

**1: (b)**

The passage discusses how advocati were put by the German Emperors to protect the arising towns against the surrounding nobility. The passage also says how the growing population drove them away later. Thus the advocati can be best described as an instrument of the German emperors to keep the new towns and its population under their control by protecting them from revolts as well as the nobility. Therefore, Option (b) is the correct answer.

Option (a) is incorrect because advocati were against the surrounding nobility. Option (c) is incorrect because they were not army. They were governors. Option (d) is incorrect because separation of power is not discussed in the passage.

**2: (d)**

The passage discusses how private and public sector are not looking beyond immediate geographical area. Moreover, they are overlooking public benefits as well as sustainability of the supply. Thus, the keynote emerging here is that we should approach biodiversity in an inclusive, global and sustainable manner. Thus, Option (d) is the correct answer.

Option (a) is incorrect because here private sector is not especially targeted.

Option (b) is incorrect because the passage is not asking us not to rely on these services. It is just suggesting its judicious use.

Option (c) is incorrect because the passage is not talking about stopping the consumption. It is telling us to consume the services in a sustainable and inclusive manner.

**3: (c)**

Statement 1 is correct because the passage is discussing the merits of geothermal energy and suggesting Central America to develop geothermal energy. Thus a logical assumption is that this region has the potential of geothermal energy. Otherwise either Central America or geothermal energy wouldn't have been discussed here.

Statement 2 is correct because the passage is quoting climate change and its impacts like drought. It is also suggesting the region not to rely on hydropower. This suggestion is valid only if climate change can make hydropower unreliable.

Using negation test too, this can be solved. Negating any of the statements would lead to the paragraph being false.

**4: (b)**

Statement 1 is incorrect because fish and human beings are not compared here. Negating this statement does not affect the validity of the paragraph. Hence, the assumption can be deemed incorrect.

Statement 2 is correct because the passage discusses how climate change will affect Caribbean states. Moreover, it also says that Caribbean states are heavily dependent on the tourism industry. Thus, it can be safely assumed that climate change can affect the tourism industry.

5: (d)

The passage discusses how in a democratic parliamentary monarchy, the elected parliament forms and terminates the government. It is better than constitutional monarchy which is a case of dual legitimacy. And it is much better than monarchies where monarchs have most of the power. Thus, Option (d) is the correct answer.

Option (a) is incorrect because it says quite the opposite of what the passage is saying.

Option (b) is incorrect because neither overall/broad comparison is being done here nor the passage indicates that democratic parliamentary monarchy is worse than ruling monarchies.

Option (c) is incorrect because human rights are not discussed here.

6: (c)

Option (a) is incorrect because there is no comparison here between aircrafts and other means of transport. Option (b) is incorrect because here building of lighter aircrafts is not suggested. The possibility of any such initiative is not discussed here.

Option (d) is incorrect because it is beyond the scope of the passage. Here, there is no mention of bullet trains.

The passage explains how global warming will make the air thin and hence the plane may be unable to take off safely. Thus, Option (c) is the correct answer.

#### Explanation for questions 7 to 9:

As per the information given in the question, we will solve this problem as follows:

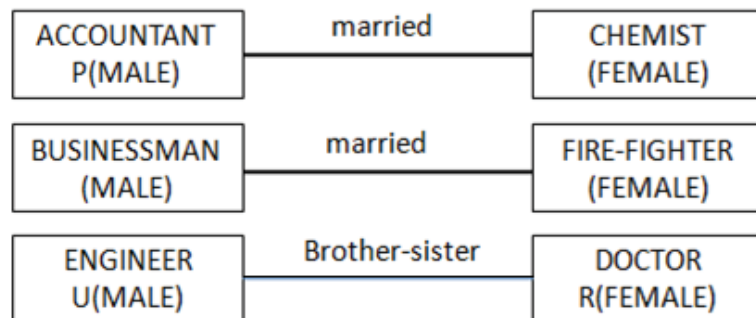
(i) P is an accountant who is married to a lady chemist. It means P is male and chemist is female.

(ii) Businessman is a male and is married to fire-fighter which clearly means that fire-fighter is a female.

(iii) U, the male unmarried engineer, is the brother of R who is unmarried female doctor.

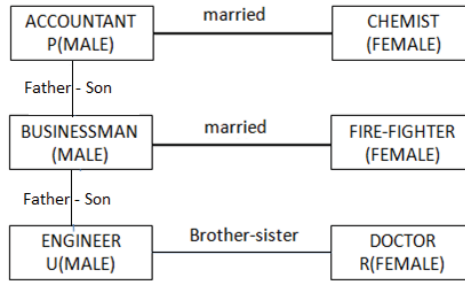
From (i), (ii) and (iii), we can deduce that there are 3 males members in the family viz. Accountant (P), Businessman and Engineer (U) and three females members viz. Chemist, Fire-fighter, and Doctor.

Below diagram clearly represents the relation of family members:



Further, it is given that businessman is the father of doctor. So, businessman is also the father of the Engineer.

Also, there are two fathers and two sons in the family and Engineer is unmarried so cannot have a son. Thus, the only possibility is that businessman is the son of Accountant. The final picture that emerges is as follows:



7: (b)  
Clearly, the fire-fighter is the mother of the engineer.

8: (a)  
We know that oldest lady i.e. Q is the wife of accountant i.e. P. Thus, Q is the chemist and Q's son is S who is businessman. Therefore, T must be the fire-fighter.

9: (b)  
Clearly, accountant and doctor are grandfather – granddaughter.

**Explanation for questions 10 and 11:**

10: (b)

**Method I**

Percentage of male teachers can be calculated for all the subjects mentioned in options as given below:

Option (a): Percentage of male teachers teaching Chemistry =  $16/(16+22) \times 100 = 42.1\%$

Option (b): Percentage of male teachers teaching Mathematics =  $28/(28+8) \times 100 = 77.8\%$

Option (c): Percentage of male teachers teaching Botany =  $10/(10+14) \times 100 = 41.6\%$

Option (d): Percentage of male teachers teaching Economy =  $24/(24+8) \times 100 = 75\%$

Clearly, mathematics has more number of male teachers.

**Method II**

Just by observing the graph, it can be inferred that Mathematics has male teachers more than three times the number of female teachers. So, the percentage of male teachers in mathematics shall be higher than that in Chemistry or Botany.

Hence, option (b) is the correct answer.

11: (c)

After two more female teachers join Mathematics department:

Number of male teachers in Mathematics = 28

Number of female teachers in Mathematics =  $8 + 2 = 10$

Required ratio (Male: Female) =  $28:10 = 14:5$

Hence, option (c) is the correct answer.

12: (b)

**Method I:**

$A = (45\% \text{ of } P) - (15\% \text{ of } Q) = 0.45P - 0.15Q \dots\dots\dots(i)$

$B = (25\% \text{ of } P) + (20\% \text{ of } Q) = 0.25P + 0.20Q \dots\dots\dots(ii)$

Subtracting (ii) from (i) we get,

$$\begin{aligned}A - B &= (0.45P - 0.15Q) - (0.25P + 0.20Q) \\ &= 0.20P - 0.35Q\end{aligned}$$

Clearly  $A - B > 0$  when  $0.20P - 0.35Q > 0$

Or  $0.20P > 0.35Q$

Or  $P/Q > 7/4 \rightarrow$  This is possible only for option (b).

### Method II

We will check by substituting the values for each option:

For option (a):

$$A = (45\% \text{ of } P) - (15\% \text{ of } Q) = 0.45 \times 700 - 0.15 \times 400 = 255$$

$$B = (25\% \text{ of } P) + (20\% \text{ of } Q) = 0.25 \times 700 + 0.20 \times 400 = 255$$

Clearly,  $A = B$ , hence option (a) is wrong.

For option (b):

$$A = (45\% \text{ of } P) - (15\% \text{ of } Q) = 0.45 \times 700 - 0.15 \times 300 = 315 - 45 = 270$$

$$B = (25\% \text{ of } P) + (20\% \text{ of } Q) = 0.25 \times 700 + 0.20 \times 300 = 175 + 60 = 235$$

Clearly,  $A - B > 0$

Hence, option (b) is the correct answer.

**13: (b)**

Percentage of people less than 30 years of age = 12%; Percentage of people more than 70 years of age = 6%;

Percentage of people more than 50 years of age = 22%

Number of people between 30 and 50 years of age = 990.

Percentage of people between 30 and 50 years =  $100\% - 12\% - 22\% = 66\%$

Let the total number of people be X

So, 66% of X = 990

$$\text{Thus, } X = (990/66) \times 100 = 1,500$$

People between 50 and 70 years =  $22 - 6 = 16\%$  of 1500 = 240

Hence, option (b) is the correct answer.

**14: (a)**

The passage discusses how over interference of judiciary with other branches of government is incompatible with democracy. Thus, Option (a) corroborates the above statement as it highlights the importance of separation of power in government.

Option (b) is incorrect because here judiciary's activism is being disapproved. Judiciary as the custodian is just the opposite idea. Option (c) is incorrect because here is no mention of election or any other method to solve public indifference.

Option (d) is incorrect because though the passage is criticizing the over activism of judiciary, it is not suggesting that other branches of the government should become overactive and keep the judiciary in check.

**15: (c)**

Statement 1 is incorrect because there is no discussion on the institutions of democracy in the given passage.

Statement 2 is correct because the passage shows how elections were different during the roman era. Moreover, the passage itself says that it is difficult to answer what is real election.

Statement 3 is correct because the passage discusses how romans didn't adhered to the principle of one man one vote.

- 16: (d)**  
The passage discusses how governments face tough task of taking good decisions as well as ensuring legitimacy. Out of the given options, the best explanation of why this is so is that many good decisions may be unpopular. This will therefore endanger the vote base of the government which gives it the legitimacy. Thus, Option (d) is the correct answer.  
Option (a) is incorrect because democratic government may not necessarily lack the required abilities.  
Option (b) is incorrect because in many forms of democracy prior consent of the governed is not always sought.  
Option (c) is incorrect because it not discussed which role the government should take first.
- 17: (a)**  
The passage discusses how Universal adult suffrage gave legitimacy against any military intervention or secessionist movements. Moreover, it also helped in achieving gender as well as caste based equality. Hence, it also gave India the egalitarian character. Therefore, Option (a) is the correct answer.  
Option (b) is incorrect because here the various features of constitution are not compared with each other. Thus, we can't say which feature is the best.  
Option (c) is incorrect because Universal adult suffrage didn't prevent succession by satisfying everyone. It did so by giving the state the legitimacy to act against any secessionist movements.  
Option (d) is incorrect because nowhere in the passage, Universal adult suffrage is shown as the solution of poverty and inequality.
- 18: (d)**  
The passage highlights the need for a new international arms trade treaty, that some nations are unwilling to agree to, so that it can control arms trade. Therefore, the assumption that "the treaty could help curb use of arms in conflicts and human rights violations", must hold true for the passage to be true. Thus, Option (d) is the correct answer.  
Option (a) is incorrect because the passage does not make any specific reference to the democratic nations.  
Option (b) is incorrect because the passage talks only about preventing arms from reaching human rights violators. There is no discussion on halting their production, trade and stockpiling.  
Option (c) is incorrect because it is not clear if the treaty is impossible. The passage only talks about the constraints the treaty is facing. If true, this statement negates the entire argument forwarded by the passage.
- 19: (b)**  
The passage discusses how NPT is inherently unfair in its structure and a trade-off that was meant to balance it was not pursued by US and other nuclear weapons states. Therefore, Option (b) is the correct answer.  
Option (a) is incorrect because there is no discussion on the right of nuclear possession. Option (c) is incorrect because there is no mention of no first use policy.  
Option (d) is incorrect because the passage does not considers the nuclear weapons as a legitimate right.
- 20: (a)**  
The passage discusses how historically as well as now, the major powers have sought to expand their influence, power and dominance. Therefore, Option (a) is the correct answer.  
Option (b) is incorrect because here the similarities are discussed more. The focus is not on the differences.  
Option (c) is incorrect because though the methods have changed, there is no significant change in the goals.  
Option (d) is incorrect because it is not clear from the passage which form of expansion was more aggressive.

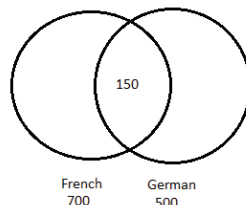
**21: (b)**  
 The passage discusses how manipulation of views through media undermines the democracy. Thus, Option (b) is the correct answer.  
 Option (a) is incorrect because there is no comparison of democratic societies with other societies with respect to media.  
 Option (c) is incorrect because the passage does not mention any such nexus. Option (d) is incorrect because here developed and developing countries are not compared.

**22: (b)**  
 24 articles sold at the price of 12 articles, is equivalent to a discount of  $(24-12)/24 \times 100\% = 50\%$ .  
 Hence the dealer offers two discounts of 10% and 50% respectively and still makes a profit of 80%.  
 If  $c$  is the cost price of an article and  $m$  is the marked price, then  
 Selling price of the article = 180% of  $c = 180c/100 = (9/5)c$   
 Also, the selling price of the article =  $(100-50)\%$  of  $[(100-10)\%$  of  $m]$  = 50% of 90% of  $m = (1/2)(9/10)m = (9/20)m$   
 Hence,  $(9/5)c = (9/20)m$   
 Or  $m = 4c$ .  
 So the marked price is  $4c - c = 3c$  above the cost price  
 i.e. marked price is  $3c / c \times 100\% = 300\%$  above the cost price.  
 This means that he had marked his goods 300% above the cost price.

**23: (c)**  
 Let the selling price of 1 article = Rs. 1.  
 So the selling price of 16 articles = Rs. 16.  
 And loss = Rs. 4  
 So the cost price =  $16 + 4 =$  Rs. 20.  
 Hence the percentage of loss =  $4/20 \times 100 = 20\%$

**24: (d)**  
 Let the total number of students be  $x$ .  
 Let  $n(M)$  = number of students who passed in Mathematics  
 $n(E)$  = number of students who passed in English  
 $n(M \cap E)$  = number of students who passed in both Mathematics and English  
 $n(M \cup E)$  = number of students who passed in either Mathematics or in English or in both the subjects.  
 So the number of students who passed in one or both the subjects =  $n(M \cup E) = n(M) + n(E) - n(M \cap E) = 65\%$  of  $x$   
 $+ 60\%$  of  $x - 40\%$  of  $x = 65x/100 + 60x/100 - 40x/100 = 85x/100 = 17x/20$   
 So the number of students who failed in both the subjects =  $x - (17x/20) = 3x/20$   
 So,  $3x/20 = 135$   
 Or  $x = 900$

**25: (c)**  
 As per the question:



**Method I:**

Let  $n(F)$  = number of people who can speak French = 700 (given)

$n(G)$  = number of people who can speak German = 500 (given)

$n(F \cap G)$  = number of people who can speak both French and German =  $z = 150$

$n(F \cup G)$  = number of people who can speak either French or German or both.

Also let  $x$  = number of people who can speak only French, and  $y$  = number of people who can speak only German.

So,  $n(F \cup G) = n(F) + n(G) - n(F \cap G) = 700 + 500 - 150 = 1050$

Since total number of people is 1500, so total number of people who can speak neither French nor German =  $1500 - 1050 = 450$  people.

Also, from the Venn diagram,  $x + z = 700$

Or  $x + 150 = 700$

Or  $x = 550$

Also,  $y + z = 500$

Or  $y + 150 = 500$

Or  $y = 350$

So, the number of people who can speak only one language =  $x + y = 550 + 350 = 900$

Hence, the number of people who can speak at most one language = number of people who cannot speak any of the languages + number of people who can speak only one language

=  $450 + 900$

= 1350

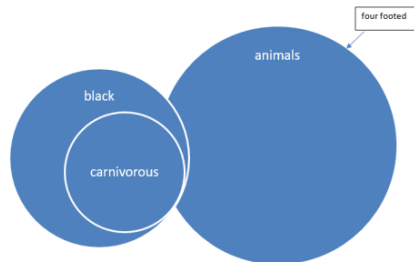
**Method II:**

The number of people who can speak at most one language = Total number of people – Number of people who can speak both the languages

=  $1500 - 150 = 1350$

26: (b)

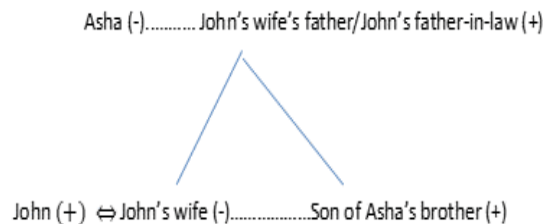
Based on the question we can draw the following Venn diagram:



Only conclusion (b) can be drawn from the given statements.

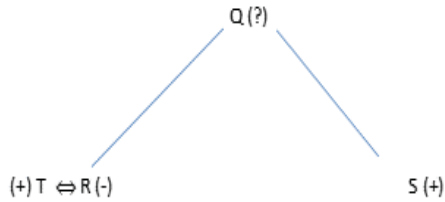
27: (c)

Brother of my wife → my brother-in-law; Son of Asha's brother is the brother-in-law of John. So, Asha's brother is John's father-in-law, i.e., Asha is the sister of John's father-in-law.



28: (a)

R is Q's daughter and S is Q's son. So, S is the brother of R. T is a male married to R. So, T is the husband of R, whose brother is S. So, S is the brother-in-law of T.



29: (b)

Here the expenditure is constant.

Since, Rate  $\times$  Consumption = Expenditure

So, Initially -  $1 \times 1 = 1$  (assume it on your own)

After change -  $1.25 \times c = 1$

(c = new consumption)

So,  $c = 4/5$

Hence, decrease in value =  $1 - (4/5) = 1/5$

And percentage decrease =  $[(1/5)/1] \times 100 = 20\%$

30: (c)

Let the original total weight be x.

Weight of the jar =  $(12.5/100)x = x/8$ .

Original weight of the water =  $x - (x/8) = 7x/8$ .

New weight of jar and water (jar + water) =  $(25/100)x = x/4$ .

New weight of water = new weight of jar and water – weight of jar =  $(x/4) - (x/8) = x/8$ .

Weight of water removed = original weight of water – new weight of water =  $(7x/8) - (x/8) = 6x/8$

Fraction of water removed = weight of water removed/original weight of water =  $(6x/8)/(7x/8) = 6/7$

31: (b)

The total number of characters =  $10 \times 50 \times 60$

Let the number of sheets in the new format be p.

Since the total number of characters remains the same, therefore:

$$10 \times 50 \times 60 = p \times 30 \times 25$$

So,  $p = 40$

So increase in the number of sheets =  $40 - 10 = 30$

So percentage increase =  $(30/10) \times 100 = 300\%$

32: (a)

Initial total salary of Mr. Gupta =  $10000 + 100\%$  of  $10000 = \text{Rs. } 20,000$

Initial payable tax =  $10\%$  of  $20000$ .

So, initial net salary =  $90\%$  of  $20000 = \text{Rs. } 18,000$ .

New total salary of Mr. Gupta =  $10000 + 200\%$  of  $10000 = \text{Rs. } 30,000$

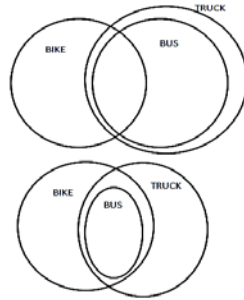
New payable tax =  $20\%$  of  $30000$

So new net salary =  $80\%$  of  $30000 = \text{Rs. } 24,000$

So increase in net salary =  $24000 - 18000 = \text{Rs. } 6,000$



- 33: (c)**  
The passage discusses how pursuit of national interests by the powerful nations may undermine international interests. Thus, the main idea of the passage is that national interests should not be pursued with a complete disregard to the international concerns. Thus, Option (c) is the correct answer.  
Option (a) is incorrect because here internationalism is not compared with national interest with regard to progress of humanity.  
Option (b) is incorrect because the passage shows that in some cases they may contradict each other. But we can't make a general statement that they are always contradictory.  
Option (d) is incorrect because passage is talking the just opposite, i.e. to balance national interests with international issues.
- 34: (b)**  
The passage discusses how elderly women face discrimination due to lack of control of family resources. Thus, the keynote here is that they should be equally treated in matters of family resources. Thus, Option (b) is the correct answer.  
Option (a) is incorrect because the passage is not discussing who should head the family and how. This statement may be an inference but certainly not the keynote or theme of the passage.  
Option (c) is incorrect because here property rights are not made conditional to the death of the husbands.  
Option (d) is incorrect because here the issue is not the longevity of men but of the conditions of women.
- 35: (d)**  
Option (a) is incorrect because the passage is talking about avoiding all the pity issues. It is not so specific to controversies.  
Option (b) is incorrect because though the passage is from the life of Lincoln, it is conveying a specific message. That message is the essential discussion and not the life of Lincoln.  
Option (c) is incorrect because though some aspects of self-control is discussed here, the ways of achieving it is not discussed here.  
The passage discusses how Lincoln reprimanded an officer and told him not to spare time for personal contention. He also advises him to yield larger things. Thus, Option (d) is the correct answer.
- 36: (b)**  
Statement 1 is incorrect because the passage is not comparing the Persian and Macedonian soldiers.  
Statement 2 is correct because the passage clearly indicates this through many statements. Eg. Passage says that he tried to connect Persian nobles to Macedonians.  
Thus, Option (b) is the correct answer.
- 37: (a)**  
The passage says that patriotism is loyalty to nation and not to the government in power. The best justification here is that a government's interest may contradict the national interest. And at those scenarios, one should be loyal to the nation and not to the government. Therefore, Option (a) is the correct answer.  
Option (b) is incorrect because government and nation are not same. Option (c) is incorrect because they are not always in conflict.  
Option (d) is incorrect because even elected governments can make wrong moves.
- 38: (a)**  
Based on two given statements following major two Venn diagrams are possible (though there are a few more that can be made):



Conclusion I: It can be said with certainty that some bikes are trucks.

Conclusion II: It cannot be said with certainty that no truck is bike. In fact some truck is bound to be bike.

Thus, conclusion I is true and conclusion II is false.

Hence, option (a) is the correct answer.

39: (c)

Circles are different from polygons and there is nothing common between circles and polygons.

However, rhombus is a subset of polygon, i.e. All rhombus are polygons.

Hence, option (c) is the correct answer.

40: (d)

Football (i.e. circle) is a sub set of Badminton (i.e. square). So, there is no boy who plays football but not badminton. That means every boy who plays football also plays badminton.

Hence, option (d) is the correct answer.

41: (c)

Total Students in a class = 120

Number of students who like English = 62

Number of students who like Maths = 52

Number of students who like both English and Maths = 24

Number of students who like neither English nor Maths =  $120 - (62 + 52 - 24) = 120 - 90 = 30$

Percentage of students who do not like both English and Maths =  $(30/120) \times 100 = 1/4 = 25\%$

Hence, option (c) is the correct answer.

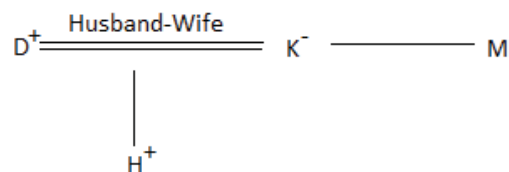
42: (d)

D1H means D is father of H

H5K means H is son of K.

K3M means K is sister of M.

This information can be expressed graphically as given below:



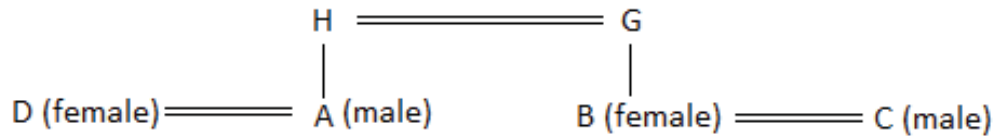
Note: + and – sign represents male and female respectively. A married couple is shown by double line or double side arrow.

Clearly, M is D's wife's sister or brother.

Hence, option (d) is the correct answer.

43: (b)

It is given that A is son of H and B is daughter of G. Also, B is married to C.  
A's wife is D and D is daughter in law of G. So, G is a parent of A. Thus, G and H makes a couple.  
This information can be represented graphically as follows:



So, B is the daughter of H and C is the son – in – law of H.  
Hence, option (b) is the correct answer.

44: (a)

Let the initial mixture be 1000 ml. (This solution will have 500 ml milk and 500 ml water)  
 $\frac{1}{4}$  of this mixture will have 125 ml of milk and 125 ml of water.  
Amount of pure milk to be added into it = 500 ml.  
So, Percentage of water in new mixture =  $125 / (250 + 500) = (125 / 750) \times 100 \% = 16.67\%$   
Hence, option (a) is the correct answer.

45: (d)

Let the initial amount invested be A.  
Return on investment for the first year is 10% and for subsequent years is 20%.  
Amount after 1 year =  $(110/100) \times A = 1.1A$   
Amount after second year =  $(120/100) \times 1.1A = 1.1A \times 1.2$   
Similarly, amount after six years =  $1.1 \times (1.2)^5 A$   
Hence, option (d) is the correct answer.

46: (c)

**Method I:**

Let the initial length and breadth of a rectangle be l and b respectively.  
Initial area of rectangle =  $l \times b = lb$   
New Length after it got increased by 20% =  $120/100 \times l = 1.2l$   
New Breadth after it got increased by 25% =  $125/100 \times b = 1.25b$   
New Area =  $1.2l \times 1.25b = 1.5lb$   
Net change in area = New Area – Initial area =  $1.5lb - lb = 0.5lb$   
Percentage increase in area = Net increase in area / original area  $\times 100 = 0.5lb/lb \times 100 = 50\%$   
Hence, option (c) is the correct answer.

**Method II:**

Use this formula  $(x + y + xy/100)$   
Where x and y are percentage changes  
Use positive for increment and negative for decrement and observe overall result.  
In above question  
 $x = 20$  and  $y = 25$   
So, net change =  $(20 + 25 + 20 \times 25 / 100) = 50$   
Result is positive so overall area increases by 50%  
Hence, option (c) is the correct answer.

47: (b)

Let the income of Parul and Palak be  $4x$  and  $3x$  respectively  
 And the Expenses of Parul and Palak are  $3y$  and  $2y$  respectively.  
 As it is given that each of them saves Rs. 6000 monthly

So,

Savings of Parul =  $4x - 3y = 6000$ .....(1)

Saving of Palak =  $3x - 2y = 6000$ .....(2)

Subtracting (2) from (1) gives

$x - y = 0$ , i.e.  $x = y$ .....(3)

Using (3) in (1) we get,

$x = 6000$ .

So, Parul's Income =  $4x = 24000$

Palak's income =  $3x = 18000$

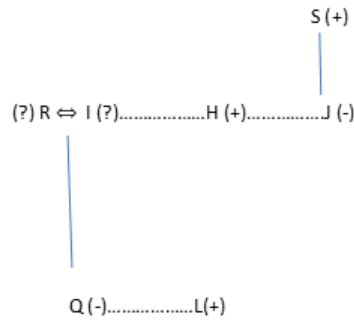
Net difference =  $24000 - 18000 = 6000$

Required percentage =  $6000/18000 \times 100\% = 33.33\%$

Hence, option (b) is the correct answer.

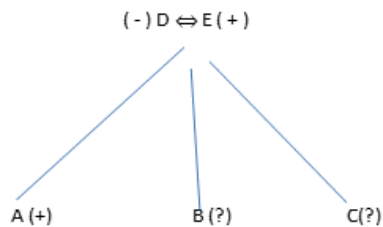
48: (c)

L is the brother of Q, who is the daughter of I. So, L is the son of I. H is the brother of I. So, H is the uncle of L.



49: (d)

A, B and C are children of the same parents. So, D, who is C's mother, and E, who is A's father, will be the mother and the father of all the three. However, it is not mentioned whether B is a male or female. So, the statement (d) cannot be definitely true.



50: (a)

The passage discusses how violence fails to diminish evil and hate. Therefore, Option (a) is the correct answer which talks about non-violence and love.

Option (b) is incorrect because the passage does not talk about solving 'all the issues'. It is confined to the issue of violence and hate.

Option (c) is incorrect because the passage is not telling us to kill the hater. Option (d) is incorrect because according to passage, violence only multiplies violence. There is no mention of any such peace of any side.

- 51: (d)**  
Option (a) is incorrect because there is no mention of food import. Option (b) is incorrect because the passage is lamenting the expansion of agriculture into the semi-arid lands. It is not telling to make it more fertile.  
Option (c) is incorrect because there is no suggestion of clearing of forests.  
The passage discusses how population growth is causing land degradation in Africa. Thus, the main idea is to regulate the population growth to ease the burden on natural resources. Thus, Option (d) is the correct answer.
- 52: (b)**  
Option (a) is incorrect because there is no mention of poverty elimination as the prerequisite of universal health.  
Option (c) is incorrect because relation between health and wealth is not established here.  
Option (d) is also incorrect because the passage is not talking about public money. In fact, we can't say if public money is currently spent on cosmetics.  
The passage discusses how only profit motive leads to neglect of basic health issues. Therefore, we must balance private profit and public health. Thus, Option (b) is the correct answer.
- 53: (d)**  
Option (a) is incorrect because the focus of the passage is on training of workers and not on the distribution of profits.  
Option (b) is incorrect because though labour cost and cost of production are discussed here, these are not the main idea of the passage.  
Option (c) is incorrect because the focus of the passage is not the profits of industries but the wages of the workers.  
The passage explains how untrained labourer will be underpaid. Thus, the main idea is that training them in skills which are learnt in a longer duration will help in raising their wages as their mere bodily existence of the worker will not be sufficient and skills acquired will be needed. Thus, Option (d) is the correct answer.
- 54: (d)**  
Option (a) and Option (b) are incorrect because this value is not same as the ethical values.  
Option (c) is also incorrect because the values are not the work done. Rather, they are the outcomes of the work done.  
The passage discusses that workers produce capital, i.e. values. These capital (values) then in turn commands the work of the worker so that more capital (values) can be produced. Thus, these values are the resources which can be used to generate more resource in a factory with the help of workers. Therefore, Option (d) is the correct answer.
- 55: (c)**  
The above passage discusses how Japanese stagnation was not predicted well. Moreover, the passage also says that the future of ASEAN economy also can't be predicted. The best justification is therefore that generally it is very difficult to accurately predict the future course of an economy. Thus, Option (c) is the correct answer.  
Option (a) is incorrect because we can't say if ASEAN or any other economy will stagnate in future. Japan may be an exception.  
Option (b) is incorrect because the above instances can't be generalised for all the Asian countries.  
Option (d) is incorrect because the similarity between the two countries is not discussed here.

- 56: (c)**  
 He earns Rs. 1,050 from income of Rs 6,000.  
 So,  $3000(m/100) + 3000(n/100) = 1050$   
 Or  $30m + 30n = 1050$   
 Or  $m + n = 35$  ..... (i)  
 Also, he earns Rs 1,350 from income of Rs 7,500  
 So,  $3000(m/100) + 4500(n/100) = 1350$   
 Or  $30m + 45n = 1350$   
 Or  $2m + 3n = 90$  ..... (ii)  
 Solving these two equations simultaneously, we get  $n = 20$ .
- 57: (d)**  
 Cost of the commodity after 1 year =  $1000 + 200\% \text{ of } 1000 = 1000 + 2000 = \text{Rs. } 3,000$   
 Cost of the commodity after 2 years =  $3000 + 300\% \text{ of } 3000 = 3000 + 9000 = \text{Rs. } 12,000$   
 OR  
 The required cost =  $1000 (1 + 200/100) (1 + 300/100) = 1000 \times 3 \times 4 = \text{Rs. } 12,000$
- 58: (a)**  
 Men  $\times$  Time = Work  
 Let the work be 100 units and time be 1 unit  
 $100 \times 1 = 100$  units  
 Now work is 150 units (after 50% increase), but time remains the same.  
 Let  $m$  be the total number of workers (with same efficiency) required now.  
 So,  $m \times 1 = 150$   
 So  $m = 150$   
 So extra workers required = 50  
 But since the new workers are  $5/2$  times (i.e. 150% more) efficient than the existing workers.  
 So actual number of new workers required =  $50 / (5/2) = 20$   
 Hence, the required percentage =  $20/100 \times 100 = 20\%$
- 59: (d)**  
 Selling price of 110 items = Rs 1,000  
 Let cost price of 110 items =  $x$ .  
 Then  
 $x - (10x/100) = 1000$   
 or,  $90x/100 = 1000$   
 or  $x = 10000/9$   
 For gaining 10% on Rs.  $10000/9$ , selling price of 110 items should be 110% of Rs  $10000/9 = (10000/9)(110/100) = \text{Rs. } 11000/9$ .  
 Since Rs.  $11000/9$  is the selling price of 110 items  
 So Rs. 1 is the selling price of  $110 / (11000/9)$  items  
 So Rs. 1000 is the selling price of  $110 \times 9 \times 1000 / 11000 = 90$  items.  
 Hence for Rs 1000, items sold = 90.
- 60: (c)**  
 Let the cost price be Rs. 100.  
 Then the selling price = Rs. 114.  
 Now, let the marked price be Rs.  $x$ , then

$$95x/100 = 114$$

$$\text{or } x = \text{Rs. } 120.$$

If no discount was offered, the selling price = Rs. 120

The cost price = Rs. 100.

So the percentage of profit = 20%

**61: (a)**

Let the article be worth Rs.  $x$  (the actual cost price).

Effective cost price = 80% of Rs.  $x = 80x/100 = 4x/5$ .

Also, the selling price = 120% of Rs.  $x = 120x/100 = 6x/5$ .

So gain =  $(6x/5) - (4x/5) = 2x/5$ .

So the gain percent =  $(2x/5)/(4x/5) \times 100 = 50\%$

**62: (c)**

The conversion of the first statement gives us the answer, "If I do not need a leisure, I do not go to the Maldives" as I go to the Maldives only if I need a leisure. Also, options (a) and (b) are wrong as it's not necessary that the concerned person goes to Maldives or tries to be with family members whenever he needs leisure. He may be having other options too.

**63: (d)**

The statement given is "Eating green vegetables is good for health."

This does not mean that all healthy people eat green vegetables.

Neither does it imply that eating green vegetables is essential for maintaining good health. People may remain healthy by eating other nutritious diets too.

Hence, option (d) is the correct answer.

**64: (d)**

On the basis of given statements we will examine all the options one by one:

Options (a) & (b): These options are wrong as none of the statements say where do aliens exist or come from.

Option (c): Intelligence of aliens is not compared to the intelligence of man in any of the statements.

Option (d): This is true as nothing can be said definitely about aliens.

Hence, option (d) is the correct answer.

**65: (d)**

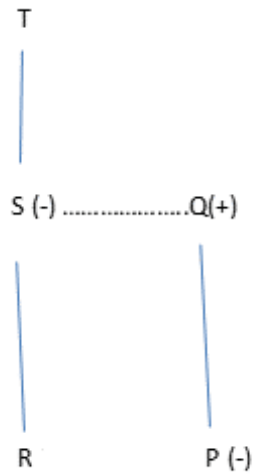
On the given date, only Delhi (460) is falling in the 'severe' category (401 – 500) of air quality, rest (the remaining 4 cities) are in the non – severe category.

**66: (b)**

As the air quality is the worst (severe) in Delhi on that day, so the persons having respiratory disease(s) and living/staying in Delhi needed to be the most cautious on that day.

67: (d)

P's father is Q. R's mother is S. Q is a child of T. So, Q's younger sister S is the daughter of T. So, T is the father/mother of S and so R is the granddaughter/grandson of T.



68: (d)

The passage discusses that MW impacts staff as well as the patient. And the only place where these two are found together is the hospital. Hence, it can be assumed that MW makes hospital region prone to diseases. Thus, Option (d) is the correct answer.

Option (a) is incorrect because the option is using superlative **most** important.

Option (b) is incorrect because the passage is specific about developing countries and not the whole world.

Option (c) is incorrect because the responsibility of patients is not discussed here.

69: (d)

The passage shows the demerits of following the development philosophies forced on them by the West. The natural next step is that they should follow policies which suits their interests. Thus, Option (d) is the most logical corollary.

Option (a) is incorrect because the passage is not about following European model. It is about imposing of some development policies. There is difference between following some good policy and imposing of some bad philosophies.

Option (b) is incorrect because the passage says that US model was emulated and that lead to failure in certain cases due to unsuitability but it does not necessitate failure in all cases. The passage talks about forcing of outside models of development.

Option (c) is incorrect because this idea is not discussed or hinted in the passage.

70: (a)

The passage discusses how the government should not block despicable views. Thus, Option (a) is the correct answer.

Option (b) is incorrect because the passage is about freedom of speech and not about the freedom of making mistakes.

Option (c) is incorrect because here the passage does not want the government to be fearful of free expression.

Option (d) is incorrect because the passage is not about **absolute** freedom of speech.



- 71: (a)**  
 Statement 1 is correct because the passage clearly says that Bose wanted self-rule but Gandhiji wanted dominion status.  
 Statement 2 is incorrect because Quit India movement is out of scope of the passage.  
 Statement 3 is incorrect because there is no such analysis in the passage.
- 72: (c)**  
 The passage discusses that government taxes what is “moving”, i.e. running/operating and subsidize the stopped ones. This can be corroborate by the fact that revenue should be generated from the booming sectors and the lagging sectors should be helped by the government using those resources. Thus, Option (c) is the correct answer. Option (b) says the just the opposite of what the passage states and hence is incorrect.  
 Option (a) is incorrect because though the passage is discussing the role of government, we can't say if the regulation of economy is so much dependent on the government.  
 Option (d) is incorrect because the passage is discussing the approach of the government towards economy. But we can't say if it is solely responsible.
- 73: (a)**  
 The passage discusses why we (the people) should be more powerful than the government. Thus, Option (a) is the correct answer.  
 Option (b) is incorrect because there is no mention of governance here.  
 Option (c) is incorrect because in the passage there is a comparison between power of government and power of the people. It is not talking that the government should be weak in every affair.  
 Option (d) is incorrect because the passage is about government and not about leadership.
- 74: (a)**  
 Let the daily consumption of petrol be P litres.  
 Total petrol in the tank = 11P.  
 New rate of consumption after it got increased by 10% =  $(110/100) \times P = 1.1P$   
 Required number of days =  $11P/1.1P = 10$  days  
 Hence, option (a) is the correct answer.
- 75: (d)**  
 Let the cost price of a cycle be Rs. x.  
 Selling price after selling it for 20% gain =  $(120/100) \times x = \text{Rs. } 1.2x$ .  
 If the cost price was 25% less, then new cost price =  $(100 - 25)\%$  of x = 75% of x =  $0.75x$ .  
 New Selling price =  $1.2x - 700$ .  
 Profit percentage =  $SP-CP/CP \times 100$   
 Putting the given values in above equation we get,  
 $1.2x-700-0.75x/0.75x \times 100 = 44x4/9$   
 or  $0.45x - 700/0.75x \times 100 = (44x9)+4/9 = 400/9$   
 or  $0.45x-700/0.75x = 4/9$   
 Or  $4.05x - 6300 = 3x$   
 Or  $x = 6300/ 1.05 = 6000$   
 Thus, the cost price of the cycle is Rs. 6,000  
 Hence, option (d) is the correct answer.

**76: (b)**

As we know that loss percent =  $(\text{Loss}/\text{CP}) \times 100$

Now, we will calculate the loss percentage of all the four options one by one:

Option (a): Loss percent =  $10/300 \times 100\% = 3.33\%$

Option (b): Loss percent =  $10/500 \times 100\% = 2\%$

Option (c): Loss percent =  $50/1000 \times 100\% = 5\%$

Option (d): Loss percent =  $70/700 \times 100\% = 10\%$ .

Clearly, 2% is the minimum loss amongst all the options.

Hence, option (b) is the correct answer.

**77: (d)**

Let the initial cost of car be Rs.  $x$ .

We know that Selling price =  $(100 + \text{Gain}\%)/100 \times \text{cost price}$

Selling price of first middleman after 20% gain =  $(120/100) \times x = 1.2x$

Similarly, selling price of second middleman after 20% gain =  $1.2 \times 1.2x$

And selling price of third middleman after 20% gain = Cost price of Rajesh =  $1.2 \times 1.2 \times 1.2x = 1728000$

On calculating we get,  $x = 10,00,000$

Thus, the original cost of car = Rs. 10,00,000

Hence, option (d) is the correct answer.

**78: (a)**

Let the costs of the two flats be  $2x$  and  $3x$  respectively.

Total cost price =  $2x + 3x = 5x$

Selling price of first flat after a loss of 20% =  $(100 - \text{loss}\%)/100 \times \text{cost price} = (80/100) \times 2x = 1.6x$

Selling price of second flat after a gain of 15% =  $(100 + \text{profit}\%)/100 \times \text{cost price} = (115/100) \times 3x = 3.45x$

Total selling price =  $1.6x + 3.45x = 5.05x$

Profit = Selling price – cost price =  $5.05x - 5x = .05x$

Profit percentage =  $(\text{profit}/\text{cost price}) \times 100 = (0.05x/5x) \times 100 = 1\%$

Hence, option (a) is the correct answer.

**79: (b)**

We know that selling price =  $(100 - \text{discount}\%)/100$  of the initial cost

Now, we will calculate the selling price under the three schemes:

Scheme 1: SP =  $0.9 \times 0.9 = 0.81$  of the initial cost.

Scheme 2: SP =  $0.86 \times 0.94 = 0.808$  of the initial cost

Scheme 3: SP =  $0.88 \times 0.92 = 0.809$  of the initial cost

Under Scheme 2, the purchaser will be able to buy at the least price.

Hence, option (b) is the correct answer.

**80: (d)**

It is given that statement 4, i.e. "Some apples are not red" is true.

So, this directly implies that statement 1 is wrong.

Hence, option (d) is the correct answer.