether the data given in the statements is sufficient to answer.

46. What is the present age of Rahul?

- I. The ratio of Rahul's age 5 years ago to his age after 7 years is 5 : 9.
- II. The difference between Rahul's age after 7 years and his age 3 years ago is 20 years.
- A) I alone sufficient
- B) II alone sufficient
- C) Either I or II sufficient
- D) Both I and II sufficient
- E) Data inadequate
- **47.** What is the speed of a boat in still water?
- I. The boat covers 40 km downstream in 4 hours.
- II. The boat covers the same distance upstream in 5 hours.
- A) I alone sufficient
- B) II alone sufficient
- C) Either I or II sufficient
- D) Both I and II sufficient
- E) Data inadequate
- **48.** What is the sum of two numbers?
- I. The difference between the numbers is 6.
- II. The product of the two numbers is 135.
- A) I alone sufficient
- B) II alone sufficient
- C) Either I or II sufficient
- D) Both I and II sufficient
- E) Data inadequate
- **49.** What is the area of a right-angled triangle?
- I. The base of the triangle is 12 cm.
- II. The height of the triangle is 16 cm.
- A) I alone sufficient
- B) II alone sufficient
- C) Both I and II sufficient

D) Either I or II sufficient E) Data inadequate
50. What is the cost price of the article?I. The article is sold at a profit of 20%.II. The selling price of the article is Rs. 480.
A) I alone sufficient B) II alone sufficient C) Either I or II sufficient D) Both I and II sufficient E) Data inadequate
Directions (51–55): Solve the following word problems.
51. A sum of Rs. 12,000 is lent at simple interest at the rate of 12% p.a. for 3 years. What will be the interest earned? A) 4200 B) 4320 C) 4400 D) 4500 E) 4600
52. A train 120 m long passes a pole in 10 sec. What is the speed of the train? A) 36 km/hr B) 43.2 km/hr C) 48 km/hr D) 52 km/hr E) 60 km/hr
 53. A can complete a work in 20 days and B can complete the same work in 30 days. In how many days will they complete the work together? A) 10 days B) 12 days C) 15 days D) 18 days E) 20 days
54. The average marks obtained by 120 students in an exam is 35. If the average marks of passed students is 39 and that of failed students is 15, then find the number of students who passed the exam. A) 100 B) 105 C) 110

- D) 115
- E) 120

55. The ratio of present ages of A and B is 4 : 5. After 8 years, the ratio will be 5 : 6. Find their present ages.

- A) 24, 30
- B) 28, 35
- C) 32, 40
- D) 36, 45
- E) 40, 50

Answer Key (Quantitative Aptitude – Q31 to Q55)

- 31. B
- 32. C
- 33. D
- 34. C
- 35. C
- 36. B
- 37. C
- 38. C
- 39. A
- 40. D
- 41. B
- 42. C
- 43. C
- 44. B

- 45. C
- 46. D
- 47. D
- 48. D
- 49. C
- 50. D
- 51. B
- 52. B
- 53. B
- 54. B
- 55. B

