

## Mock Test (Solution)\_02

1. **Answer: (B)**  
Factors of 11 in 111! is 110, 99, 88, 77, 66, 55, 44, 33, 22 and 11  
So, desired answer = 10  
Shortcut:  
 $[111/11] + [111/11^2] = [10.09] + [0.9] = 10 + 0 = 10$
2. **Answer: (D)**  
Let the speed of the boat and of the current be 'x' km/h and 'y' km/h respectively.  
According to the question,  
 $60/(x - y) - 60/(x + y) = 2$   
Or,  $1/(x - y) - 1/(x + y) = 1/30$   
Or,  $30 \times 2y = x^2 - y^2$   
Or,  $x^2 = y^2 + 60y$  ..... (i)  
After doubling his travelling speed,  
 $60/(2x - y) - 60/(2x + y) = 200/420 = 10/21$   
Or,  $1/(2x - y) - 1/(2x + y) = 1/126$   
Or,  $(2x + y - 2x + y)/(4x^2 - y^2) = 1/126$   
 $4x^2 - y^2 = 252y$  ..... (ii)  
From equation (i) and (ii), we get  
 $4(y^2 + 60y) - y^2 = 252y$   
Or,  $3y^2 = 12y$   
Or,  $y = 4$  km/h
3. **Answer: (C)**  
The quantity of pure liquid =  $[x \{1 - (y/x)\}^n]$   
Wine =  $100(1 - 10/100)^2$   
So, we get the quantity of Wine in the resultant mixture = 81 litres  
So, the quantity of water in the resultant mixture =  $100 - 81 = 19$  litres  
So, the required ratio of Wine:Water = 81:19
4. **Answer: (C)**  
Let the cost price of the trimmer be ₹x  
Roshan sold it to Ajay at a loss of 20%.  
So, selling price of trimmer for Roshan = ₹0.80x  
Ajay spent ₹160 on repairing  
Cost price of Trimmer for Ajay = ₹(0.80x + 160)  
Again Ajay sold it to Salman incurring a loss of 20%.  
Selling price for Ajay = ₹[0.80 × (0.80x + 160)] = Cost price for Salman  
According to question;  
 $0.80 \times (0.80x + 160) = 1600$   
 $0.80x + 160 = 2000$   
 $0.80x = 1840$   
So,  $x = 2300$
5. **Answer: (D)**  
Let the amount borrowed by P from Q be ₹'x'  
So, the amount borrowed by P from R = ₹(2x/3)  
 $x + (2x/3) = 7250$   
 $5x = 21750$   
 $x = \text{Rs.} 4350$   
Money to be repaid to Q =  $4350 + (4350 \times 0.12 \times 2) = ₹5394$   
Money to be repaid to R =  $\{(2 \times 4350)/3\} + \{(2 \times 4350)/3\} \times 0.18 \times 2$   
 $= 2900 + 2900 \times 0.36 = ₹3944$   
Total amount to be repaid by P =  $3944 + 5394 = ₹9338$
6. **Answer: (B)**  
Ratio of profit share of A, B and C =  $[1250 \times 7 + 2186 \times 5]:[1350 \times 7 + 570 \times 5]:[1230 \times 12] = 8:5:6$   
Profit share of A =  $8/19 \times 13680 = ₹5760$
7. **Answer: (C)**  
Since,  $6x + 4y = 20$ , reduce this to the lowest form =  $3x + 2y = 10$   
Using formula;  $(c_1 - c_2)/\sqrt{(a^2 + b^2)} = (10 - 5)/\sqrt{(3^2 + 2^2)} = 5/\sqrt{13}$  units = distance between the lines
8. **Answer: (A)**  
 $(4/3 \div 20/7 \text{ of } 28/5) \div (32/5 \div 9/2 \text{ of } 16/3) \times (3/4 \times 8/3 \div 5/9 \text{ of } 6/5) = k + 7$   
 $1/12 \div 4/15 \times 3 = k + 7$   
 $1/12 \times 15/4 \times 3 = k + 7$   
So,  $k + 7 = 15/16 = 0.9375$   
So,  $k = -6.0625$
9. **Answer: (C)**  
Sum of interior angle of a polygon with side 'n' is  $(n - 2) \times 180$   
Sum of the exterior angles of a polygon = 360  
For Hexagon, sum of interior angle =  $(6 - 2) \times 180 = 720$   
Ratio of interior angle = 3:5:6:7:7:8  
So, sum of interior angles of hexagon;  
 $3x + 5x + 6x + 7x + 7x + 8x = 720$   
Therefore,  $x = 20$

Interior Angle (in degrees)	60	100	120	140	140	160
Exterior Angle (in degrees)	120	80	60	40	40	20

For Pentagon, sum of exterior angles = 360

Ratio of exterior angle = 1:2:3:4:5

So, sum of interior angles pentagon;

$$y + 2y + 3y + 4y + 5y = 360$$

Therefore,  $y = 24$

Exterior Angle (in degrees)	24	48	72	96	120
Interior Angle (in degrees)	156	132	108	84	60

Largest interior angle of the pentagon =  $156^\circ$

Smallest exterior angle of the hexagon =  $20^\circ$

Desired Difference =  $136^\circ$

Number of product E sold in 2017 =  $79.2/360 \times 7250$   
= 1595

Number of product E sold in 2018 =  $1.4 \times 1595$  = 2233

13. **Answer: (B)**

Total number of products sold by the company =  $585/(64.8/360) = 3250$

Desired answer =  $(43.2 + 72)/360 \times 3250 = 1040$

14. **Answer: (C)**

Let the height of the cylindrical vessel be  $x$  cm.

So, radius of the cylindrical vessel =  $1.75x = 7x/4$  cm

Since, Diameter of bowl = Diameter of vessel

Therefore, radius of the hemispherical bowl = radius of the cylindrical vessel

Radius of bowl =  $(7x/4)$  cm

According to the question

Volume of the hot water = Volume of hemispherical bowl =  $2/3 \times \pi \times (7x/4)^3$

Therefore, volume of the hot water =  $539x^3/48 \text{ cm}^3$

15. **Answer: (A)**

When 3 has the power which is divisible by 4, then its unit digit will be 1

When any number which has unit digit 1 is divided by 5, the remainder will be 1

Therefore,  $a = 1$

When 4 has the power which is divisible by 4, then its unit digit will be 6

When any number which has unit digit 6 and which can be written as  $4^n$  is divided by 6, the remainder will be 4

Therefore,  $b = 4$

Therefore,  $(3a - 2b) = (3 \times 1 - 2 \times 4) = -5$

16. **Answer: (D)**

Radius of circular area = 56 metres

Therefore, distance covered by the machine =  $2\pi r = 2 \times (22/7) \times 56 = 352$  metres

Now, perimeter of Octagon =  $8 \times 27 \text{ m} = 216$  metres

Time required moving along octagon

=  $(74 \times 216)/352 = 45.40 \sim 46$  minutes

Required difference =  $74 - 46 = 28$  minutes

17. **Answer: (B)**

$(442 - 424 + 242) \div 13 + \sqrt{2304} = x$

$20 + 48 = x$

Or,  $x = 68$

Therefore,  $\{(x/2) + 16\} = (34 + 16) = 50$

18. **Answer: (C)**

According to the question,

Selling price of the article =  $1.24 \times 1450 = ₹1798$

Marked price of the article =  $1798 + 145 = ₹1943$

Required percentage =  $\{(1943 - 1450)/1450\} \times 100 = 34\%$

19. **Answer: (A)**

Let the cost price of each orange be ₹1

Therefore, cost price of 60 oranges = ₹60

Profit earned = ₹20

Required profit percentage =  $(20/60) \times 100 = (100/3)\%$

20. **Answer: (B)**

Marked price of the article =  $1677/(0.86 \times 0.78) = ₹2500$

Therefore, cost price of the article =  $2500 - 150 = ₹2350$

21. **Answer: (D)**

22. **Answer: (C)**

Respective ratio of the profits received by 'A', 'B' and 'C'

=  $(2 + 2 + 1):(6 + 6 + 1.5):(5 + 5 + 2) = 10:27:24$

Required percentage =  $\{(24 - 10)/10\} \times 100 = 140\%$

**Answer: (C)**

Let the sum invested be ₹'P'.

ATQ;

$19P - P = (P \times r \times 24) \div 100$

Or,  $18P = (24Pr/100)$

So,  $r = 75$

Therefore,  $(2r/3)\% = \{(2 \times 75)/3\}\% = 50\%$

Required interest =  $\{12000 \times 50 \times 6\} \div 100 = ₹36,000$

23. **Answer: (D)**

In the mixture,

Let the quantity of milk which costs ₹30 per litre be  $7x$  litres

And, quantity of milk which costs ₹45 litre be  $8x$  litres

Cost price of the mixture =  $\{[30 \times (7x) + 45 \times (8x)]/15x\} = \{(210x + 360x)/15x\} = ₹38$

So, to earn 50% profit the milkman should sell the mixture at  $1.5 \times 38 = ₹57$  per litre.

24. **Answer: (C)**

Ratio of profit shares of 'A' and 'B' =  $\{(8000 \times 6) + (10000 \times 6)\} : \{4000 \times 6\}$

=  $108000:24000 = 9:2$

B's profit share =  $11,11,121 \times (2/11) = ₹2,02,022$

25. **Answer: (D)**

In order to compare the numbers, we must make their denominators equal.

For option:

a.)  $(12/28) > (14/28) > (5/28)$  this is incorrect.

b.)  $(12/28) < (5/28) > (14/28)$ , this is also incorrect.

c.)  $(8/28) < (5/28) > (21/28)$ , this is also incorrect.

d.)  $(21/28) > (8/28) > (5/28)$ , this is correct.

26. **Answer: (A)**

$20\% \text{ of } 260 + 18 \div 3 \times 2 - 4$

$\frac{6 \times 4 + 12 \text{ of } 3}{52 + 12 - 4}$

=  $\frac{24 + 36}{52 + 12 - 4}$

=  $\frac{60}{60}$

= 1

27. **Answer: (B)**

Initial quantity of milk in the mixture =  $50 \times (3/5) = 30$  litres

And, initial quantity of water in the mixture =  $50 \times (2/5) = 20$  litres

Quantity of milk withdrawn =  $20 \times (3/5) = 12$  litres

Quantity of water withdrawn =  $20 - 12 = 8$  litres

Required ratio =  $\{30 - 12 + 20\} : \{20 - 8\} = 38:12 = 19:6$

28. **Answer: (A)**

Given,  $\tan^2 = 3$

So,  $\tan = \sqrt{3}$ , since  $0^\circ \leq < 90^\circ$

Or,  $\tan = \tan 60^\circ$

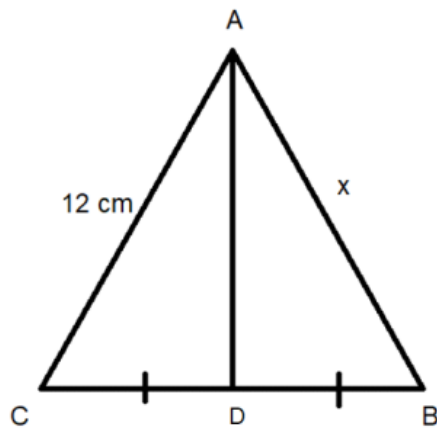
So,  $= 60^\circ$

So,  $\sec + \sin(1/2) = \sec 60^\circ + \sin(60^\circ/2)$

=  $\sec 60^\circ + \sin 30^\circ = 2 + (1/2) = (5/2)$

29. **Answer: (C)**

Let the length of side AB be ' $x$ ' cm

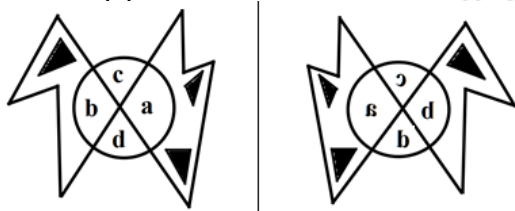


Apollonius theorem: The sum of the squares of any two sides of any triangle equals twice the square on half the third side, together with twice the square on the median bisecting the third side  
 So,  $(AB^2 + AC^2) = 2(AD^2 + BD^2)$   
 Or,  $x^2 + 12^2 = 2 \times (16^2 + 4^2)$   
 Or,  $x^2 = 400$   
 Or,  $x = 20$  (Since, length cannot be negative therefore we will take the positive root only)  
 Therefore, length of side AB is 20 cm.

30. **Answer: (A)**

Let the length of edge of the tetrahedron be 's' cm  
 Height of tetrahedron =  $\{(\sqrt{2}/\sqrt{3}) \times s\}$  cm  
 ATQ;  
 $2\sqrt{6} = (\sqrt{2}/\sqrt{3}) \times s$   
 Or,  $s = 6$  cm  
 Volume of tetrahedron =  $(\sqrt{2}/12) \times s^3$   
 $= (\sqrt{2}/12) \times 6 \times 6 \times 6$   
 $= 18\sqrt{2} \text{ cm}^3$

31. **Answer: (B)**



32. **Answer: (C)**

Figure C is the correct answer.

33. **Answer: (D)**

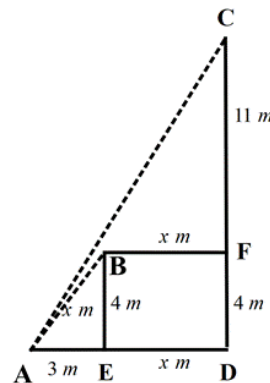
The second number in each pair is obtained after multiplying the first number by the immediate next number  
 $20 \times 21 = 420$   
 $10 \times 11 = 110$   
 $15 \times 16 = 240$

34. **Answer: (B)**

$E+5=J$   
 $P+5=U$   
 Similarly IT:NY  
 $I+5=N$   
 $T+5=Y$

35. **Answer: (A)**

From the directions, we get,



$(AB)^2 = (AE)^2 + (BE)^2$   
 $(AB)^2 = (3)^2 + (4)^2$   
 $(AB)^2 = 9 + 16$   
 $(AB)^2 = 25$   
 $AB = 5$  m.  
 Here,  $AB = BF = ED = 5$  m.  
 Hence,  $AD = 3 + 5 = 8$  m and  $CD = 11 + 4 = 15$  m.  
 $(AC)^2 = (AD)^2 + (CD)^2$   
 $(AC)^2 = (8)^2 + (15)^2$   
 $(AC)^2 = 64 + 225$   
 $(AC)^2 = 289$   
 $AC = 17$  m.

Hence, the shortest distance between boxes A and C = 17 m.

36. **Answer: (A)**

N's wife is A's sister-in-law.  
 A is K's only sister and unmarried.  
 And K is also unmarried, hence, A must be having one brother N.

— (f) — N (m) — A (f) — K (m/f)

We know,  
 R is U's daughter.  
 U has a brother-in-law.  
 Hence, K must be U's brother-in-law and U is N's wife.  
 Hence, K is R's uncle.

37. **Answer: (B)**

Code	A	C	H	M	N	O	R
Original letters	H	O	N	R	A	M	C

Hence, the code is AMRHCON.

38. **Answer: (C)**

Here the product of positions or ranks of the letters in alphabetical order is taken  
 $F = 6$ ,  $OD = 60$   
 $OD = 15 \times 4 = 60$ .  
 Similarly,  
 $JBW = 10 \times 2 \times 23 = 460$ .

39. **Answer: (D)**

Prakash lives in an owned apartment, but he tells Samir that it makes more financial sense to rent an apartment. This is not enough information to infer that Samir lives in a rented apartment. Hence, (d) is the correct answer.

40. **Answer: (C)**

In each pair, the alphabetical position of the letter at right is twice the alphabetical position of the letter at left, except for GO.  
 $E(5) - J(10)$   
 $J(10) - T(20)$



H(8)-P(16)  
L(12)-X(24)  
M(13)-Z(26)  
I(9)-R(18)  
K(11)-V(22)  
G(7)-N(14)

41. **Answer: (D)**

The ones who will register for a designing course will do so in the months that have 31 days while the ones who will register for a coding course will do so in the other months. Among the given months, March, May and August have 31 days.

T is the last one to register for the designing course. So, T will register in August.

Month	Person
Feb	
Mar	
Apr	
May	
Aug	T
Nov	

Two people will register in between X and N.

Month	Case 1	Case 2
Feb	N/X	
Mar		
Apr		N/X
May	X/N	
Aug	T	T
Nov		X/N

F and X will register for the same course. So, both of them will register either in months that have 31 days or in months that do not have 31 days. R will register immediately after F.

Month	Case 1	Case 2
Feb	N	F
Mar	F	R
Apr	R	N
May	X	
Aug	T	T
Nov		X

Q will not register immediately before N. Q will not register for designer course. So, case 2 is invalid.

Month	Case 1
Feb	N
Mar	F
Apr	R
May	X
Aug	T
Nov	Q

N, R and Q will register for the coding course.

42. **Answer: (B)**

In each column; the fourth number is obtained by subtracting the square of the third number from the sum of the square of the first number and the square of the second number:

$$6^2 + 5^2 - 4^2 = 36 + 25 - 16 = 45$$

$$5^2 + 1^2 - 2^2 = 25 + 1 - 4 = 22$$

$$\text{So, } 4^2 + 6^2 - 7^2 = 16 + 36 - 49 = 3$$

43. **Answer: (C)**

TT \_ IIHJ \_ \_ \_ LI \_ \_ \_ JTTLI \_ \_ \_ TTLI \_ \_ JJ

The set of letters 'TTLIIHJJ' recurs four times in the given series.

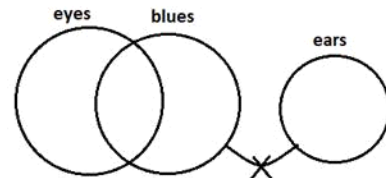
Hence, the complete series is:

TT L IIHJ JTT LI IHJ JTTLI IHJJ TTLI IH JJ

So, the missing letters are: LJTTIHJJHJJH

44. **Answer: (A)**

Some eyes are blues. No blues are ears.



All blues are eyes is a possibility but not a definite truth. So, I does not follow.

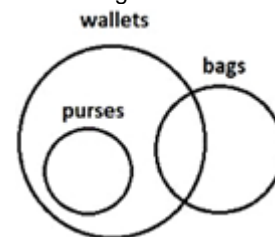
No ears are eyes is a possibility but not a definite truth. So, II does not follow.

All ears are eyes is a possibility but not a definite truth. So, III does not follow.

Hence, none of the conclusions follow.

45. **Answer: (B)**

Some bags are wallets. All purses are wallets.



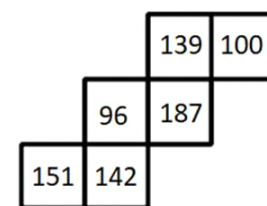
Some purses are wallets is true. So, I follows.

No bags are purses is a possibility but not a definite truth. So, II does not follow.

All wallets are purses is a possibility but not a definite truth. So, III does not follow.

Hence, only I follows.

46. **Answer: (D)**



139 will be opposite to 142

151 will be opposite to 187

'96' will be opposite to '100'.

47. **Answer: (D)**

The order is Concorde, Concrete, Concurred, Congrats, Congress, Conjure, Conrad thus 1234675

48. **Answer: (C)**

ACCOUNT can be formed the given word.

49. **Answer: (B)**

Here, we can see that respective ratio of ages of Priya and Vedant after 8 years is 6: 7. So, Vedant is elder than Priya. Now,

Vedant = 4 + Priya

And, (Priya + 8): (Vedant + 8) = 6: 7

(Priya + 8): (4 + Priya + 8) = 6: 7

Priya = 16 years

And, Vedant = 4 + 16 = 20 years

Therefore, sum of present ages of Priya and Vedant =  $16 + 20 = 36$  years

50. **Answer: (A)**

The year 1989 is an ordinary year. So, it has 1 odd day.

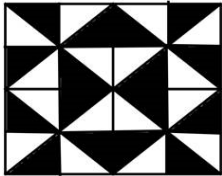
Similarly, 1990, 1991, 1993 and 1994 have 1 odd day each and 1992 has 2 odd days (leap year).

So, total no. of odd days =  $5 \times 1 + 1 \times 2 = 7$

So, 14 July, 1989 was a Friday.

Hence, 12 July, 1989 was a Wednesday.

51. **Answer: (B)**



52. **Answer: (A)**

$17 - 11 = 6$  and  $6^2 = 36$

$23 - 14 = 9$  and  $9^2 = 81$

$34 - 29 = 5$  and  $5^2 = 25$

53. **Answer: (C)**

The birthday is after 21 and before 29, i.e., on 22, 23, 24, 25, 26, 27 or 28 and it is Monday.

17 was a Thursday, so 21 is Monday. Hence, the next Monday is 28.

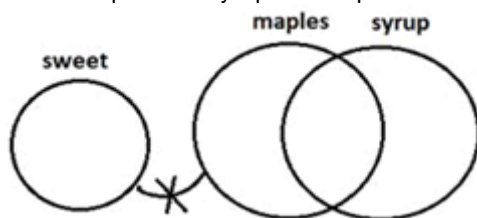
Hence, Rakesh's wife's birthday is on 28.

54. **Answer: (A)**

Number of Indians that are cricketer but not father are 34. It is the intersection of pentagon and rectangle.

55. **Answer: (B)**

Some maples are syrup. No maple is a sweet.



Some sweet are not syrup is not true as all sweet can be syrup. So, I does not follow.

Some syrup are not sweet is true as no maple is sweet. So, II follows.

56. **Answer: (C)**

$16+2=18$

$18+4=22$

**$22+6=28$**

$28+8=36$

$36+10=46$

$46+12=58$

57. **Answer A**

Since, 2 books are there between biology and chemistry, only possible arrangement is - (also, history is below biology, which is not kept at the top.)

1	Chemistry
2	
3	
4	Biology
5	History

Maths and physics are kept consecutively with maths below physics hence, we left a consecutive positions space for it above.

We get finally,

1	Chemistry
2	Physics
3	Maths
4	Biology
5	History

58. **Answer: (B)**

Product of the digits of each given number is 96, except in option (b).

$6 \times 2 \times 8 = 96$

$4 \times 4 \times 6 = 96$

$8 \times 3 \times 4 = 96$

But,  $3 \times 6 \times 4 = 72$ , hence odd.

59. **Answer: (A)**

Except trunk, all other are types of plants. Trunk is a part of tree.

60. **Answer: (D)**

Some scientists are philosophers and most of the philosophers donate money to charity. But there are some philosophers who do not donate to charity and some scientists may belong to that group. (I) cannot be concluded.

It is said that most of the philosophers donate money to charity, but it cannot be said for sure that most of the people who donate to charity are philosophers. There may be other groups of people who donate to charity and philosophers may be a small part of it. Hence, (d) is the correct choice.

61. **Answer: (C)**

(c) is the right answer. We need to replace AN with A. We use AN with words that begin with a vowel sound.

62. **Answer: (C)**

All except C are true. Refer to the lines: "A fourth pterosaur, Afrotapejara zoughrii, which had no teeth, is the first of its kind found on African soil, identified by part of its skull, according to a University of Portsmouth statement...The fourth species, Afrotapejara zoughrii, would have been similar in size, but toothless with a large crest on the front of its skull. None of these pterosaurs would have weighed much despite their size." Thus, (c) is the right answer.

63. **Answer: (B)**

Refer to the lines: "None of these pterosaurs would have weighed much despite their size. Like modern birds, their bones were thin and hollow, allowing the flying reptiles to reach large sizes without becoming too heavy to take off. But this flight adaptation makes pterosaur skeletons less likely to fossilize intact, leaving them scarce in the fossil record." Thus, (b) is the right answer.

64. **Answer: (A)**

Refer to the lines: "None of these pterosaurs would have weighed much despite their size. Like modern birds, their bones were thin and hollow, allowing the flying reptiles to reach large sizes without becoming too heavy to take off. But this flight adaptation makes pterosaur skeletons less likely to fossilize intact, leaving them scarce in the fossil record." Thus, (a) is the right answer.

65. **Answer: (C)**

Refer to the lines: "The three chunks of jaw bone from the toothed pterosaurs resemble existing specimens found in Brazil and England, leading researchers to tentatively place them in the genera Anhanguera, Ornithocheirus and Coloborhynchus, respectively. If confirmed, such close evolutionary ties suggest these winged reptiles could have flown hundreds of miles across the newly forming Atlantic Ocean." Thus, (c) is the right answer.

66. **Answer: (D)**

All except D are true. Refer to the lines: "In recent weeks, paleontologists have reported four new species of prehistoric flying reptiles dating back to the mid-Cretaceous, or about 100 million years ago all found in Morocco...Researchers hypothesize these soaring hunters had 13-feet-wide wingspans, and snatched fish with their sharp teeth, forming part of an ancient river ecosystem that included crocodiles, turtles and predatory dinosaurs." Thus, (d) is the right answer.

67. **Answer: (D)**

All except D are true. Refer to the lines: "Homo erectus was the first ancestor of modern humans to have human-like body proportions and the first to appear outside of Africa. The species appeared in what is now the nation of Georgia 1.85 million years ago and survived in some Indonesian enclaves until as recently as 117,000 years ago. It's generally believed that they first evolved in Africa, and the cranium find described at Drimolen would push back their earliest-known occurrence anywhere in the world by more than 100,000 years." Thus, (d) is the right answer.

68. **Answer: (C)**

All except C are true. Refer to the lines: "Paranthropus robustus, an offshoot of the human family tree not considered a direct human ancestor, is known for large, powerful jaws and teeth that could pulverize a diet of nuts, seeds, roots and tubers. Paranthropus lived from perhaps 2 million years ago (the remains described in this study are the earliest known) until about 1.2 million years ago." Thus, (c) is the right answer.

69. **Answer: (A)**

All except A are true. Refer to the lines: "Australopithecus africanus is the most primitive of this trio. The lineage dates to 3.3 million years ago and combines human features with ape-like attributes including long, tree climbing-arms. Despite these intermediate features, Australopithecus's exact relation to modern humans remains unknown. The species is thought to have died out around 2 million years ago." Thus, (a) is the right answer.

70. **Answer: (C)**

The passage tells us that Homo erectus lived until as recently as 117,000 years ago, while the Paranthropus robustus live until 1.2 million years ago and the Australopithecus africanus died out 2 million years ago. Refer to the lines: "Australopithecus africanus is the most primitive of this trio...The species is thought to have died out around 2 million years ago...Paranthropus lived from perhaps 2 million years ago (the remains described in this study are the earliest known) until about 1.2 million years ago.

Homo erectus was the first ancestor of modern humans to have human-like body proportions and the first to appear outside of Africa. The species appeared in what is now the nation of Georgia 1.85 million years ago and survived in some Indonesian enclaves until as recently as 117,000 years ago." Thus, (c) is the right answer.

71. **Answer: (A)**

Refer to the lines: "Two million years ago, three different early humans—Australopithecus, Paranthropus, and the earliest-known Homo erectus—appear to have lived at the same time in the same place, near the Drimolen Paleocave System." Thus, (a) is the right answer.

72. **Answer: (C)**

Refer to the passage: "The Humboldt squid, and the current of the same name it is native to, is named after Alexander von Humboldt, an influential naturalist." Thus, (c) is the right answer.

73. **Answer: (B)**

Refer to the lines: "Lead author Burford found that the Humboldt squid's use of bioluminescence is unique. "Humboldt squids have small aggregations of luminescent tissue—little dots sprinkled throughout their muscles," Burford says. "Instead of projecting light outwards, what these photophores do is radiate light within the body tissue. They make the whole animal glow." Thus, (b) is the right answer.

74. **Answer: (D)**

All except D are mentioned in the passage as reasons why animals use bioluminescence. Refer to the lines: "Yet the Humboldt squid (Dosidicus giga), a social species that lives in groups of hundreds of individuals, can communicate visually at depths of 600 feet or more. Cephalopods including squid, octopus and cuttlefish are known for a stunning array of visual displays...Many deep-sea creatures use bioluminescence for defense, camouflage and predatory behaviors. Some creatures present bioluminescent displays that are sex- and species-specific, allowing them to identify others within their species and gender." Thus, (d) is the right answer.

75. **Answer: (C)**

Refer to the lines: "Cephalopods including squid, octopus and cuttlefish are known for a stunning array of visual displays." Thus, (c) is the right answer.

76. **Answer: (C)**

Refer to the lines: "New research by Ben Burford of Stanford University and Bruce Robison of the Monterey Bay Aquarium Research Institute (MBARI) suggests that the Humboldt squid uses bioluminescent light organs known as photophores to backlight their visual displays." Thus, (c) is the right answer.

77. **Answer: (B)**

(b) is the right answer. DULCET means (especially of sound) sweet and soothing (often used ironically). SOOTHING is the synonym. UNEQUIVOCAL- leaving no doubt; unambiguous. SOPHISTICATED- (of a machine, system, or technique) developed to a high degree of complexity. COMPLEX- consisting of many different and connected parts.

78. **Answer: (C)**



(c) is the right answer.

Claque- A group of followers hired to applaud at a performance

Cortege- A funeral procession

Credulous- Ready to believe anything

79. **Answer: (B)**

The correct spelling of the word is UBIQUITOUS and it means found everywhere. Thus, (b) is the right answer.

80. **Answer: (A)**

HOLD BACK (restrain) will fit here as the sentence tells us how he never restrained himself from expressing his views. Thus, (a) is the right answer.

Hold down - to maintain something as a lower level; to continue. Hold off - postpone or delay. Hold out - survive.

81. **Answer: (B)**

(b) is the right answer. We need to replace USE with USED. The passive voice construction of ARE+VERB requires a verb in its past participle form.

82. **Answer: (A)**

The sentence is in active voice and in past progressive tense (WAS ASKING). Follow the rules below to convert a sentence in the indicative mood to passive voice:

1. The subject clause will become the object clause. Here, the subject THE BEGGAR will change to the object of the verb, and the object ALMS will change into the subject and begin the sentence.

2. Replace WAS ASKING with WERE BEING ASKED. The passive voice construction for past continuous tense is "WAS/ WERE + BEING + past participle".

3. Add the conjunction BY before THE BEGGAR to link the verb with its object.

Option (a) is the right answer.

83. **Answer: (B)**

We need a past participle form verb here to fit in the construction HAVING + BEEN + VERB. EXPELLED (rusticated) will fit here as the sentence tells us how Goodfellow was rusticated from the Naval Academy. Thus, (b) is the right answer.

Exempted - excluded. Extracted - drawn out. Exhausted - tired.

84. **Answer: (A)**

We need an adjective to modify the pronoun HIMSELF. SKILLED (adept) will fit here as the sentence tells us how he was adept at treating gunshot wounds. Thus, (a) is the right answer.

Scorned - belittled. Stumped - defeated. Stirred - provoked.

85. **Answer: (A)**

We need a verb to link the subject and object. PERFORMED (carried out) will fit here as the sentence tells us how he carried out the first recorded laparotomy. Thus, (a) is the right answer.

Pervaded - spread through an area. Po

86. **Answer: (D)**

We need a noun to form the object of the possessive pronoun THEIR. BATTLE (fight) will fit here as the sentence tells us how he treated the Earp brothers after their fight. Thus, (d) is the right answer.

Brunt - the worst part of something. Burden - trouble. Brisk - quick.

87.

**Answer: (B)**

We need a noun here to be modified by the adjective UNIQUE. ROLE (part) will fit here as the sentence tells us how the revolver pushed his career forward. Thus, (b) is the right answer.

Roll - move in a particular direction by turning over and over on an axis. Rule - law. Ruin - destroy.

88.

**Answer: (A)**

(a) is the right answer. PASS THE TORCH means to pass on the responsibility.

89.

**Answer: (A)**

(a) is the right answer.

Bell- The sound of deer

Bellow- The sound of alligators

Cackle- The sound of geese

90.

**Answer: (A)**

Option (a) is the right answer.

The sentence is in direct speech and in the indicative mood. To convert this sentence to the indirect speech, follow these rules:

1. Remove the comma and the inverted commas.

2. Begin the indirect speech sentence with the reporting speech clause THE BOY SAID.

3. Put THAT between the reporting and reported speeches.

4. The third person subjective pronoun HE will remain unchanged.

5. Replace the simple present tense WORKS with the simple past WORKED.

6. Change the demonstrative pronoun HERE to THERE.