

001

SPARDHA 2017

ALMA FIESTA

6-8

Indian Institute of Technology, Bhubaneswar

NAME:

CLASS:

Contact Info:

SCHOOL NAME:

Email – ID (if available):

INSTRUCTIONS

- Write your name, class and school name in the space provided above.
- Use only **blue ball-point pen** to choose answers.
- Use **Tick (✓)** to select your answer. Do NOT circle, highlight, shade, etc. Answers chosen with anything except (✓) will not be considered for mark evaluation.
- **2 marks will be awarded** for a correct answer and **1 will be deducted** for an incorrect answer.
- No marks will be awarded for questions left unanswered.
- Rough work should **strictly** be done on the last page provided. Marks will be deducted for scribbling rough work on papers with questions on it.
- Calculators and other electronic gadgets are **strictly not allowed** inside the examination hall. If found with any such device, the candidate will be **immediately disqualified**.
- Candidates are advised to bring pencil, eraser, pen and school ID card (if available).

ALL THE BEST

Directions (Q. 1 to 3): In each of the following questions, one number is missing in the series. You have to understand the pattern of the series and insert the number.

1. 13, 17, 19, 23, 29, 31, 37, ?

- (A) 43 (B) 41 (C) 39 (D) 44

2. 4, 2, 8, 16, 128, ?

- (A) 3156 (B) 2868 (C) 2048 (D) 1868

3. 2, 4, 8, 14, 22, 32, ?

- (A) 40 (B) 42 (C) 48 (D) 44

4. What should come next in the following number sequence?

1 1 2 1 2 3 1 2 3 4 1 2 3 4 5 1 2 3 4 5 6 1 2 3 _

- (A) 5 (B) 1 (C) 6 (D) 4

5. Three of the four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

- (A) Fruit (B) Flower (C) Leaf (D) Tree

6. If the letters in the word "PREDICTABLE" are rearranged as they appear in the English alphabet, the position of how many letters will remain unchanged after the rearrangement?

- (A) Two (B) One (C) Three (D) More than three

7. In a certain code, "MENTAL" is written as "NFOUBM". How is "ABILITY" written in that code?

- (A) BCJMJVZ (B) BCMJJUZ (C) BJDMUZY (D) BCJMJUZ

8. If Table is called Book, Book is called Chair, Chair is called Chocolate, Chocolate is called Milk and Milk is called Pen. Then on which do we sit?

- (A) Chair (B) Chocolate (C) Book (D) Table

9. I am going towards north and after walking 10 km, I turned right and again walked 6 km. again I turned right and walked 10 km. How far and in which direction I am from the starting point?

- (A) 10 km east (B) 5 km south (C) 6 km west (D) 6 km east

10. Which would be the proper sequence of the following

1. Rainbow
2. Rain
3. Sun
4. Happy
5. Child

- (A) 4, 2, 3, 5, 1 (B) 4, 5, 1, 2, 3 (C) 2, 3, 1, 5, 4 (D) 2, 1, 4, 3, 5

Directions (Q. 11 to 12): Read the following information carefully and answer the questions that follow:
P, Q, R, S, T, U and V are players. P, Q, R, S play chess. T, U, V play football. S, T, U play volleyball. P, Q, S play tennis. T, U, V play cricket. R, S, T play badminton.

11. Who among the following plays maximum games?

- (A) P (B) T (C) U (D) R

12. Who among the following plays minimum number of games?

- (A) U (B) S (C) T (D) V

13. If $62 + 32 = 6$, $56 + 23 = 24$, then $45 + 10 = ?$

- (A) 20 (B) 4 (C) 25 (D) 16

14. If 'NEW DELHI' is coded as 'RSOVWDVM', then the code for 'TIMBAKTU' is

- (A) GRNYZPGF (B) FGPZYNRG (C) FGPZNYRG (D) FHPZYNRH

15. Find the odd one out.

- (A) 16 (B) 625 (C) 2401 (D) 6560

Directions (Q. 16 to 17): Find the next / missing term which will fit in the given series / pattern.

16. 145, 122, 101, 82, 65, ____

- (A) 45 (B) 50 (C) 49 (D) 55

17. QYK, ____, ISG, EPE

- (A) NWJ (B) MVI (C) NVI (D) MVJ

18. Katrina ran 20 m to the east, then she turned left and walked for 15 m, then turned right and went 25 m and then turned right again and went 15 m. How far is she now from the starting point?

- (A) 15 m (B) 25 m (C) 35 m (D) 45 m

19. P is Q's sister, R is Q's mother, S is R's father and T is S's mother. Then how is S related to P?

- (A) Sister (B) Mother (C) Grandmother (D) Grandfather

20. B is to the South-West of A. C is to the East of B and South-East of A and D is to the North of C in line with BA. In which direction of A is D located?

- (A) East (B) North (C) South-East (D) North-East

21. If North is called North-West, North-West is called West, West is called South-West and so on, what will South-East be called?

- (A) West (B) South (C) East (D) North-East

22. If 'ACTION' is coded as ZXGRLM then 'HEALTH' will be coded in the same way as:

- (A) SVZOGS (B) TVZOGT (C) RUZPGR (D) QVG

23. The train for Mumbai leaves every two and a half hours from New Delhi Railway Station. An announcement was made that the train for Mumbai had left 40 minutes ago and the next train will leave at 18:00 hrs. At what time was the announcement made?

- (A) 15:30 hrs (B) 17:10 hrs (C) 16:00 hrs (D) 16:10 hrs

24. Certain number of horses and an equal number of men are going some where. Half of the owners are on their horses back while the remaining ones are walking along leading their horses. If the number of legs walking on the ground is 70, how many horses are there?

- (A) 10 (B) 12 (C) 14 (D) 16

25. Six students P, Q, R, S, T and U are sitting in the field. P and Q are from Delhi while the rest are from Chennai. S and U are tall while others are short. P, R and S are girls while others are boys. Which is the tall girl from Chennai?

- (A) R (B) S (C) T (D) U

26. A clock seen through a mirror shows quarter past four. What is the correct time shown by the clock?

- (A) 9:45 (B) 9:15 (C) 8:45 (D) 7:45

Directions (Q. 27 to 31): Four men A, B, C and D and four women P, Q, R and S are sitting around a table facing to the centre. No two males sit adjacent to each other. D is two places to the right of A and adjacent to S, who is two places to the left of P, who is adjacent to B, who in turn is not opposite to A.

27. Who is sitting opposite to S?

- (A) Q (B) R (C) A (D) Can not be determined

28. If Q sits three places away from C and B, then who sits three places to the left of D?

- (A) P (B) R (C) B (D) Can not be determined

29. If each person exchanges his/her seat with the person sitting opposite to him/her, then who sits to the immediate right of B?

- (A) Q (B) S (C) R (D) Can not be determined

30. If every man shifts by two places to his right and every woman shifts by two places to her left, then who sits adjacent to C?

- (A) Q and R (B) P and S (C) P and Q or R (D) Can not be determined

31. If D and Q exchange their seats, then which of the following conditions is not violated?

- (A) No two men can sit adjacent to each other
(B) D is two places to the right of A
(C) B is not opposite to A
(D) All the above are violated

32. A committee of five is to be formed from five boys A, B, C, D, E and three girls P, Q, R such that at least two girls must be in committee. If C is selected, then D is selected and vice-versa. If P is selected, then Q is selected and C is not selected. Who among the following must get selected?

- (A) C (B) P (C) R (D) Q

Directions (Q. 33 to 37): Chhota Bheem, Kalia, Raju, Jaggu, Dholu and Bholu are six students of a class. Each one has topped in one of the six different subjects viz. Mathematics, Hindi, English, History, Geography and Science but not in the order as given. Again each one has got a different overall rank i.e.

- (i) The highest ranker has topped in Science.
- (ii) Jaggu who is higher in rank than Dholu but lower than Chhota Bheem has topped in history.
- (iii) The lowest ranker among them has topped in Mathematics.
- (iv) Chhota Bheem and Dholu have topped in neither science nor geography.
- (v) Bholu has topped in geography.
- (vi) Bholu in order of rank is lower than Dholu, who has topped in Hindi and higher than Raju.

33. Who has topped in Science?

- (A) Chhota Bheem (B) Kalia (C) Jaggu (D) None of these

34. Who among them has the lowest rank?

- (A) Chhota Bheem (B) Kalia (C) Jaggu (D) None of these

35. Which subject has Chhota Bheem topped in?

- (A) Mathematics (B) English (C) Hindi (D) None of these

36. Which rank does Bholu hold among the six students?

- (A) First (B) Second (C) Third (D) Fifth

37. Which subject has Dholu topped in?

- (A) Mathematics (B) English (C) Hindi (D) None of these

Directions (Q. 38):

A + B means 'A' is Brother of 'B'.

A – B means 'A' is Sister of 'B'.

A × B means 'A' is Father of 'B'.

A /B means 'A' is Mother of 'B'.

38. Which of the following represents that 'F' is father of 'W'?

- (A) F / R + W (B) F + R × W (C) F × R – W (D) F × R / W

39. If first half of the English alphabet is written in reverse order, then which letter will be 9th to the left of the 18th letter from the left?

- (A) G (B) H (C) E (D) L

Directions (Q. 40): Answer the given question based on the following English alphabets?

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

40. Which letter is 7th to the left of the 12th letter from the left end?

- (A) Q (B) E (C) G (D) U

Directions: (Q. 41 to 50): Questions asked on the Topic “Blood Donation”.

41. Which of the following is second most abundant blood group?

- (A)A+ (B)B+ (C)O+ (D)AB+

42. A person is allowed to donate blood when suffering from :

- (A) Cholera (B) Pnuemonia (C) Goitre (D) Malaria

43. What should be the age of a person who is donating blood?

- (A) more than 17 (B)less than 17 (C)More than 70 (D)more than 15 but less than 17

44. When is Blood Donor Day?

- (A)14th Nov (B)24th Dec (C)14th June (D) 17th Mar

45. Which of the following metals is present in Haemoglobin?

- (A) Iron (B) Cobalt (C) Manganese (D) Aluminium

46. How often can a person donate blood?

- (A)88 days (B)100 days (C)84 days (D)96 days

47. Which of the following is second most abundant blood group?

- (A)A+ (B)B+ (C)O+ (D)AB+

48. How many units of blood are in an average human's body.

- (A)4-6 units (B)6-8 units (C)8-10 units (D)10-12 units

49. Can a person taking medications like antibiotics donate blood?

- (A) yes he can donate blood
(B) he should wait for sometime for his treatment to get over and then can donate blood
(C) he can never donate blood
(D) depends on his blood type

50. Who had invented the blood donation programme ?

- (A) Charles Richard (B) James Harrison (C) Michael Joseph Jackson (D)Michael Jordon
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