



KERALA TALENT ACADEMY
Kerala Talent Cognitive Skills Assessment (KTCSA)
HSS Level (Higher Secondary) - Classes 11 & 12
SET A - Cognitive Skills(Sample Paper)

 Instructions:

20 questions | 1 mark each | No negative marking
Read each question carefully | Write answers on OMR sheet
Time Allowed: 40 minutes | Total marks : 20

SECTION A: MENTAL ABILITY

1. If $7 \# 8 = 113$, $8 \# 9 = 145$, $9 \# 10 = 181$, then $10 \# 11 = ?$
(A) 221 (B) 225 (C) 229 (D) 233
2. Find the missing number: 7, 15, 32, 67, 138, ____
(A) 279 (B) 283 (C) 287 (D) 281
3. If “COMPUTER” is coded as “FRPSXWHU”, then how is “KEYBOARD” coded?
(A) NHBZEUGV (B) NHBZEVGU (C) NHBZEUGW (D) NHBERDUG
4. Arrange in ascending order: $3/7$, $5/9$, $7/11$, $4/13$
(A) $4/13$, $3/7$, $5/9$, $7/11$ (B) $3/7$, $4/13$, $5/9$, $7/11$
(C) $7/11$, $5/9$, $3/7$, $4/13$ (D) $4/13$, $5/9$, $3/7$, $7/11$
5. Find the odd one out: 121, 169, 289, 361, 529, 625
(A) 289 (B) 361 (C) 529 (D) 625

SECTION B: SPEED MATHEMATICS

6. Simplify: $25 \times 8 - 36 \div 4 + 17$
(A) 213 (B) 208 (C) 221 (D) 225
7. 35% of 240 + 20% of 350 = ?
(A) 154 (B) 158 (C) 162 (D) 166
8. $\sqrt{529} + \sqrt{361} - \sqrt{196} = ?$
(A) 32 (B) 28 (C) 36 (D) 38
9. Simplify $42 \times 6 - 28 \div 7 + 15$
(A) 259 (B) 263 (C) 267 (D) 271

10. Simplify $12^3 - 9^2 + 11$

- (A) 1708 (B) 1712 (C) 1658 (D) 1720

SECTION C: CONCENTRATION

11. Find the missing letter: F, I, L, O, ____

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

12. How many vowels are in the word “INTELLIGENCE”?

- (A) 5 (B) 6 (C) 7 (D) 8

13. Which word has the maximum number of letters?

- (A) PHILOSOPHY (B) PSYCHOLOGY (C) ECONOMICS (D) BIOLOGY

14. Find the pattern: 1, 4, 10, 19, 31, ____

- (A) 46 (B) 48 (C) 50 (D) 52

15. Spot the difference: “ACHIEVEMENT” vs “ACHIVEMENT” – How many letters are missing?

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

SECTION D: REASONING

16. All engineers are logical. Suresh is an engineer. Then Suresh is logical?

- (A) True (B) False (C) Uncertain (D) Cannot say

17. Circle : Circumference :: Square : ?

- (A) Area (B) Diagonal (C) Perimeter (D) Volume

18. If BAT = 23, CAT = 24, then MAT = ?

- (A) 34 (B) 35 (C) 36 (D) 37

19. Complete the series: 2, 6, 12, 20, 30, 42, ____

- (A) 54 (B) 56 (C) 58 (D) 60

20. If South-East is opposite to North-West, then what is opposite to North-East?

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