



UNIFIED CYBER OLYMPIAD (UPDATED)

CLASS - 06
Question Paper Code : 3B107

KEY

1. B	2. D	3. C	4. A	5. B	6. A	7. B	8. D	9. A	10. C
11. D	12. C	13. D	14. B	15. B	16. D	17. B	18. A	19. C	20. B
21. D	22. B	23. C	24. C	25. B	26. A	27. B	28. D	29. A	30. B
31. D	32. A	33. D	34. B	35. A	36. C	37. D	38. C	39. C	40. A
41. D	42. B	43. B	44. D	45. B	46. B	47. D	48. B	49. D	50. B

SOLUTIONS

MENTAL ABILITY

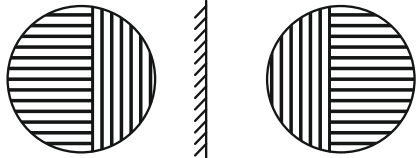

01. (B) Number of integers between -5 and 990
 $= 990 - (-5) - 1$
 $= 990 + 5 - 1 = 994$
02. (D) $1234 \times 456 + 123 \times 1234 + 1234 \times 119 + 1234 \times 158 + 1234 \times 144$
 $= 1234(456 + 123 + 119 + 158 + 144)$
 $= 1234 \times 1000$
 $= 12,34,000$
03. (C) Common multiples of 3, 4 and 6 are 12, 24, 36 and 48
 $[\because \text{LCM of } 3, 4 \text{ \& } 6 = 12]$
 Required sum $= 12 + 24 + 36 + 48 = 120$

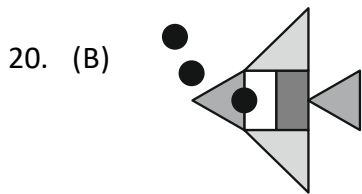
04. (A) 10,002 is the smallest 5 digit number having three different digits i.e., 0, 1 & 2.
05. (B) If numerators are same for all fractions, then the small denominator fraction is the biggest fraction.
 $\therefore \frac{997}{7}$ is the greatest option.
06. (A) $2\frac{3}{5} - 4\frac{3}{4} + 7\frac{2}{3} = \frac{13}{5} - \frac{19}{4} + \frac{23}{3}$
 $= \frac{156 - 285 + 460}{60}$
 $= \frac{331}{60} = 5\frac{31}{60}$

07. (B) Given 38, x , 3, 21 are in proportion
 \therefore Product of means = Product of extremes
 $\therefore 3x = 21 \times 38$
 $x = \frac{21 \times 38}{3}$
 $x = 266$
08. (D) Let the weight of copper be x kg.
 \therefore The copper and zinc weight ratio
 $= x \text{ kg} : 2.121 \text{ kg}$
 Given $3 : 7 = x : 2.121$
 Product of means = Product of extremes
 $7x = 3 \times 2.121$
 $x = \frac{3 \times 2.121}{7}$
 $= 0.909 \text{ kg}$
09. (A) Number of people represented for 1 unit
 $= 2.5$ crores
 \therefore Number of people represent for 7 units
 $= 7 \times 2.5$ crores
 $= 17.5$ crores
10. (C) Weight of the sack = 3.6 kg
 $= 3.6 \times 1000 \text{ g} = 3600 \text{ g}$
 Number of 5 rupee coins of weight 3.6 kg
 $= \frac{3600 \text{ g}}{9 \text{ g}} = 400$
11. (D) 17 is a factor of 18445
 17 can be HCF of 18445
 Similarly 13 & 85 are also factors of 18445
 But 13 is not a factor of 18445
 \therefore 13 is not a HCF of those two numbers.
12. (C) Volume of first box = $l \times b \times h = lbh$
 Volume of second box = $2l \times \frac{b}{2} \times h = lbh$
 \therefore Both boxes volumes are equal.
13. (D) $0 + 5 - \cancel{3} - 2 + \cancel{3}$
 $= 5 - 2 = 3$

14. (B) Cost of 1 kg wheat = $\frac{426}{15} = ₹ 28.4$
 Cost of 5 kg wheat = $₹ 28.4 \times 5 = ₹ 142$
 (OR)
 Cost of 15 kg = ₹ 426
 Cost of 5 kg wheat = cost of 15 kg wheat / 3
 $= \frac{426}{3} = ₹ 142$
15. (B) Volume of a cuboid
 $= lbh = 15 \times 12 \times 4.5 \text{ m}^3$
 $= 810 \text{ m}^3$

REASONING

16. (D) 
17. (B) A mountain is opposite to a valley, just as a crest is opposite to a trough in a wave.
18. (A) 
19. (C) The pattern as follow
 vowel = - 6
 consonant = + 1
- | | | | | | |
|------|------|------|------|------|------|
| 15 | 18 | 1 | 14 | 7 | 5 |
| O | R | A | N | G | E |
| -6 ↓ | +1 ↓ | -6 ↓ | +1 ↓ | +1 ↓ | -6 ↓ |
| I | S | U | O | H | Y |
| 9 | 19 | 21 | 15 | 8 | 25 |
- SIMILARLY;
- | | | | | |
|------|------|------|------|------|
| 13 | 1 | 14 | 7 | 15 |
| M | A | N | G | O |
| +1 ↓ | -6 ↓ | +1 ↓ | +1 ↓ | -6 ↓ |
| N | U | O | H | I |
| 14 | 21 | 15 | 8 | 9 |
- Hence, option (C) is the correct answer



21. (D) The rule followed is

$$\begin{array}{ccccccc} K & \xrightarrow{+2} & M & \xrightarrow{+2} & O & \xrightarrow{+2} & Q & \xrightarrow{+2} & S \\ R & \xrightarrow{-2} & P & \xrightarrow{-2} & N & \xrightarrow{-2} & L & \xrightarrow{-2} & J \\ 6 & \xrightarrow{+2} & 8 & \xrightarrow{+4} & 12 & \xrightarrow{+6} & 18 & \xrightarrow{+8} & 26 \end{array}$$



23. (C) Specified letters from the left are N and O, and the letter from the right is I.

With these letters, according to the conditions given in the question, one word ONION can be formed. Clearly, first letter of this word is O.

24. (C) $5 \times 2 \div 2 < 10 - 4 + 8$

$5 - 1 < 10 + 4 ; 4 < 14$

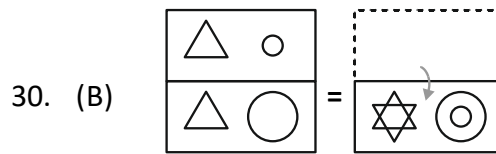
25. (B) The seating arrangement is
P, X, S, Z, R, A

26. (A) 1, 5, 8 are all open figures bisected by a line segment.
4, 6, 7 are all closed figures touching a line segment.
2, 3, 9 are all closed figures intersected by a line.

27. (B) Each fold doubles the number of sections. After three folds
 $2 \times 2 \times 2 = 8$

28. (D)
- "DANGER" can be rearranged to form "GARNED," "RANGED," and "GARDEN."
 - "GRADEN" is not a valid word and does not form from rearranging the letters of "DANGER."
 - Therefore, the correct answer is (D) GRADEN

29. (A) The name of a word is 'BRACELET'. The first and last letters are 'B' and 'T' respectively.



COMPUTERS

31. (D) Facebook Messenger - Facebook Messenger is primarily a messaging platform associated with the social media network Facebook, but it does not provide email services independently.

32. (A) Laser is high speed, high quality and non impact printer.

33. (D) Except option (D) remaining options are the characteristics of first generation computers.

34. (B) Solving mathematical problems was the main purpose of the Analytical Engine invented by Charles Babbage

35. (A) Scanner is an input device used to transfer hard copy into a computer softcopy.

36. (C) To print the words "SchoolCollegeUniversity" in a line using the PRINT keyword in QBasic, you can use semicolons to separate the words

37. (D) Accessing company documents and reports is typically carried out using an Intranet. Employees can use the Intranet to access important documents, reports and other resources necessary for their work within the organization.

38. (C) 5G technology is primarily designed for terrestrial communication and is not directly applicable to space exploration. The other options are all potential applications of 5G technology due to its high speed, low latency and high capacity capabilities.

39. (C) The given image is a Flash device.

ENGLISH

40. (A) WordArt is a feature in PowerPoint 2016 that enables users to apply various visual effects to text. By using WordArt, students can make their text stand out by adding effects such as shadows, reflections, 3-D rotations, and more.
41. (D) Calibri is the default font style used in MS Word documents.
42. (B) To display notifications and alerts
43. (B) Design and Layout tabs provide options for customizing the appearance and structure of tables.
44. (D) A translator is software that converts instructions written in a high-level programming language (HLL) or assembly language into machine language (binary code) that the computer's processor can execute. There are several types of translators, including compilers and interpreters.
45. (B) A box that can represent two different conditions is typically depicted as a diamond shape in flowcharts.
46. (B) Only option (B) : [!"] exclamation mark and close inverted commas' can be used to fill that blank correctly. Note : The word 'Oh' is an exclamation which is used to express surprise, fear, joy, etc., and hence we need to introduce an exclamation mark at the place where the blank is. And as the quote (expression) should end; as the next quote, a question by Lasya, begins, we should introduce ["] close inverted commas immediately thereafter.
47. (D) 'CBDA', resulting in 'No sooner did the people see the giant, than they fled away' is the correct answer. Note : The structure 'no sooner' is used to talk about something that happens immediately after something else (two activities take place almost at the same time). There is no real time difference between them. When 'no sooner' comes at the beginning of a sentence, we use inverted word order, that means the auxiliary verb comes before the subject, as in 'did the people see', here. The conjunction 'than' is used to combine the two clauses ('No sooner did the people see the giant', and 'they fled away', here).
48. (B) 'turtle' can be used to fill the blank to complete the idiom correctly as per the context. The idiom 'turn turtle' means '(of a boat) to turn over completely while sailing'.
49. (D) 'PET' can be used to mix with the letters 'COMENT' in capital in the given sentence, to form the word 'COMPETENT' to make that sentence meaningful.
50. (B) The word 'enrole' is misspelt. Its correct spelling is 'enroll'.