UNIFIED COUNCIL
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UNIFIED COUNCIL OLYMPIADS

UIC
Unified International Cyber Olympiad

UNIFIED INTERNATIONAL CYBER OLYMPIAD (UPDATED)

CLASS - 8
Question Paper Code : 3B127

KEY

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

SOLUTIONS

MENTAL ABILITY

1. **(A)** Let the principal be ₹ x

Given A = ₹ $\frac{5}{4}x$

$I = A - P = ₹\ \frac{5x}{4} - ₹x = ₹\ \frac{x}{4}$

$₹\frac{x}{4} = \frac{x \times 5 \times R}{100} \Rightarrow R = 5$

2. **(C)** $LHS = \frac{(67.542 + 32.458)(67.542 - 32.458)}{35.084}$

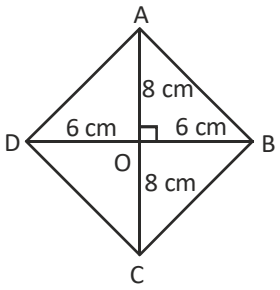
$= \frac{100 \times 35.084}{35.084}$

$= 100$

3. **(B)** Difference of degrees = 8 – 5 = 3

4. **(B)** Option (B) gives the required figure

5. **(A)**



$\Delta AOB,\ AO = \frac{16\ cm}{2} = 3\ cm,$

BO = $\frac{12\text{ cm}}{2}$ = 6 cm & $\angle AOB = 90°$

$\therefore$ $AB^2 = AO^2 + OB^2 = 64\text{ cm}^2 + 36\text{ cm}^2 = 100\text{ cm}^2$

$AB = \sqrt{100\text{ cm}^2} = 10\text{ cm}$

6. **(C)** $\frac{n}{2}$ (or) $\frac{n+1}{2}$ digits

7. **(D)** $2(x-4)-(x-7)=15$

$2x-8-x+14=15$

$x-1=15$

$x=16$

8. **(D)** Let the principal be ₹ x

Given $₹x\left(1+\frac{15}{100}\right)^2 - ₹x - ₹\frac{x\times15\times2}{100}$

= ₹144

$x\times\frac{23}{20}\times\frac{23}{20}-x-\frac{6x}{20}=144$

$\frac{529x-400x-120x}{400}=144$

$\frac{9x}{400}=144$

$x = 144\times\frac{400}{9}$ = ₹ 6400

(or) $\frac{Pr^2}{10,000}$ = ₹ 144

$P\times\frac{(15)^2}{10,000}$ = ₹ 144

$P = ₹\,144\times\frac{\cancel{10,000}^{\cancel{2000}^{400}}}{{}_3\cancel{15}\times\cancel{15}_3} = ₹\,6400.$

9. **(C)** Given $₹673 = \frac{P\times4\times\frac{25}{3}}{100}$

P = ₹ 673 × 3 = ₹ 2019

10. **(B)** Given $15x^2 + 21x - 20x - 28$

$= 15x^2 - ax - 28$

$x = -ax$

a = –1

11. **(C)** $\angle B = \angle D = 106°$

$106° + 106° = 212°$

12. **(C)** Let the length be 'l' and breadth be 'b'

Given new rectangle area =

$\frac{l(100-5)}{100}\times\frac{b(100+5)}{100}$

$=lb\times\frac{19}{20}\times\frac{21}{20}=\frac{399lb}{400}$

Decreased area = $lb-\frac{399\,lb}{400}=\frac{lb}{400}$

Decreased area percentage =

$=\frac{\left(\frac{lb}{400}\right)}{lb}\times100=0.25$

13. **(C)** 2^{18} = 262144

3^{12} = 531441

4^{10} = 1048576

5^8 = 390625

14. **(A)** $216 = 6^3$

$1000 = 10^3$

$\sqrt[3]{6^3\times10^3}$ = 60

15. **(C)** 100% – (20% + 10% + 25% + 10%) = 35%.

REASONING

16. **(D)** 4 is opposite number to 3.

17. **(D)** Farhan > Eshan > Charan > Aarav > Dev > Bhavesh

Hence, Bhavesh is the youngest.

18. **(C)** Back track is a meaningful word by using 2 group of words.

19. **(D)** GHT, JKR, MJP, PKN, SLL

1st letter is skip two letters

2nd letter is series HIJKL

3rd letter is reverse from 'L' skip 'I' letter

∴ JKR is wrong term.

20. **(B)** (240 ÷ 8 – 20) × 5 + 7 = (30 – 20) × 5 + 7

= 50 + 7 = 57

21. **(B)** Reverse the first 7 letters (ELEPHAN - NAHPELE) and keep the last letter (T) unchanged

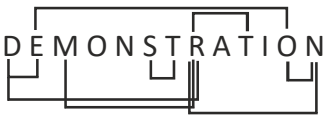
22. **(C)** RQPO ⇒ OPQR

VUTS ⇒ STUV

HNOP ⇒ HNOP

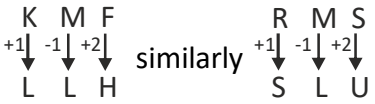
HGFE ⇒ EFGH

HNOP is not in sequence. So, it is add one out.

23. **(D)** 

more than 4 pairs occur.

24. **(C)** First use the key to open the lock, then open the door, enter the room and switch on the light.

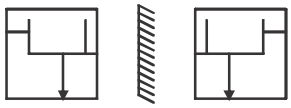
25. **(D)** 

26. **(D)** a abc b aab c ccaa c bcc aab

a bbc a aab a ccaa b bcc bab

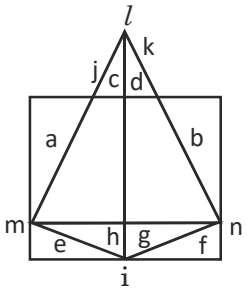
a abc a aab b ccaa b bcc aab

a **b**bc **c** aab **b** ccaa **b** bcc **a**ab

27. **(C)** 

28. **(A)** 

29. **(A)** There are 14 triangles.



30. **(C)** 8 × 4 + 7 = 39

7 × 2 + 6 = 20

6 × 5 + 7 = 37

@ = ×

$ = +

COMPUTERS

31. **(B)** A pie chart can only display one series of data. A data series is a row or column of numbers used for charting.

32. **(A)** MS-Access

33. **(B)** FPS standards for frames per second.

34. **(A)** A web server is a program that uses HTTP protocol to serve the files that form web pages to users, in response to their requests. What are forwarded by their computer's HTTP clients.

35. **(C)** HTTP (Hypertext Transfer Protocol)

36. **(C)** Website is a collection of web pages under a single domain name.

37. **(D)** E-mail reaches its destination within a few seconds.

E-mail doesn't get lost in transit.

It is possible to attach sound and animation files with e-mail.

All are correct regarding e-mail.

38. **(D)** Graphic tablet is a hardware input device.

Touch screen is also an input device.

Smart cards are often called input devices.

Therefore 'none of these' 'D' is correct.

39. **(A)** A Braille printers.

40. **(D)** All of the above option (D).

41. **(D)** Trojan, Alien.298 and Amoeba.A all are comes under different types of viruses.

42. **(B)** IF-THEN-ELSE is not a looping statement.

43. **(C)** Sorting of data means arranging the data in ascending or descending order.

44. **(C)** A landscape is not a component of a chart.

45. **(C)** A browser is a software that allows users to surf the net.

ENGLISH

46. **(A)** The sick elephant was put down after it trampled a boy.

47. **(D)** Some people long for the way things used to be years ago.

48. **(D)** Order

49. **(D)** Genious

50. **(C)** lay

The End