Explanation

1. **Answer: B**

Explanation

- **Option (a) is incorrect**: Because it is nowhere mentioned in the passage that human race cannot exist without religion.
- **Option (b) is correct:** Because the passage says, religion has played important role for connected races and societies and also given the universal language and culture to the mankind. This has helped to create meaning in human life.
- **Option (c) is incorrect:** Because though it is mentioned in the passage that to get direction, courage and insight the spirit is worshipped it is not mentioned as any compulsion.
- **Option (d) is incorrect:** Because though it is mentioned in the passage that religion has played important role to connect races and societies, it is not mentioned that this is the only way to do so.

2. **Answer: C**

Explanation:

- **Option (a) is incorrect:** Passage has given examples of states and governments those do not posses any territory.
- **Option (b) is incorrect**. As it is mentioned in the passage that Steppe Empire was the classic example of non sedentary politics.
- **Option (c) is correct**: It has been mentioned that there are examples of the polities and governments which did not controlled any the resources of one fixed geographic area. So, polity is more of a concept than any entity.
- **Option (d) is incorrect:** Passage says that empires differ from the states as their territories are not statically defined or permanently fixed and consequently that their body politic was also dynamic and fluid.

3. **Answer: D**

Explanation:

- **Statement 1 is incorrect:** Durkheim associated rise of the modern society with industrialization, not Marks and Engles.
- **Statement 2 is incorrect**: As it is mentioned in the passage that Marx and Engels associated the emergence of modern society above all with the development of capitalism.
- **Statement 3 is correct:** As it is mentioned in the passage that Weber holded the opinion that Protestant ethics is a prime reason behind the rise of modern society.
- **Statement 4 is correct:** As it is mentioned in the passage that Gidden's 'a multidimensional view of institutions of modernity' emphasises not only capitalism and industrialism as key institutions of modernity, but also on 'surveillance' and 'military power'

4. **Answer: C**

Explanation:

- **Option (c) is correct:** The passage states – "The upsurge of the peasants and tribals, the movements for regional autonomy and self-determination" and "a society in which a large number of potential contradictions become articulate and active".

5. **Answer: A**

Explanation:

- **Option (a) is correct**: Human activities have the capacity to change the natural environment to great extent. Other living beings are not considered to capable to do so.
- **Option (b) is incorrect**-Though the same is mentioned in the passage it is not considered as its

virtue.
- **Option (c) is incorrect**-As it is mentioned in the passage that event acts which seem less extreme, such as building a mud hut or a photovoltaic system in the desert can change the natural environment. These are very trivial activities.
- **Option (d) is incorrect**: As in the passage activities like building a mud hut or a photovoltaic system are also considered as examples of built environment.
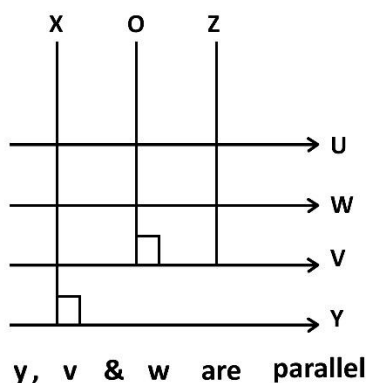
6. **Answer: D**

Explanation:
- **Option (a) is incorrect-** Passage suggests that though best quality antibodies are developed the bugs become resistant to these antibodies after sometime.
- **Option (b) is incorrect-** It is nowhere mentioned in the passage Superbug staying in human body can lead to infection which may be hard to deal later.
- **Option (c) is incorrect-**This is contrary to what is mentioned in the passage. The passage says that taking antibiotics without doctor oversight increases the risk of coming dawn with superbugs.
- **Option (d) is correct-** It is mentioned in the passage that antibody resistance by superbugs is a new problem in the healthcare sector and it has crippled the modern healthcare system.

7. **Answer: D**

Explanation:
- **Option (d) is correct.**
We can easily solve this question by making a picture of given information:

y, v & w are parallel

Hence, it is very clear from the photo that y, v and w are parallel.

8. **Answer: A**

Explanation:
- **Option (a) is correct.**
    - Observe the table given in question:
    - Monthly cost of petrol is always same that is 40 x 60 = 2400
    - Hence, when the price is Rs. 80/litre.
    - Then consumption will be 2400/80 = 30.

9. **Answer: D**

Explanation:
- **Option (d) is correct:**
    - Total weight of bag X: 80×50= 4000.

- Weight after removing 20 mangoes & adding 25 oranges= 4000-20×500+25×400= 4000 grams (4kg).
- Total weight of bag X: 100×40= 4000 grams(4kg).
- Weight after removing 25 oranges & adding 20 mangoes = 4000+20×500-25×400= 4000 grams (4kg). Hence, no change.

10. Answer: B

Explanation:

- **Option (b) is correct:**
  - Circumference of circular track= $2\pi r$= 2×22×2100/7= 13200.
  - Since both travels in opposite direction, resultant Speed will be sum of speed.
  - In 1st minute, resultant Speed= 2+20=22
  - In minute, resultant Speed= 4+18=22
  - Hence, resultant Speed is same.
  - A in 1st minute 60*2= 120
  - B in 1st minute 60*20= 1200
  - A+B = 1320
  - Hence in every minute they total cover 1320 m.
  - So they meet after 13200/1320 = 10 min.
  - Distance travelled In 10 minutes by A is 60× (2+4…+20)
  - Distance travelled In 10 minutes by B is 60× (20+18…+2).
  - Hence both are equal.

11. Answer: C

Explanation:

Option (c) is correct:

- Sum of ratio of persons in school A= 1+2+3+4=10
- Number of Peon in School A= (1/10) ×1000=100
- Number of teachers in School A= (2/10) ×1000=200.
- Number of girls in School A= (3/10) ×1000=300.
- Number of boys in School A= (4/10) ×1000=400.
- Sum of ratio of persons in school B = 2+5+7+9=23
- Number of Peon in School B= (2/23) ×1150=100
- Number of teachers in School B= (5/23) ×1150=250.
- Number of girls in School B= (7/23) ×1150=350.
- Number of boys in School B= (9/23) ×1150=450.
- Number of Peon in both School = 100+100= 200
- Number of teachers in both School = 200+ 250= 450
- Number of girls in both School = 300+350= 650
- Number of boys in both School = 400+450= 850
- Sum of peon & boys= 200+850= 1050.
- Sum of teachers and girls= 450+ 650= 1100
- Ratio = 1050:1100= 21:22

12. Answer: D

Explanation:

- **Option (d) is correct:**
  - Initial one stair.
  - 1st jump= 1 skipped + 1 standing stair= 2 stairs
  - 2nd jump= 2 skipped + 1 standing stair= 3 stairs. And so on

- o Total stairs= 1+2+3+4+5+6= 21

13. Answer: D

Explanation:

- **Option (d) is correct:**
  - o L.C.M of 7,11,13,17 is 17017 which is 5-digit number. So, we easily deduce the answer.

14. Answer: C

Explanation:

- **Option (c) is correct:**
  - o 3^2= 9
  - o 6^2=36
  - o 9^2= 81
  - o 12^2=144
  - o 15^2= 225
  - o 18^2= 324
  - o 21^2= 441
  - o 24^2= 576
  - o 27^2= 729
  - o 300^2= 900
  - o 10 numbers

15. Answer: D

Explanation:

- **Option (d) is correct.**

Let's make a table by using information given in question:

NAME	PROFESSION
Girija	Violin
Vanaja	Violin, Vocal
Jalaja	Vocal, No violin
Shailaja	No violin, Dancer, Vocal
Tanuja	Dancer, Vocal, Violin
Pooja	Actress

Hence, by the table it is clear that Tanuja is certainly a dancer and a violinist.

16. Answer: B

Explanation:

- **Option (b) is correct:**
  - o Divisibility test for 11 = (sum even place digits) - (sum of odd place digits) is 0 or divisible by 11.
  - o So, sum even place digits = 1+7+8+2+3+9=30
  - o sum of odd place digits = 3+3+9+5+@+6= 26+@
  - o Hence 30-(26+@) = 0
  - o Hence @= 4

17. Answer: B

Explanation:

- **Option (b) is correct:**
  - o In this the 3rd number in row is 2nd number -1st number

- o 6-4=2
- o 13-6=7
- o 10-8=2
- o We have to skip one alphbet to get the other , so we get 2R as the correct answer.
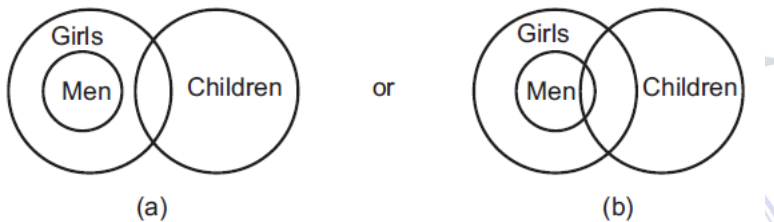
18. Answer: D
Explanations:

- **Option (d) is correct:** Suppose my current age = x years
  - o 6 (x + 6) + 7 (x+ 7) = 14x
  - o 6x + 36 + 7x + 49 = 14x
  - o 14 x – 13x = 85
  - o x = 85 years
  - o My age after 5 years from now
  - o = 85 + 5 = 90 years
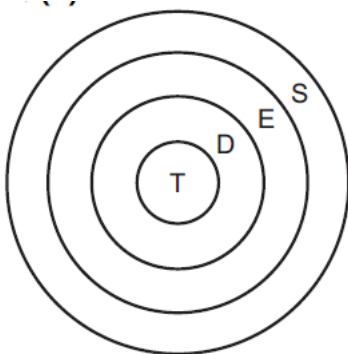
19. Answer: B
Explanation:

- **Option (b) is correct:**

  - o Thus, from both diagrams (a) and (b) it is clear that all girls cannot be men and we can conclude 'some girls are not children'. Thus, only (II) follow.

20. Answer: D
Explanation:

Conclusion I, II and III are correct.

21. Answer: D
Explanation:

- **Statement 1 is incorrect:** In the passage, it is mentioned that in the rich countries stores offer massive discounts and it influences the consumer price heavily. So the consumer price becomes a tiny part of a cost of living and plays a very little role to define the cost of living.
- **Statement 2 is incorrect**: Passage says that consumer prices are influenced by mass production and over production. The situation for poor societies is worsened by certain free trade agreements that allow easier export of food in the "southern" direction than vice versa.

22. Answer: A

Explanation:

- **Option (a) is correct:** The passage mainly talks about the Low Labour Productivity and issues associated with it.

23. Answer: D

Explanation:

- **Options (a), (b) and (c) are incorrect-** The passage mentions that in India Hinduism, Buddhism and Jainism all follow tree worship. The passage mentions that along with the trees; rivers, mountains and animals are also considered sacred in India. It is said in the passage that animism and tree worship is the core part of religion in India. Panchavati has five types of sacred trees, but more number of trees are also included in Panchavati.
- **Option (d) is correct-** Based on the above deductions, this is the most appropriate answer.

24. Answer: A

Explanation:

- **Options (b, c, d) is incorrect:** The passage establishes the definition of ecology and also mentions the practices most suitable to agro ecology. In the passage more use of pesticides and reducing the production cost are not mentioned as the sutaible practices for agroecology but recycling of resources, emission reduction and agricultural practices sutaible to local conditions are considered as sutaible for agro ecology.
- **Option (a) is correct:** Based on the above deductions, this is the most appropriate answer.

25. Answer: D

Explanation:

- **Statement 1 is incorrect:** Though Alan Turing gave important contribution in the development of computer technology there are others also who gave their contribution as well. So Turing cannot be considered as the only forefather of computer technology. Neither it is mentioned in the passage.
- **Statement 2 is incorrect:** Turing designed the executing instruction (program) and it was proved as important contribution. The passage mentions about this but it was nowhere mentioned that he was responsible for making the final design of the computer.
- **Statement 3 is incorrect:** Turing worked during the earlier phase of development of the computer technology so it was not expected that he could make any sophisticated machine.
- **Statement 4 is correct:** The entire passage talks about importance of computer program which is at the core of modern computer. Turing was pioneer in designing the computer program that can be stored on tape. So, this can be considered as most critical inference of the passage.

26. Answer: C

Explanation:

- **Option (c) is correct:** In the passage it is mentioned that in large parts of the world, knowledge on how to prevent illness and maintain hygiene is not widely known or taught, children learn valuable hygiene and sanitation knowledge at a young age and Community hygiene is foundational to social progress. So statements 1,2,3 cannot be considered as valid. Rest of the two statements (statement no.4 and 5) can be considered correct in the context of the passage. Hence **Option (c)** is the correct

27. Answer: B

Explanation:

- **Option (b) is correct:**

- o For 1st minute, distance covered by, A= 60×2= 120 m, B= 60×1= 60m, difference cut = 60= 6×10
- o For 2nd minute, distance covered by, A= 60×(2+0.2)= 132 m B= 60×1.1= 66m. difference cut = 66= 6×11
- o For 3rd minute, distance covered by, A= 60×(2+0.4)= 144 m B= 60×1.2= 72m. difference cut = 72= 6×12
- o After 10 minutes, Total lead cut down= 6×(10+11..+19)=6×145= 870
- o So, X=870m.

28. Answer: C
Explanation:
- **Option (c) is correct:**
  - o To find population n years ago = P/(1+R/100) ^n
  - o We are given, number of trees increased in
  - o First year = increased by 15 %
  - o Second year = decreased by 20 %
  - o Third year = increased by 10 %
  - o Therefore, to find number of trees in the beginning use the trick.
  - o Population n years ago = 161920/ [(1+15/100) (1-20/100) (1+10/100)] =
  - o 161920× (20/23) (5/4) (10/11) =160000

29. Answer: B
Explanation:
- **Option (b) is correct:**
  - o Consider Total no of students = 200. Ratio is 11:9
  - o Therefore, Boys=110 and Girls=90
  - o 10% of boys who get scholarship = 110*10/100 = 11
  - o 30% of girls who get scholarship = 90*30/100 = 27
  - o Therefore, number of students who do not get scholarship =200-(11+27) = 162
  - o Therefore % of students who do not get scholarship= 162/200= 81%

30. Answer: B
Explanation:
- **Option (b) is correct:**
  - o Let number of students be 180. Sum of ratios are 17+13= 30 and 5+1= 6.
  - o Total boys are (17/30) ×180= 102. Total girls are 180-102= 78
  - o Number of failed girls= 17=>1/6.
  - o So, number of passed boys = 5/6=> 85. (1-> 17 then 5-> 85)
  - o So, number of failed boys= 102-85= 17 which is out of 180.
  - o Therefore, angle on piechart is (17/180) ×360= 34

31. Answer: C
Explanation:
- **Option (c) is correct:**
  - o LCM of 15,25,35,45 is 1575
  - o Which means they will ring simultaneously after 1575 seconds.
  - o Total seconds remained in Monday after 1 pm are 11×60×60= 39600.
  - o Number of times they ring simultaneously= 1575× 25= 39375.

32. Answer: A
Explanation:

- **Option (a) is correct:**
  - Distance covered by A in given time (t) = 500m
  - Distance covered by B in given time (t) = 500 – 45 – 35 = 420.
  - Ratio of their speed = (500/t): (420/t)
  - Or 500: 420 =25: 21.

33. Answer: C

Explanation:

- **Option (c) is correct:**
  - Expenditure= consumption × Price
  - Earlier expenditure= 3600×80= 288000
  - Increased Price 120% of 80= 96.
  - To keep expenditure same consumption has to be reduced.
  - 288000= decreased consumption × Increased Price
  - decreased consumption= 288000/96= 3000
  - Net decreased consumption= 3600-3000= 600
  - % decreased consumption= (600/3600) ×100= 16.67%

34. Answer: C

Explanation:

- **Option (c) is correct.**
  - The PIN contains 3 digits (without repetition) out of 1, 2, 3, 4, 5, 6 and 7 and the digits are in decreasing order from left to right with the difference between any two digits in the PIN differ by at least 2.
  - Let us consider the various possible cases:
  - Case 1: Let the greatest digit is 7 as the leftmost digit.
  - Possible combinations: 753, 752, 751, 742, 741, 731 (i.e. 6 combinations)
  - Case 2: Let 6 as the leftmost digit.
  - Possible combinations: 642, 641, 631 (i.e. 3 combinations)
  - Case 3: Let 5 as the leftmost digit
  - Possible combinations: 531 (i.e. 1 combination)
  - Case 4: Let 4 as the leftmost digit.
  - No possible combination because the difference between any two digits should be at least 2 and the digits should be in decreasing order.
  - So, the total number of possible combinations of the PIN = 6 + 3 + 1 = 10.

35. Answer: B

Explanation:

- **Option (b) is correct:**
  - In 6 days, work= 6×20=120 which is 30% of actual work.
  - So actual work= (100/30) ×120= 400.
  - But 120 work is completed so remaining work= 400-120= 280.
  - 6 days has gone & has to complete 2 days earlier i.e in 8 days. So he has only 8 days.
  - 8 days &280 work.
  - Let x be number of extra men employed.
  - (X+20) × 8= 280
  - 8x=280-160=120
  - X= 15

36. Answer: C

Explanation:

- **Option (c) is correct:** Let ABCD be square. Person standing at A wanted to go D.
  - Possible ways are
  - A->D
  - A->B->D
  - A->B->C->D
  - A->C->D
  - A->C->B->D

37. Answer: D

Explanation:

Person	Festivals							
	Holi	Dus-sehra	Diwali	Buddha Purnima	Shiv-ratri	Christ-mas	Gudhi Padwa	Eid
Arjun	✓	✓	✓	✓	✗	✗	✗	✗
Bhupesh	✗	✗	✗	✗	✓	✓	✓	✓
Chetan	✓	✗	✓	✗	✓	✓	✗	✗
Dinesh	✓	✓	✗	✓	✗	✗	✗	✗
Elin	✗	✗	✓	✓	✗	✓	✓	✗

Bhupesh and Elin celebrate Christmas and Gudhi Padwa but not Dussehra and Holi.

38. Answer: B

Explanation:

- **Option (b) is correct:**
  - As, city A to city B there are 5 routes. city B to city C there are 7 routes.
  - Total possible routes = 5 * 7 = 35 routes.

39. Answer: C

Explanation:

$$1^{st} \text{ circle, } \sqrt{9} + \sqrt{16} + \sqrt{25} + \sqrt{36}$$
$$= 3 + 4 + 5 + 6 = 18$$

By, dividing result by 2 we get, $\frac{18}{2} = 9$

$$II^{nd} \text{ circle, } \sqrt{4} + \sqrt{4} + \sqrt{4} + \sqrt{4}$$
$$= 2 + 2 + 2 + 2 = 8$$

By dividing result by 2 we get $= \frac{8}{2} = 4$

$$\therefore III^{rd} \text{ circle, } \sqrt{49} + \sqrt{64} + \sqrt{81} + \sqrt{100}$$
$$= 7 + 8 + 9 + 10 = 34$$

By dividing it by 2 we get $\frac{34}{2} = 17$

40. Answer: C

Explanation:

- **Option (c) is correct:**
  - Clock is 20 seconds slow per hour, From 6 a.m. Sunday to 12 noon Tuesday = 54 hours. The clock will lose time in 54 hours = 20 × 54 = 1080 seconds = 18 min

    12: 00 – 0: 18 min = 11:42

41. Answer: D

Explanation:

- **Statement 1 is incorrect:** Light plays important role for bugs for travel and movement.
- **Statement 2 is incorrect:** It is mentioned in the passage that insects use natural light sources like the moon or sun to help them and it get confused with the artificial sources of light but passage doesn't say that use of artificial source of light to be avoided where the number of bugs are more.
- **Statement 3 is incorrect:** It is mentioned in the passage that bugs get confuse with the artificial source of light and it cannot differentiate between the artificial and natural source of light.
- **Statement 4 is correct**: The passage talks about the role of light in the bugs life and its importance for the travel and movement of bugs.

42. Answer: D

Explanation:

- **Statement 1 is incorrect:** Passage mentions that trapping pollinators is a specialized mechanism devised by flowers and not spreading the odor.
- **Statement 2 is incorrect:** Passage mentions that day-pollinated species tend to be brightly coloured and not the night pollinating flowers.
- **Statement 3 is correct:** Passage mentions that Orchid flowers attract pollinators (Euglossa cordata) by odor and the bees will become intoxicated during these visits to the orchid flowers.
- **Statement 4 is correct:** Passage mentions that in general, plants that rely on pollen vectors tend to be adapted to their particular type of vector, for example day-pollinated species tend to be brightly coloured, but if they are pollinated largely by birds or specialist mammals, they tend to be larger and have larger nectar rewards than species that are strictly insect-pollinated.

43. Answer: C

Explanation:

- **Statement 1 is incorrect:** Passage mentions that traditional and indigenous peoples have preserved the ecosystem for centuries and not destroyed them.
- **Statement 2 is incorrect:** Passage mentions that if the ecosystem gets destroyed the benefits produced from that ecosystem decline precipitously.
- **Statement 3 is Correct:** This is the main crux of the passage. Passage mentions that though in the last two decades, it is realized that saving half of the ecosystem is important for environmental functionality, the ecosystem to be seen in the global view and not just in the local context.
- **Statement 4 is incorrect:** Passage mentions that some fragile ecosystems, like rainforests also important for the ecological benefits like oxygen production, water filtration, rainfall production and carbon storage and these to be maintained far more than 50% for its appropriate functionality.

44. Answer:B

Explanation:

- **Option (b) is correct.** The first couple of phrases state that moral decisions must be made using our own judgement. Other options are out of context.

45. Answer: C

 Explanation:

- **Option (a) is incorrect** - The passage says that the process of globalization arguably begun with the Silk Road so it cannot be considered as the best summing up statement.
- **Option (b) is incorrect -** The passage says that Ottoman Empire was seen as a threat by the Europian communities and they started looking for alternative trade routes.

- **Option (c) is correct -** The passage talks how Ottoman Empire created threat to Europian communities and they started looking for alternative routes that lead to ushering the Age of Discovery, European colonialism and intensified process of globalization.
- **Option (d) is incorrect -** The passage mentions that human found alternative trade routes and the silk road lost its importance.

46. Answer:B

Explanation:

- **Options (a), (c) and (d)** are wrong: The passage makes it clear that owning digital data now drives trade and business advantages and that it is not a good idea to place Indian data in the hands of foreign companies. (for India).
- **Option (b) is correct:** Obviously, the optimal conclusion is option (b). (i.e. a guidance for the future).

47. Answer: B

Explanation:

- **Option (b) is correct:**
    - Let side of old square be 7x.
    - New segment of each side will be 3x and 4x.
    - If these points joined new segment will be diagonal having right angle at the corner of old square.
    - Therefore side of newly formed square $3x^2 + 4x^2 = 25x^2 = 5x^2$
    - Side= 5x
    - Area of newly formed square= $5x \times 5x = 25x^2$
    - Area of old square= $7x \times 7x = 49x^2$
    - Ratio = 49:25

48. Answer: B

Explanation:

- **Option (b) is correct:**
    - 33444
    - 34344
    - 34434
    - 34443

49. Answer: C

Explanation:

- **Option (c) is correct:**
    - Minimum product of 4 consecutive natural numbers= $1 \times 2 \times 3 \times 4$= 24 & it's Sum= 10
    - Final sum= 24+10= 34
    - Minimum product of 4 consecutive natural numbers= $1 \times 2 \times 3 \times 4$= 24 which is multiple of 12. If we take any 4 consecutive natural numbers their factors must be 3&4. So, these are multiple of 12.

50. Answer: C

Explanation:

- **Option (c) is correct:**
    - Capacity/ volume of tank = LBH= $100 \times 200 \times 400$= 80000000 cu.cm
    - We know that 1 liter = 1000 cu.cm
    - So capacity of tank= 8000 liters.

- o A cylindrical pipe is pouring 2 liter water per second.
- o So total time to fill tank 8000/2= 4000 seconds

51. Answer: C

Explanation:

- **Option (c) is correct:** Let the number of flowers be x and number of bees be y.
  - o If one bee lands on each flower, one bee will be left out.
  - o $\implies y = x + 1$ … (i)
  - o If two bees land on each flower, one flower will be left out.
  - o $\implies y = 2(x - 1)$ … (ii)
  - o From (i) and (ii), we have
  - o $x + 1 = 2x - 2$
  - o $\implies x = 3$ and $y = x + 1 = 4$
  - o So, number of flowers = 3 and number of bees = 4.

52. Answer: B

Explanation:

- **Option (b) is correct:**
  - o Let price of each ball and bat be x and y respectively.
  - o Then $5x + 2y = 2600$
  - o $7x + 3y = 3800$
  - o On solving, x=200, y= 800
  - o So, y-x= 600

53. Answer: C

Explanation:

- **Option (c) is correct:**
  - o Marks obtained by Jeson = 560
  - o Marks obtained by Ross = 560 X (125/100) = 700
  - o Marks obtained by Jos = 700 X (90/100) = 630
  - o Marks obtained by Jon= 630 X (120/100) = 756

54. Answer: B

Explanation:

- **Option (b) is correct:**
  - o Firstly, we have to list down the3-digit numbers which are divisible by 7.
  - o These are: 105, 112, 119, 126, 133, 140, 147, 154, 161, 168, 175, 182, 189, 196, 203, 210, 217, 224, 231, 238, 245, 252, 259   …
  - o In this, remove the numbers whose all digits are not different.
  - o These are: 105, 126,140, 147, 154, 168, 175, 182, 189, 196, 203, 210, 217, 231, 238, 245, 259 …
  - o Now, reverse the digits, we get, 501, 621, 041, 741, 451, 861, 571, 281, 981, 691, 302, 012, 712, 132, 832, 542, 952 …
  - o From these digits, only 861 and 952 are divisible by 7. So, only four 3-digit numbers are there i.e., 168, 861, 259 and 952.

55. Answer: B

Explanation:

- **Option (b) is correct:**
  - o At following time angle is approximately 60 degree
  - o 3:06, 3:27, 4:11, 4:32, 5:17, 5:38, 6:22, 6:43, 7:23, 7:49, 8:33, 8:54, 9:38, 9:58, 10:43, 11:06.
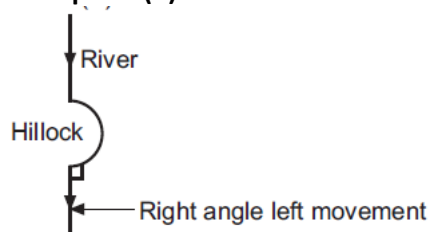
56. Answer: C

Explanation:

- **Option (c) is correct:**
  - Suppose all questions are correct, so Max marks he could get 4× 156= 624.
  - Here, each wrong answer he could loss 5 marks (4 for correct and 1 for wrong)
  - Total less marks= 624- 454= 170.
  - So number of wrong answer= 170/5= 34
  - Hence number of correct responses= 156-34= 122

57. Answer: B

Explanation:

- **Option (b) is correct:**

  - o River is flowing in south direction.

58. Answer: B

Explanation:

- **Option (b) is correct:**

  In a certain code:

256	red colour chalk
589	green colour flower
254	white colour chalk

  Common between rows 1 and 2 is: 5 and colour.
  ⟹ 5 means colour.
  Common between row 1 and 3 is: 2/5 and colour/chalk.
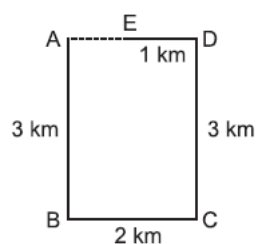 ⟹ 2 means chalk.
  4 means white because 2 means chalk and 5 means colour.

59. Answer: B

Explanation:

- **Option (b) is correct:**
  - o Ganesh's house is at A and his school is at E. A is to the West of E. So, his house is to the West of his school.

60. Answer: D

Explanation:

- **Option (d) is correct:**

- o   Jugal > Jayesh > Fija = Venu > Amol
- o   Bigger cats are faster and smaller cats are obedient,
- o   thus Jugal's cat is faster and Amol's cat is obedient.

61. Answer: B

Explanation:
- **Statement (a) is incorrect:** as it is a general statement and does present the crux of the passage.
- **Statement (b) is correct:** We must be in a position to respect a man as a man and to extend opportunities for development to those who deserve them and not to those who happen to belong to our community or race.
- **Statement (c) is incorrect:** As the opening line of the passage says that people talk about democracy (or understand democracy) but they have a weakness favoring their caste or community or religion.
- **Statement (d) is incorrect:** As it projects an extreme situation which is out of the scope of the passage.

62. Answer: D

Explanation:
- **Statement (a) is incorrect:** The mode of communication is very similar in both the cases, so much so that computers can now be designed to generate artificial human speech and even, by accident, to produce sequences of words which human beings recognize as poetry.
- **Statement (b) is incorrect:** The implication is not that machines are gradually assuming human forms, but that there is no sharp break of continuity between what is human, what is mechanical.
- **Statement (c) is incorrect:** The comparison does not depend upon any close resemblance between the actual mechanical links which occur in brains and computers; it depends on what the machines do.
- **Statement (d) is correct:** In the second last line, the author mentions the accidental mixing up of the words by computer can result in poetry which is mentioned in option (d).

63. Answer: B

Explanation:
- **Statement 1 is incorrect:** The passage mentions that no single model can be considered as the ultimate model.
- **Statement 2 is incorrect**: The passage mentions that use of representative of the people is the characteristics of modern democracy. Here last man cannot participate in the system but he participates through his representatives.
- **Statement 3 is correct:** As the passage marks that monarchial democracy is also a form of democracy.

64. Answer: D

Explanation:
- **Option (a) is incorrect**: Though passage mentions that education plays vital role in gender equality, It is just a half side of a coin. It doesn't reflect the entire story.
- **Option (b) is incorrect:** Same as the statement a though this statement is correct it cannot reflect the entire story.
- **Option (c) is incorrect:** As education is mentioned as the human right and not the fundamental right.

Option (d) is the best answer: As the passage talk about education in totality and its importance for overall development of a human being and society.

65. Answer: B

Explanation:

- **Option (b) is correct:**
  - o 1/13= 0.076923 -> 6923
  - o 1/17= 0.058823 -> 8823
  - o 1/19= 0.052631 -> 2631
  - o 1/23= 0.043478 -> 3478
  - o Greatest number is 8823.

66. Answer: D

Explanation:

- **Option (d) is correct:**

  In this question, we will proceed by checking all the options.

  We will multiply all numbers given in the options by 7 and see which of the product entirely comprises 1's only.

  a) $15713 \times 7 = 109991$

  b) $15723 \times 7 = 110061$

  c) $15783 \times 7 = 110481$

  d) $15873 \times 7 = 111111$ (all 1's)

67. Answer: B

Explanation:

- **Option (b) is correct:**
  - o Let the least value price = X.
  - o Then the next price value is = X+20, and the next value is X+40 and on and on up to 7 values. It is an arithmetic Progression with sum 700.
  - o X + X+20 + X+40 +… X+120 = 700
  - o Or 7X + (20+40+…+120) = 700
  - o Or 7X + 420 = 700
  - o Or 7X = 700 − 420 = 280
  - o Or X = 40.

68. Answer: B

Explanation:

- **Option (b) is correct:**
  - o Remaining products= 100%- 25%-40%= 35%= 175
  - o So total products are 500 (35%= 175 -> 1%=5 -> 100%=500)
  - o Total cost= total price × CP of each product = 500× 60= 30000
  - o 25% sells at 20% profit= 25% of 500× 120% of 60 = 125× 72= 9000
  - o 40% sells at 10% profit= 40% of 500× 110% of 60 = 200× 66 = 13200
  - o 35% sells at 25% loss= 35% of 500× 75% of 60 = 175× 45 = 7875
  - o Total sell = 9000 +13200+7875= 30075
  - o Net profit= 30075- 30000=75

69. Answer: B

Explanation:

- **Option (b) is correct:**
  - o It is given that total length of the wall = 4.5 m = 450 cm
  - o length covered by frog in one jump = 30cm
  - o frog slides to the length = 15cm

- o net length covered = 30 – 15 = 15 cm
- o frog has to cover 420 cm and then a jump of 30cm and frog will be out from well.
- o Number of jumps required by frog to cover 420 cm = 420/15 = 28 jumps
- o In the 29th jump the frog will reach at the top of the wall and will not slide down.
- o Hence, total number of jumps required = 29**.**

70. Answer: B
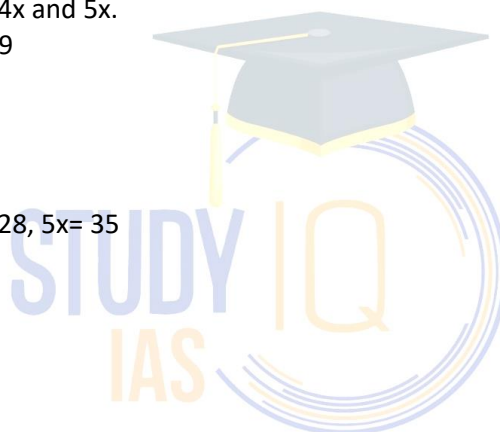**Explanation:**
Option (b) is correct:
- o $2=1^2+1^3$
- o $12=2^2+2^3$
- o $36=3^2+3^3$
- o $80=4^2+4^3$
- o $150=5^2+5^3$
- o $252=6^2+6^3$

71. Answer: C
Explanation:
- **Option (c) is correct:**
  - o Let the Numbers be 4x and 5x.
  - o $(4x)^2+(5x)^2= 2009$
  - o $16x^2+25x^2= 2009$
  - o $41x^2= 2009$
  - o $x^2= 79$
  - o x= 7
  - o So numbers are 4x= 28, 5x= 35
  - o Difference= 7
  - o Square= 49

72. Answer: A
Explanation:
- **Option (a) is correct:**
  - o Let odd numbers be x, x+2,x+4,x+6,x+8,x+10
  - o x+x+2+x+4+x+6+x+8+x+10=180
  - o 6x= 150
  - o x= 25 which is smallest number
  - o So largest number= 35
  - o Product= 25×35= 875
  - o Let even numbers be y,y+2,y+4,y+6,y+8
  - o Put y= 2 (smallest even number)
  - o 2×4×6×8×10= 3840
  - o Sum= 2+10= 12
  - o x-y= 875-12= 863

73. Answer: C
Explanation:
Option (c) is correct: Initially rank of boy was 20th in a class of 45 students.
Hence, the arrangement was like
(19) ------boy----- (25)
After adding two more boys rank dropped by 1
New rank is 21st and total boys in class will be 47 Hence, arrangement will be.

(20) ----------boy------- (26)
Hence, new rank of the boy from the end is 27th.

74. Answer: D
Explanation:
- **Option (d) is correct:** Both statements are required to answer the question.
  - Jon is 27 from bottom & Jon is 7 ranks above Jos. So, Jos is 20th from bottom.
  - Jos is 37th from top.
  - Therefore, total students are 20+36= 56

75. Answer: C
Explanation:
- **Option (c) is correct:**
  - K,P< L,M,N But not smallest.
  - O>K<P
  - K is smallest. So, both statements are required to answer the question.
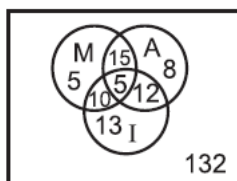
76. Answer: D
Explanation:
- **Option (d) is correct:**
  - Let the Price of Brown socks = z
  - And the number of Brown socks = n
  - According to question, the price of black pair was thrice that of a brown pair Price of Black pair = 3z
  - Now, wrong bill is 100% more means it is twice than the correct bill.
  - Hence, n × 3z + 5 × z = 2 (n × z + 5 × 3z)
  - Hence, 3n + 5 = 2n + 30 ⇒ n = 25.

77. Answer: B
Explanation:

Let X = Set of students appeared for entrance exam
M = Set of students failed in MHT-CET exam.
A = Set of students failed in AIEEE exam.
I = Set of students failed in IIT exam.
\ n (X) = 200 , n (M) = 35, n (A) = 40, n (I) = 40
n (M Ç A) = 20, n (M Ç I) = 15, n (A Ç I) = 17, n (M Ç A Ç I) = 5
The number of students who failed in at least one subject = n (M È A È I).
By formula, n (M È A È I) = n(M) + n(A) + n(I) – n(M Ç A) – n(A Ç I) – n(M Ç I) + n(M Ç A Ç I)
= 35 + 40 + 40 – 20 – 15 – 17+ 5 = 68
The number of students who did not fail in any subject = 200 – 68 = 132

78. Answer: A
Explanation:

- **Option (a) is correct:**
o Each alphabet has same number which is number of its reverse Alphabetical order
o i.e. A is coded as no. of Z , A-26, B- 25, ----- Z=1
o So, OP → 1211

79. **Answer: B**

Explanation:

- **Option (b) is correct:**
- 29th May, 2006 = (2005 years + Period from 1.1.2006 to 29.5.2006)
- 5 years = (4 ordinary years + 1 leap year) = (4 x 1 + 1 x 2) = 6 odd days Jan. Feb. March April May
- (31 + 28 + 31 + 30 + 29) = 149 days
- 149 days = (21 weeks + 2 day) = 1 odd day.
- Total number of odd days = (0 + 0 + 6 + 2) = 8= 1week+1 day= odd day. Given day is Monday.

80. **Answer: D**

Explanation:

- **Option (d) is correct:**
  o The series is yxy/ yxy/ yxy/ yxy. Thus yxy is repeated.