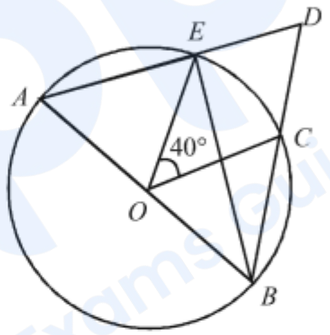
SNAP 2021 Answer Key PDF

1. (a) **"to remove something good while removing something bad" is the closest in meaning to the idiom Don't throw the baby out with the bath water.**
2. (b) **"plentiful" is the closest in meaning to the word given in question; Meaning-** existing in or yielding great quantities; abundant.
Sparse- scanty; in short supply.
Sporadic- occurring at irregular intervals or only in a few places; scattered or isolated
Skimpy- providing or consisting of less than is needed; meagre.
Copious- abundant in supply or quantity
3. (c) the use of **"will"** in the sentence is **American English**; American English, sometimes called United States English or U.S. English, is the set of varieties of the English language native to the United States. While the use of "shall" in the sentence is **British English**; British English or Anglo-English is the standard dialect of "English as used in Great Britain, as distinct from that used elsewhere." Variations exist in formal, written English in the United Kingdom.
4. (b) **"and"** is the **conjunction** in the sentence as it connects two independent sentences and a principle clause with a subordinate clause.
5. (a) **NUCLEI- is the correct spelling.**
6. (b) **"throng"** is the closest in meaning to the word given in question; meaning- a large, densely packed crowd of people or animals.
Streak- a long, thin line or mark of a different substance or colour from its surroundings
Camarilla- a small group of people, especially a group of advisers to a ruler or politician, with a shared purpose.
Horde- a large group of people.
7. (b) "Don't be so critical" is the closest in meaning to the idiom **cut some slack.**
8. (d) **"to"** it is preposition.
9. (a) **Hyperbole** uses exaggeration for emphasis or effect.
A **simile** is a comparison between two unlike things using the words "like" or "as."
Personification gives human qualities to non-living things or ideas.
A **metaphor** makes a comparison between two unlike things or ideas.
10. (d) **noun: troupe;** refer to a group of dancers, actors, or other entertainers who tour to different venues.
11. (d) **all of the above;** When two words are used together to yield a new meaning, a compound is formed. Compound words can be written in three ways: as open compounds (spelled as two words, e.g., ice cream), closed compounds (joined to form a single word, e.g., doorknob), or hyphenated compounds (two words joined by a hyphen, e.g., long-term).
12. (c) **oxymoron;** An oxymoron is two contradictory terms used together.
Synecdoche occurs when a part is represented by the whole or, conversely, the whole is represented by the part.
An **oxymoron** is two contradictory terms used together.
A **metaphor** makes a comparison between two unlike things or ideas
13. (b) **"from" (preposition)** fits the blank appropriately.
14. (a) **"benign"** is the appropriate answer; meaning- not harmful in effect.
15. (a) correct spelling- **SATELLITE**
16. (b)



Q $\angle AEB = 90°$ (Angle made in half circle)

$$\angle EBC = \frac{\angle EOC}{2} = \frac{40}{2} = 20°$$

(Angle made by same chord on center is double the angle made on circumference)
Now, in ΔBOE,
$\angle BED + \angle EBD + \angle EDB = 180°$
$\Rightarrow 90° + 20° + \angle EDC = 180°$
$\Rightarrow \angle EDC = 180° - 110° = 70°.$

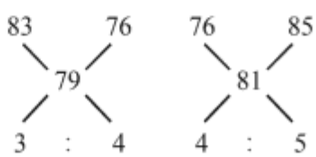
17. (a) Let size of the alloy broken off is x Kg.
According to question,

$$\frac{x}{30-x} = \frac{60-x}{x}$$

$$\Rightarrow x^2 = 1800 - 30x - 60x + x^2$$

$$\Rightarrow 90x = 1800 \Rightarrow x = \frac{1800}{90} = 20 \text{ Kg.}$$

18. (c) A B B C



Hence required combined average

$$= \frac{3\times 83 + 4\times 76 + 5\times 85}{3+4+5} = \frac{978}{12} = 81.5.$$

19. (a) $\log_{10} 3+\log_{10}(4x+1)=\log_{10}(x+1)+\log_{10} 10$

$\Rightarrow \log_{10} 3\times(4x+1)=\log_{10}(x+1)\times 10$

$\Rightarrow 3(4x+1)=10(x+1)$

$\Rightarrow 12x+3=10x+10$

$\Rightarrow 2x=7 \Rightarrow x=\frac{7}{2}$

20. (d) Average annual exports for company Y

$=\frac{80+40+60+60+80+100+140}{7}=\frac{560}{7}=80$

Average annual exports for company Z

$=\frac{60+90+120+90+60+80+100}{7}=\frac{600}{7}$

Hence, required percentage

$=\frac{80}{\frac{600}{7}}\times 100=\frac{80\times 7}{6}=93.33\%.$

21. (b) $\frac{(10^{99}-1)}{9}+\frac{(10^{17}+x)}{9}$

$=\frac{(1)^{99}-1}{9}+\frac{(1)^{17}+x}{9}=\frac{1-1}{9}+\frac{1+x}{9}=\frac{1+x}{9}$

So, for $x=8$

$\Rightarrow \frac{1+8}{9}=\frac{9}{9}$ entirely divisible.

Hence, $x=8$.

22. (c) Let total distance is 100 Km.

Time taken in 50% journey at 25 Km/hr $=\frac{50}{25}=2$ hrs.

Time taken in 40% journey at 20 Km/hr $=\frac{40}{20}=2$ hrs.

Time taken in remaining journey at 10 Km/hr

$=\frac{10}{10}=1$ hr.

Hence, average speed $=\frac{100}{5}=20$ Km/hr

23. (a) $2\ldots\ldots\ldots=7\times 6\times 5=210$

$4\ldots\ldots\ldots=7\times 6\times 5=210$

$5\ldots\ldots\ldots=7\times 6\times 5=210$

$6\ldots\ldots\ldots=7\times 6\times 5=210$

Hence, total numbers $=210+210+210+210=840$.

24. (b) Capacity of tank = LCM of (12, 18) = 36 units

Efficiency of Ist leak $=\frac{36}{12}=3$

Efficiency of IInd leak $=\frac{36}{18}=2$

Hence, they together will empty the tank in

$=\frac{36}{5}=7.2$ minutes

25. (d) General equation $=ax^2-bx+c=0$

According to question,

$\frac{1}{(2p-1)}=\frac{3}{(q+1)}$

$\Rightarrow (q+1)=3(2p-1)$ ...(i)

$\Rightarrow q+1=6p-3$

$\Rightarrow 6p=q+4$ ...(ii)

And, $\frac{(2p+1)}{(2p-1)}=\frac{(4q+1)}{(q+1)}$

From Eq. (i),

$\frac{(2p+1)}{(2p-1)}=\frac{(4q+1)}{3(2p-1)}$

$\Rightarrow 4q+1=3(2p+1)$

$\Rightarrow 4q+1=6p+3$

From Eq. (ii),

$\Rightarrow 4q+1=q+4+3 \Rightarrow 3q=6 \Rightarrow q=2$

Put q's value in Eq. (ii),

$6p=2+4=6 \Rightarrow p=1$

Hence, $p+q=1+2=3$.

26. (c) Probability of A speaks truth = 70% = 0.7

Probability of A does not speak truth = 30% = 0.3

Probability of B speaks truth = 80% = 0.8

Probability of B does not speak truth = 20% = 0.2

Hence, probability that they both will contradict each other $=0.7\times 0.2+0.8\times 0.3=0.14+0.24=0.38$.

27. (b) $(6x-3)^9=(6x-3)^3\times(6x-3)^3\times(6x-3)^3$

So, $a_0=(-3)^3\times(-3)^3\times(-3)^3$

$=-27\times -27\times -27=-19683.$

28. (a) Let cost price of $100x$.

According to question,

Selling price $=100x\times\frac{5000}{4700}\times\frac{5300}{5000}=112.77x$

Henc, profit percentage $=\frac{12.77x}{100x}\times 100=12.77\%.$

29. (d) $A*B=551=576-25=(24)^2-(5)^2$

$\Rightarrow A*B=(24+5)\times(24-5)=19\times 29$

And, $B*C=1073=1089-16=(33)^2-(4)^2$

$\Rightarrow B*C=(33+4)\times(33-4)=29\times 37$

$\therefore A=19,\ B=29$ and $C=37$.

Hence, $A+B+C=19+29+37=85$.

30. (b) Total work $=5\times x=5x$

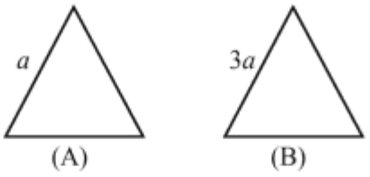
According to question,

$x+(x-3)+(x-3+2)+(x-4)$

$+(x-2)+(x-5)+(x-3)=5x$

$\Rightarrow 7x-18=5x \Rightarrow 2x=18 \Rightarrow x=9$ people.

31. (c)



$$\frac{\text{Area of } \Delta(A)}{\text{Area of } \Delta(B)} = \frac{(a)^2}{(3a)^2} = \frac{1}{9}$$

Hence, required percentage $= \frac{8}{1} \times 100 = 800\%$.

32. (c) $2\pi(R^2 - r^2) + 2\pi(R + r)h = 4620$

And, $\pi(R^2 - r^2) = 115.5$ ...(i)

$\Rightarrow 2 \times 115.5 + 2\pi h(R + r) = 4620$

$\Rightarrow 2\pi h(R + r) = 4620 - 231 = 4389$

$\Rightarrow 2 \times \frac{22}{7} \times 7 \times (R + r) = 4389$

$\Rightarrow (R + r) = \frac{4389}{44} = \frac{399}{4}$

From Eq. (i),

$\pi(R + r)(R - r) = 115.5$

$\Rightarrow (R - r) = \frac{115.5}{\frac{399}{4} \times \frac{22}{7}} = \frac{115.5 \times 2}{57 \times 11} = \frac{10.5 \times 2}{57}$

$\Rightarrow (R - r) = \frac{21}{57} = \frac{7}{19}$.

33. (d) Ball will travel before coming to rest

$$= 300 + 2\left[\frac{\frac{4}{5} \times 300}{1 - \frac{4}{5}}\right] = 300 + 2\left[\frac{240}{\frac{1}{5}}\right]$$

$= 300 + 480 \times 5 = 300 + 2400 = 2700$ m.

34. (b) Total number of possible isosceles triangles are 16 and that are :

$(a, b, c) = (11, 11, 1), (10, 10, 2), (9, 9, 3), (8, 8, 4),$
$(7, 7, 5), (6, 6, 1), (6, 6, 2), (6, 6, 3),$
$(6, 6, 4), (6, 6, 5), (5, 5, 7), (6, 6, 7),$
$(6, 6, 8), (6, 6, 9), (6, 6, 10)$ and $(6, 6, 11)$.

35. (a) Let total number of students attempt $= x$

Then, number of students attempt the exam from Gujarat = Same number from Assam $= (0.06)x$.

ATQ, $0.07x - 0.06x = 80$

$x = 8000$.

Hence, people from Assam and Gujarat appeared

$$= 8000 \times \left(\frac{6 + 6}{100}\right) = 960.$$

36. (d) As year 2007 is not a leap year. Hence number of odd days between 8th December, 2006 and 8th December 2007 = 1 day.

Hence, 8th December 2006 was Friday.

37. (b) 7, 10, 8, 11, 9, 12, [10]

+1, +1, +1, +1, +1

38. (d) Except Mayonnaise, all other are types of herb.

39. (b) Ounce is a unit of weight, while Inch, Centimeter and Yard are units of length.

40. (a) QAR, RAS, SAT, TAU, UAV

+1, +1, +1, +1, +1

41. (d) ZA5, Y4B, XC6, W3D, VE7

−1, −1, −1, −1

+1, +1, +1, +1

42. (d) 1st April, 2001 was Sunday. Hence, Wednesday was fallen on 4th, 11th, 18th and 25th April, 2001.

43. (d) 3, 31, 131, 351, 739, [1343]

$(1)^3 + 2$, $(3)^3 + 4$, $(5)^3 + 6$, $(7)^3 + 8$, $(9)^3 + 10$, $(11)^3 + 12$

44. (c) 9, 27, 81; 16, 64, 256; 25, 125, 625;

$(3)^2$, $(3)^3$, $(3)^4$; $(4)^2$, $(4)^3$, $(4)^4$; $(5)^2$, $(5)^3$, $(5)^4$

Hence, wrong number is 5.

45. (a)

In the clock, number 4 and 10 are just opposite to each other. Hence, angle between 4 PM and 10 AM = 180°.

46. (b) Today is Saturday. Then on $(1 + 9 \times 7)$ days i.e. 64 days is also Saturday.

Hence, after 69th days, it will be Friday.

47. (b) The meaningful order is :

I, want, my, salary, immediately $\Rightarrow$ (1) (5) (4) (3) (2).

48. (d) P, H, O, N, E

+2, +2, +2, +2, +2

R, J, Q, P, G

Similarly, Q, U, O, T, E

+2, +2, +2, +2, +2

S, W, Q, V, G

49. (d) Add positions of alphabets and then reverse the result

DOOR = 4+15+15+18 = 52 = reverse 52 to give = 25

Similarly,

OVER = 15+22+5+18 = 60 = reverse 60 to give = 06

50. (a) Clearly, for better economic gain, losses should be reduced and income increased. So, only course I follows.

51. (a) Clearly, a study of rival products in the market will help assess the cause for the lowering down of sales and then a suitable action can be taken. Thus, I follow.

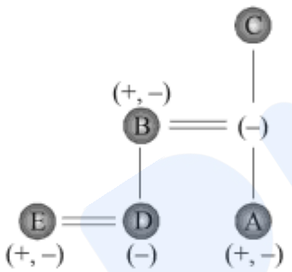
52. (d) The employees of a bank going on strike and the government employees calling off their protest seem to be two independent events that might have been triggered by individual causes.

53. (a) Stress in everyday life is a major cause of frustration among the youth and is bound to lead them to take harsh steps as suicide.

54. (c) Only Assumption I follows
The statement is talking about food poisoning due to liquor so the number of people consuming liquor in towns or villages is not the main concern here. That is why the only assumption I follow

55. (a) **Only Assumption I follows**
Because the school was not receiving any student entries for participation in the summer camp, that is why it was cancelled. The second option is not implicit because the camp is being conducted in summers, so the weather is expected to be hot.

56. (d)



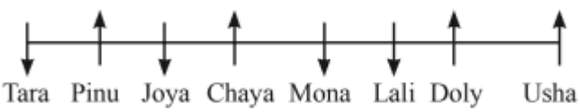
Hence, C is either grand father or grand mother of E.

57. (b)

58. (d) In the first and second statements, the common code digit is '4' and the common word is 'good'.
So, '4' stands for 'good'.
In the second and third statements, the common code digit is '7' and the common word is 'pictures'.
So, '7' means 'pictures'.
Thus, in the second statements, '8' means 'see'.

59. (d) Input: dream 25 dare 64 enjoy 18 smile 23 spread 47 joy 70
Step 1 47 dream 25 64 enjoy 18 smile 23 spread joy 70 dare
Step 2 64 47 25 enjoy 18 smile 23 spread joy 70 dare dream
Step 3 25 64 47 18 smile 23 spread joy 70 dare dream enjoy
Step 4 18 25 64 47 smile 23 spread 70 dare dream enjoy joy
Step 5 23 18 25 64 47 spread 70 dare dream enjoy joy smile
Step 6 70 23 18 25 64 47 dare dream enjoy joy smile spread
Change in word: The words are placed at the extreme right end as they appear in the dictionary i.e. the word that appears first in the dictionary will come first to the extreme left end of the step, then comes the second word as per dictionary order to the extreme right end and so on.
Change in number: The numbers are considered as per the product of their digits. The number with the highest product is chosen first and placed at the extreme left end , then the number with the second highest product is taken and placed at extreme left end and so on.
The operation is performed first on words and then on numbers but within the same step.
From the common explanation it is clear that "spread 70 dare" is seen for the first time in the same sequence in step 4.
Step 4 18 25 64 47 smile 23 **spread 70 dare** dream enjoy joy

60. (a)



we can say that three persons sit between Joya and Doly.