G & T   GENERAL ABILITY 3

ROB OLLIS

Edition 1

MC
MASTER
COACHING

Circle the Correct Response

1. Four times a quarter of 4 and one quarter is equal to three times a third of

    a $3\frac{1}{3}$ **b** $4\frac{1}{4}$ **c** 4   **d** none

2. Tom shares a basket of apples with his 3 friends, there are no apples left over and each person has the same number of apples. Jill, who doesn't like apples that much, gives four of her apples back to Tom. Tom now has three times as many apples as Jill. The number of apples in the original basket is

    a 24   **b** 32   **c** 36   **d** 12

3– 4 refer to this data:
    James is older than Mia but younger than Len. Pia is the average of James' age and Len's age.

3. The oldest in the group is

    a James   **b** Len   **c** Pia   **d** Mia

4. The people who are older than James are

    a none   **b** Pia only   **c** Len and Mia   **d** Len and Pia

5. In a certain code HCGKJZ means GADGET. In the same code EGYMHK means

    a DEVINE   **b** REVILE   **c** DEFEAT   **d** DEVICE

6. In a foreign language, PICI PECI PO means KEEP ROOM TIDY and RIM POPO POM means WEED GARDEN NOW. If POPO POM means WEED GARDEN and PICI PECI means TIDY ROOM, what is the foreign word for KEEP?

    a PECI   **b** PO   **c** PICI   **d** POM

7. In a certain store 3 shirts and 1 tie cost \$170 whilst 5 shirts and 3 ties cost \$330. The cost of 2 shirts and 1 tie would be

    a \$100   **b** \$125   **c** \$130   **d** \$95

8. A circle of radius 5cm has an area of about 78.5 m^2. Therefore the area of a circle of radius 10cm would be closest to

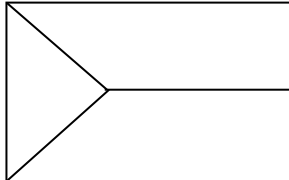   **a** 157 cm^2 **b** 200 cm^2 **c** 314 cm^2 **d** 257 cm^2

9. The interior angles of a triangle add up to 180°. The interior angles of the drawn figure would add up to

    a 720°   **b** 540°

    c 600°   **d** 360°

31. Alaine thought of a number. He multiplied it by 5, then he added 7 and then he divided by 3. His final answer was 9. Which number did he begin with?

   a 2   **b** 3   **c** 4   **d** 5

32. Casper School for the gifted and talented have designed their own flag as shown, but it is not yet coloured. They decided to use 3 of the four colours, red, green, white and black. How many designs are possible?

   a 9
   b 24
   c 7
   d 4

33. The missing number in the table is

5	2	8	1	4	7
34	13	55	6	27	

   a 48   **b** 35
   c 20   **d** 3

34. ✪ is a mathematical operation such that:

$$3 ✪ 5 = 34$$
$$5 ✪ 2 = 29$$
$$4 ✪ 3 = 25$$
$$2 ✪ 7 = ?$$

   a 32   **b** 48   **c** 53   **d** 18

35. All rows, columns and diagonals in the given magic square add to the same number. Complete the magic square and the number is

8		
	5	7
	9	

   a 16   **b** 15   **c** 17   **d** 18

36. Three days ago was Mylon's birthday. Two days after tomorrow is Friday. Mylon's birthday was on

   a Thursday   **b** Saturday   **c** Sunday   **d** Monday

37. In a certain code XQBMHKF means WRANGLE. In the same code JMUQVCF means

   a ENTRUST   **b** HICKORY   **c** INTRUDE   **d** INVADER

38. In a foreign language, JAY KUL LAGOS means EAT MORE BANANAS and MIEIGO KUL LAGOS means EAT MORE FRUIT. If DIEPO LAGOS means MORE TREES then the word for EAT is

   a KUL   **b** JAY   **c** LAGOS   **d** KUL LAGOS

43. **d** Vertical line M, 45 degree line S
44. **a** Sequence +5, then -3
45. **a** White, black, white, black, ∴ white being rotated clockwise 45 degrees each succession
46. **d** Outer figure D rotated 90 degrees clockwise, arrow 45 degrees anti-clockwise each succession
47. **b** Deidre awoke too late to catch the bus
48. **d** Swap roles, inner figure becomes outer figure
49. **a** Add an extra line each succession
50. **b** If first 3 are different colours, the 4th must be one of the selected colours
51. **c** Two embedded sequences, next number from sequence : 23, 22, 21, ∴ 20
52. **a** Difference 6 is $\frac{1}{3}$ of James age. ∴ James 18, Robyn 6
53. **c** Last column eliminates second inner figure. ∴ Circle is eliminated from 1st column
54. **a** In each pattern the sum of the columns are equal. 8 + 13 + 9 = 30, 7 + ? +6 = 30
55. **d** Differences 8, 16, 24. Next difference is 32. 51 + 32 = 83
56. **d** Difference on its own will not solve problem
57. **c** 7n - 2 where n is the top number
58. **a** $8^2 - 5^2 = 39, 9^2 - 4^2 = 65, \mathbf{7^2 - 3^2 = 40}$.
59. **c** Each row is a rotation of 90 degrees anti-clockwise of the previous row
60. **c** BC and CE