

## —: SSC (MTS) Exam. Practice Set :—

Answers with Explanation

## SESSION – I

## PART – I

## Numerical and Mathematical Ability

1. (d)  $\therefore$  C.P. of 1000 gm of cashew nut = Rs. 250  
 $\therefore$  C.P. of 50 gm of cashew nut  
 $= \frac{250}{1000} \times 50 = \text{Rs. } 12.5$  শ্রুতিভঙ্গ  
 S.P. of 50 gm of cashew nut = Rs. 10  
 $\therefore$  Loss per cent  
 $= \frac{12.5 - 10}{12.5} \times 100 = 20\%$
2. (d) Let conical tank contain 'x' litres of fuel, then cylindrical tank would hold (x + 500) litres. So,  
 $(x - 200)2 = x + 500 - 200$   
 $2x - 400 = x + 300 \Rightarrow x = 700$   
 Hence, cylindrical tank would hold 700 + 500 = 1,200 L
3. (b) Number =  $269 \times 68$   
 $= 269 \times (67 + 1)$   
 $= 269 \times 67 + 269$  শ্রুতিভঙ্গ  
 Clearly, remainder is obtained on dividing 269 by 67 that is 1.
4. (b) LCM of 24, 36 and 54 seconds = 216 seconds = 3 minutes 36 seconds  
 $\therefore$  Required time = 10 : 15 : 00 + 3 minutes 36 seconds  
 $= 10 : 18 : 36$  a.m.
5. (b) LCM of 5, 10, 12, 15 = 60  
 $\therefore$  Number =  $60k + 2$   
 Now, the required number should be divisible by 7.  
 Now,  $60k + 2 = 7 \times 8k + 4k + 2$   
 If we put  $k = 3$ ,  $(4k + 2)$  is equal to 14 which is exactly divisible by 7.  
 $\therefore$  Required number =  $60 \times 3 + 2 = 182$
6. (c) Let the number of wickets taken by the cricketer before the last match = x  
 According to the question,  
 $\frac{12.4x + 26}{x + 5} = 12.2$   
 $\Rightarrow 12.4x + 26 = 12.2x + 61$  শ্রুতিভঙ্গ  
 $\Rightarrow 0.2x = 61 - 26 = 35$   
 $\Rightarrow x = \frac{35}{0.2} = \frac{350}{2} = 175$
7. (d)  $G = 19W$  and  $C = 9W$   
 Let 1 gm of gold is mixed with x gm of copper such that (x + 1) gm of alloy is formed.  
 $\therefore 19W + 9Wx = (x + 1) \times 15W$   
 $\Rightarrow 19 + 9x = 15x + 15$   
 $\Rightarrow 15x - 9x = 19 - 15 \Rightarrow 6x = 4$   
 $\Rightarrow x = \frac{2}{3}$  শ্রুতিভঙ্গ  
 $\therefore$  Gold : Copper =  $1 : \frac{2}{3} = 3 : 2$
8. (b) Population of town = 1000  
 Males  $\Rightarrow$  600  
 Females  $\Rightarrow$  400  
 Literate males  
 $\Rightarrow \frac{600 \times 20}{100} = 120$   
 Total literate inhabitants  
 $= \frac{1000 \times 25}{100} = 250$   
 $\therefore$  Literate females =  $250 - 120 = 130$   
 $\therefore$  Required percent শ্রুতিভঙ্গ  
 $= \frac{130}{400} \times 100 = 32.5\%$
9. (c) Let the person have ₹ 100.  
 Then SI for 1 year  
 $= ₹ \left( \frac{40 \times 15 \times 1}{100} + \frac{30 \times 10 \times 1}{100} + \frac{30 \times 18 \times 1}{100} \right)$   
 $= ₹ (6 + 3 + 5.4) = ₹ 14.4$   
 $\therefore$  Rate of interest on whole sum = 14.4%
10. (b) Let Ram's share be Rs. x.  
 $\therefore$  Shyam's share = Rs. (260200 - x)  
 $A = P \left( 1 + \frac{R}{100} \right)^T$   
 $\Rightarrow x \left( 1 + \frac{R}{100} \right)^4$   
 $= (260200 - x) \left( 1 + \frac{R}{100} \right)^6$   
 $\Rightarrow x = (260200 - x) \left( 1 + \frac{4}{100} \right)^2$  শ্রুতিভঙ্গ  
 $\Rightarrow x = (260200 - x) \left( 1 + \frac{1}{25} \right)^2$

$$\Rightarrow x = (260200 - x) \left( \frac{26}{25} \right)^2$$

$$\Rightarrow x = (260200 - x) \frac{676}{625}$$

$$\Rightarrow \frac{625x}{676} + x = 260200$$

$$\Rightarrow \frac{625x + 676x}{676} = 260200$$

$$\Rightarrow \frac{1301x}{676} = 260200$$

$$\Rightarrow x = \frac{260200 \times 676}{1301}$$

$$= \text{Rs. } 135200$$

প্র্যাচিওর্স

11. (a) According to the question,  
 $(2 \times 14) \text{ men} + 14 \text{ women}$   
 $= 16 \text{ men} + 32 \text{ women}$   
 $\Rightarrow (28 - 16) \text{ men}$   
 $= (32 - 14) \text{ women}$   
 $\Rightarrow 12 \text{ men} = 18 \text{ women}$   
 $\Rightarrow 2 \text{ men} = 3 \text{ women}$   
 $\therefore 1 \text{ woman} = \frac{2}{3} \text{ man}$   
 $\therefore \text{Amount received by 1 woman per day}$   
 $= \frac{2}{3} \times 600 = ₹ 400$

প্র্যাচিওর্স

12. (b) Speed of Romita = x kmph (let)  
 Distance = Speed  $\times$  Time  
 According to the question,  
 $4 \times 6 + x \times 6 = 42$   
 $\Rightarrow 6x = 42 - 24 = 18$   
 $\Rightarrow x = 18 \div 6 = 3 \text{ kmph}$
13. (c) Let the speed of the current be x kmph  
 $\therefore \text{Rate downstream} = (x + 45) \text{ kmph.}$   
 According to the question,  
 $\frac{80}{x + 45} = 1 \text{ hour } 20 \text{ minutes} = 4/3 \text{ hours}$   
 $\Rightarrow 4x + 180 = 240$   
 $\Rightarrow 4x = 240 - 180 = 60$   
 $\Rightarrow x = 60/4 \text{ kmph} = 15 \text{ kmph}$   
 Rate upstream =  $45 - 15 = 30 \text{ kmph}$   
 $\therefore \text{Required time} = 80/30 \text{ hours} = 8/3 = 2 \text{ hours } 40 \text{ minutes}$

14. (a)  $x = \frac{\sqrt{13} + \sqrt{11}}{\sqrt{13} - \sqrt{11}}$

প্র্যাচিওর্স

On rationalising the denominator,  
 $= \frac{\sqrt{13} + \sqrt{11}}{\sqrt{13} - \sqrt{11}} \times \frac{\sqrt{13} + \sqrt{11}}{\sqrt{13} + \sqrt{11}}$

$$= \frac{(\sqrt{13} + \sqrt{11})^2}{(\sqrt{13})^2 - (\sqrt{11})^2}$$

$$= \frac{13 + 11 + 2\sqrt{143}}{13 - 11}$$

প্র্যাচিওর্স

$$= \frac{24 + 2\sqrt{143}}{2} = 12 + \sqrt{143}$$

$$\therefore y = \frac{1}{x} = \frac{1}{12 + \sqrt{143}}$$

$$= \frac{1}{12 + \sqrt{143}} \times \frac{12 - \sqrt{143}}{12 - \sqrt{143}}$$

$$= \frac{12 - \sqrt{143}}{144 - 143} = 12 - \sqrt{143}$$

$$\therefore x - y = 12 + \sqrt{143} - 12 + \sqrt{143} = 2\sqrt{143} \text{ and}$$

$$xy = (12 + \sqrt{143})(12 - \sqrt{143})$$

$$= 144 - 143 = 1$$

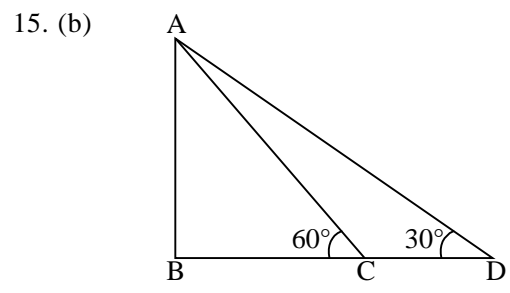
প্র্যাচিওর্স

$$\therefore 3x^2 - 5xy + 3y^2 = 3x^2 - 6xy + 3y^2 + xy$$

$$= 3(x - y)^2 + xy$$

$$= 3(2\sqrt{143})^2 + 1$$

$$= 3 \times 4 \times 143 + 1 = 1716 + 1 = 1717$$



AB = tree = h metre  
 BC = width of river = x metre  
 CD = 36 metre  
 From  $\Delta ABC$ ,

$$\tan 60^\circ = \frac{AB}{BC}$$

$$\Rightarrow \sqrt{3} = \frac{h}{x}$$

$$\Rightarrow h = \sqrt{3} \text{ x metre ... (i)}$$

প্র্যাচিওর্স

From  $\Delta ABD$ ,

$$\tan 30^\circ = \frac{AB}{BD}$$

$$\Rightarrow \frac{1}{\sqrt{3}} = \frac{h}{x+36}$$

$$\Rightarrow \sqrt{3}h = x+36$$

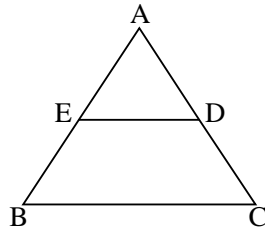
$$\Rightarrow \sqrt{3} \times \sqrt{3}x = x+36$$

$$\Rightarrow 3x - x = 36$$

$$\Rightarrow 2x = 36 \Rightarrow x = 18 \text{ metre}$$

প্র্যাক্টিস

16. (d)



In  $\triangle ADE$  and  $\triangle ABC$ ,  
 $\angle ABC = \angle ADE$   
 $\angle A = \angle A$   
 $\therefore \triangle ABC \sim \triangle ADE$   
 $\therefore \frac{AB}{AD} = \frac{BC}{DE} = \frac{AC}{AE}$   
 $\therefore \frac{AE+EB}{AD} = \frac{AC}{AE}$

$$\Rightarrow \frac{3+2}{2} = \frac{AC}{3}$$

$$\Rightarrow \frac{5}{2} = \frac{AC}{3}$$

$$\Rightarrow 2AC = 5 \times 3 \Rightarrow AC = 15/2$$

$$\therefore DC = AC - AD$$

$$= \frac{15}{2} - 2 = \frac{15-4}{2} = \frac{11}{2} = 5.5 \text{ cm}$$

প্র্যাক্টিস

17. (a) Let the parallel sides be  $5x$  and  $3x$  metres.  
 Area of trapezium =  $\frac{1}{2}$  (sum of parallel sides)  
 $\times$  distance between them

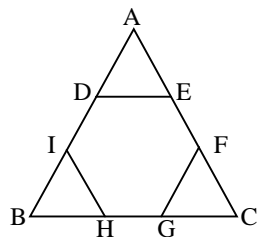
$$\Rightarrow 1440 = \frac{1}{2} (5x + 3x) \times 24$$

$$\Rightarrow 12 \times 8x = 1440$$

$$\Rightarrow x = \frac{1440}{12 \times 8} = 15$$

$$\therefore \text{The longer parallel side} = 5x = 5 \times 15 = 75 \text{ metres}$$

18. (c)



প্র্যাক্টিস

Side of the regular hexagon  
 $= \frac{1}{3} \times 6 = 2 \text{ cm}$   
 $\therefore$  Area of the hexagon  
 $= \frac{3\sqrt{3}}{2} a^2 = \frac{3\sqrt{3}}{2} \times 2 \times 2 = 6\sqrt{3} \text{ sq.cm.}$

প্র্যাক্টিস

19. (c) C.P. =  $\frac{180 \times 100}{120} = ₹ 150$   
 $\therefore$  Cost of paper =  $\frac{150 \times 15}{100} = ₹ 22.50$
20. (a) Required percentage  
 $= \frac{20-15}{20} \times 100 = 25\%$

**Part-II : Reasoning Ability & Problem Solving**

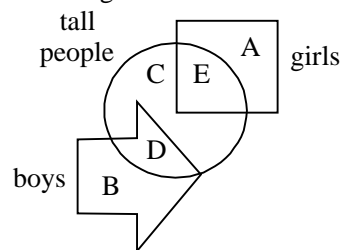
21. (d) After interchanging the  $-$  and  $+$  signs. We get,  
 $= 3 \times 14 + 56 \div 4 - 60$   
 $= 42 + 14 - 60$   
 $= 56 - 60 = -4$
22. (b) After carefully observing the figures given in the question and answers, it is very clear that the question figure is embedded in the given answer figure (b).
23. (a) Refer the table below:

প্র্যাক্টিস

Letter	A	B	C	D
denotes	+	$\times$	-	$\div$

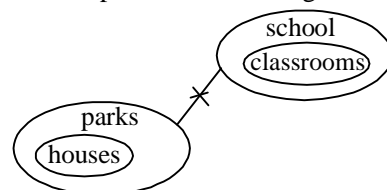
After putting the signs we get the equation as:  
 $55 + 5 \times (7 + 4) - 75 \div (25 \div 5) = ?$   
 $55 + 5 \times 11 - 75 \div 5 = ?$   
 $55 + 55 - 15 = ?$   
 $110 - 15 \Rightarrow 95$   
 Thus, option (a) is correct no need to check for further options.

24. (c) From the given Venn-diagram, we can find that C and D letters only represent people who are tall but not girls as shown below:



25. (a) The least possible Venn diagram will be:

প্র্যাক্টিস



Conclusion:

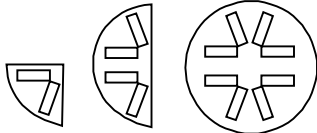
I. No house is a classroom – It is a definite case, hence true. প্র্যাচিভর্ন

II. No school is a park – It is a definite case, hence true.

III. No school is a house – It is a definite case, hence true.

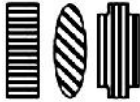
Thus, all follows.

26. (d) When the given piece of paper is unfolded in the given manner it will appear as shown below:



27. (c) The pattern followed is that the figures follow a cyclic movement.

Also, when a figure comes to the first position, the internal lines move  $45^\circ$  clockwise.



প্র্যাচিভর্ন

28. (a) The logic is based on movement of letters in a certain order –

D (1) E (2) T (3) A (4) I (5) L (6) S (7)

Then the order of the second word would be – 3214765

Following the same order of movement we get  
EMPATHY : PMEAYHT

Similarly,

FORMULA : ROFMALU

Hence, option A is the correct answer.

29. (a) The condition for formation of groups is B will join the group only with C.

A will not join with E or Q. প্র্যাচিভর্ন

D will not join with R.

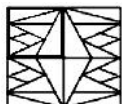
Option B group PRSABE is not possible as B is join only with C

Option C group RSTBCD is not possible as D will not join with R

Option D group PQRBCD is not possible as D will not join with R

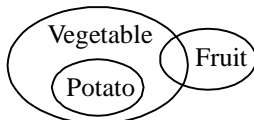
Option A group PQSBCE is possible as all the condition fulfill here

30. (d) Complete figure is:



(X)

31. (a) The least possible Venn-diagram will be:



প্র্যাচিভর্ন

Conclusions:

I. Potato is a fruit – It is not a definite case, hence false. প্র্যাচিভর্ন

II. Potato is not a fruit – It is not a definite case, hence false.

III. All vegetables are fruits – It is not a definite case, hence false.

IV. Some vegetables are not fruits – It is not a definite case, hence false.

None of the conclusions follow.

32. (b) The pattern is as follows:

$$55 + 13 = 68$$

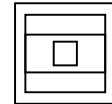
$$68 + 13 = 81$$

$$81 + 13 = 94$$

$$94 + 13 = 107$$

$$107 + 13 = 120$$

33. (a) The figure in the middle is formed by intersection of upper and lower image.



প্র্যাচিভর্ন

But in figure A the intersection of upper and lower image formed a rectangle but the middle figure is a square.

34. (a) Here, Carpenter is a profession and rest are things.

So, carpenter is different.

35. (a) Sum of letters of PATNA (P=16 + A=1 + T=20 + N=14 + A=1) = 52

Now  $52 * 5$  (as there are 5 letters in PATNA) = 260

Similarly,

Sum of letters of GOA (G=7 + O=15 + A=1) = 23 প্র্যাচিভর্ন

Now  $23 * 3$  (as there are 3 letters in GOA) = 69

Now for RANCHI: Sum of letters would be (R=18 + A=1 + N=14 + C=3 + H=8 + I=9) = 53

Now we would multiply 53 by 6 as there are 6 letters in RANCHI. So the result would be 318.

36. (c) The logic here is that except the middle most letter, all of them are replaced by their reverse place values, the middle letter is coded with its normal place value–

K Reverse 16

I Reverse 18

C Reverse 24

K = 11

E Reverse 22

R Reverse 9

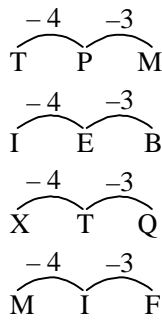
S Reverse 8

প্র্যাচিভর্ন

Similarly,  
 L Reverse 15  
 E Reverse 22  
 V Reverse 5  
 E = 5  
 L Reverse 15  
 U Reverse 6  
 P Reverse 11

Hence, option C is the correct answer.

37. (a) The pattern is as follows;



Also, M(13)  $\rightarrow$  (-4)  $\rightarrow$  I(9)  
 B(28)  $\rightarrow$  (-4)  $\rightarrow$  X(24)  
 Q(17)  $\rightarrow$  (-4)  $\rightarrow$  M(13)

Hence, option A is the correct answer.

38. (a) Pattern is:

Given series contains two series.

Series 1 : 60, 64, 68, 72

Pattern is:

$$60 + 4 = 64$$

$$64 + 4 = 68$$

$$68 + 4 = 72$$

Series 2 : 80, 70, 60, 50

Pattern is:

$$80 - 10 = 70$$

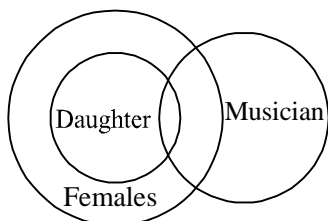
$$70 - 10 = 60$$

$$60 - 10 = 50$$

Hence, option A is the correct answer.

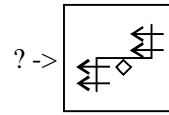
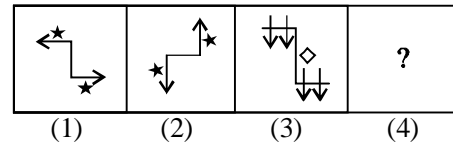
39. (d) All daughters are females. And both can be musicians.

So, the best representation is:



40. (b) From figure (1) to figure (2)- the figure turned in 90-degree clockwise direction.

From figure (3) to figure (4)- the figure turned in 90-degree clockwise direction.



SESSION-II

Part-I : General Awareness

- (b) With its origin in the Angsi Glacier, located on the northern side of the Himalayas in Burang County of China's Tibet Autonomous Region as the Yarlung Tsangpo River, Brahmaputra flows across southern Tibet to break through the Himalayas in great gorges (including the Yarlung Tsangpo Grand Canyon) and into Arunachal Pradesh (India) where it is known as Dihang or Siang.
- (b) In December 1977, the Janata Government appointed a committee on Panchayati Raj institutions under the chairmanship of Ashok Mehta. The committee submitted its report in August 1978 and made 132 recommendations to revive and strengthen the declining Panchayati Raj system in the country. As a result of this report, the Indian states of Karnataka, Andhra Pradesh, and West Bengal passed new legislation.
- (c) Of all the new town schemes in independent India, the Chandigarh project quickly assumed prime significance, because of the city's strategic location as well as the personal interest of Jawaharlal Nehru, the first Prime Minister of independent India.
- (b) To Gandhi, satyagraha meant attachment to truth, and, therefore, truth-force or love-force. It was a particular form of nonviolent resistance or civil resistance. It was critical to Gandhi's understanding of and faith in non-violence and went far beyond mere "passive resistance".

5. (c) The Child Marriage Restraint Act 1929, passed on 28 September, 1929, is popularly known as the Sharda Act, after its sponsor Harbilas Sarda. It fixed the age of marriage for girls at 14 years and boys at 18 years which was later amended to 18 for girls and 21 for boys.
6. (c) IDFC FIRST Bank in collaboration with the National Payments Corporation of India (NPCI) launched FIRSTAP, India's first sticker-based debit card, to facilitate transactions by tapping the sticker on a Near Field Communication (NFC) enabled point-of-sale (PoS) terminal.  
i. This sticker-based debit card is one-third smaller compared to the regular debit card and can also be affixed on any surface of customers' choice including cell phone wallets, Identity cards, watches and rings. শ্রীচিড়াক্স
7. (c) Providing Urban Amenities to Rural Areas (PURA) is a strategy for rural development. The concept was given by former President Dr. APJ Abdul Kalam.
8. (a) The Ganga Action Plan was launched by Rajiv Gandhi in April 1986 to reduce the pollution load on the river. শ্রীচিড়াক্স
9. (b) In economics, the demand curve is the graph depicting the relationship between the price of a certain commodity and the amount of it that consumers are willing and able to purchase at that given price. The shift of a demand curve takes place when there is a change in any non-price determinant of demand, resulting in a new demand curve. There is movement along a demand curve when a change in price causes the quantity demanded to change. When there is a change in an influencing factor other than price, there may be a shift in the demand curve to the left or to the right, as the quantity demanded increases or decreases at a given price. For example, if there is a positive news report about the product, the quantity demanded at each price may increase, as demonstrated by the demand curve shifting to the right. শ্রীচিড়াক্স
10. (b) Laissez Faire is an economic theory from the 18th century that is strongly opposed to any government intervention in business affairs. Sometimes it is referred to as "let it be economics." It is an economic environment in which transactions between private parties are free from tariffs, government subsidies, and enforced monopolies, with only enough government regulations sufficient to protect property rights against theft and aggression.
11. (c) The answer is related to the conservation of angular momentum. The person on the rotating table will maintain approximately the same angular momentum during the spin. If he moves his arms in, it will reduce the rotational inertia by reducing the distance of the mass of her arms and hands from the axis of rotation. In order to maintain the same angular momentum, angular rotation is increased. However, when he spreads his hands outward, the angular rotation is decreased. The spin becomes slower. শ্রীচিড়াক্স
12. (c) Following the density principle, the density of the egg compared to the density of the tap water is lesser (the density principle states that an object or substance with lesser density will float on the surface of the substance or object which has the greater density). Now, with salt, salt makes the density of the tap water to increase and increases also the salinity of the water making the egg float because the density of the water with salt is now greater than the density of the egg and that is why an egg sinks in soft water but floats in a concentrated solution of salt. শ্রীচিড়াক্স
13. (b) China plans to build its first base on the Moon by 2028, followed by landing astronauts on Moon in subsequent years, as it challenges National Aeronautics and Space Administration (NASA)'s dominance in space exploration.  
i. The lunar base will likely be powered by nuclear energy with a basic configuration of a lander, hopper, orbiter and rover, which will be constructed by the Chang'e 6, 7 and 8 missions. শ্রীচিড়াক্স  
ii. China also aims to eventually expand the base into an international research station (ISS).
14. (d) Lignite, often referred to as brown coal, is a soft brown fuel with characteristics that put it somewhere between coal and peat. It is considered the lowest rank of coal. It has a carbon content of around 25-35%, a high inherent moisture content sometimes as high as 66%, and an ash content ranging from 6% to 19% compared with 6% to 12% for bituminous coal. শ্রীচিড়াক্স
15. (b) Synthetic detergents are made from sodium salt of benzene sulphonic acid.

16. (a) Virus particles (known as virions) consist of two or three parts: the genetic material made from either DNA or RNA, long molecules that carry genetic information, a protein coat that protects these genes, and in some cases an envelope of lipids that surrounds the protein coat when they are outside a cell. The shapes of viruses range from simple helical and icosahedral forms to more complex structures. শ্রীচিভর্ষ
17. (a) Homeopathy is a system of alternative medicine originated in 1796 by Samuel Hahnemann, based on his doctrine of similia similibus curentur (“like cures like”), according to which a substance that causes the symptoms of a disease in healthy people will cure that disease in sick people. Homeopathy is a vitalist philosophy that interprets diseases and sickness as caused by disturbances in an immaterial vital force or life force. Disturbances are believed to manifest themselves first in mental symptoms, and eventually progress to physical disease if untreated. Homeopathy rejects germ theory, viewing the presence of pathogens as a symptom, rather than cause, of disease. Hahnemann observed from his experiments with cinchona bark, used as a treatment for malaria, that the effects he experienced from ingesting the bark were similar to the symptoms of malaria. He therefore decided cure proceeds through similarity, and treatments must be able to produce symptoms in healthy individuals similar to those of the disease being treated.
18. (b) The Reserve Bank of India (RBI) has asked Paytm Payments Services Ltd’s (PPSL), the wholly-owned subsidiary Paytm, to reapply for the authorization to provide payment aggregator (PA) services to online merchants. i. This means, PPSL has to resubmit the application within 120 calendar days for the PA services.
19. (a) Amoebiasis refers to infection caused by the amoeba *Entamoeba histolytica*. Amoebiasis is estimated to cause 70,000 deaths per year worldwide. Symptoms can range from mild diarrhea to dysentery with blood and mucus in the stool. *E. histolytica* is usually a commensal organism. শ্রীচিভর্ষ
20. (d) An insectivorous plant, also called a carnivorous plant, captures prey items, such as insects, spiders, crustaceans, mites, and protozoans, as a nitrogen source. Aldrovanda, Dionaea, Drosera, Drosophyllum, etc are some of them under the Droseraceae family.
21. (b) ‘Ikshak’ the third of the four Survey Vessels (Large) (SVL) Project was launched at Larsen and Toubro (L&T)’ s Kattupalli facility in Chennai, Tamil Nadu. It is being built by Garden Reach Shipbuilders & Engineers Ltd (GRSE) and Larsen and Toubro (L&T) for the Indian Navy. শ্রীচিভর্ষ
- i. SVL ships will replace the existing Sandhayak Class survey ships with new generation hydrographic equipment to collect oceanographic data.
- ii. The SVL ships are 110 m long and 16 m wide with a deep displacement of 3400 tons and a complement of 231 personnel.
22. (d) Burning শ্রীচিভর্ষ
23. (d) The Reactor Research Centre was set up at Kalpakkam, 80 km south of Chennai, in 1971 under the Department of Atomic Energy (DAE). It was renamed Indira Gandhi Center for Atomic Research (IGCAR) in 1985.
24. (b) Securities and Exchange Board of India (SEBI), capital markets regulator has restructured its advisory committees pertaining to foreign portfolio investors (FPIs) and social stock exchange.
- FPI Advisory Committee panel:** শ্রীচিভর্ষ
- i. Former finance secretary Hasmukh Adhia will now chair the 16-member FPI Advisory Committee panel, which was earlier headed by K V Subramanian, former chief economic adviser to the government of India (GoI).
- Social stock exchange panel:**
- i. R Balasubramaniam, chairman of Grassroots Research and Advocacy Movement (GRAAM) will now head the 18-member committee, which was earlier chaired by Ishaat Hussain, Director at SBI Foundation and former Finance Director at Tata Sons. শ্রীচিভর্ষ
25. (c) Arvind Kejriwal is an Indian social activist. He was an Indian Revenue Service official before joining social and political activities. He was awarded Ramon Magsaysay Award for Emergent Leadership in 2006, for activating India’s Right to Information movement at grassroots and social activities to empower the poorest citizens to fight corruption by holding the government answerable to the people. Kejriwal is also a Saathi (fellow) of the

Association for India's Development, a Global Impact award winning NGO. প্র্যাচিভর্স

In 2006 after resigning from IRS, he founded an NGO Public Cause Research Foundation by donating his Magsaysay award money as corpus fund. In November 2012, he launched the Aam Aadmi Party, claiming that the party's vision was Swaraj. প্র্যাচিভর্স

Note : Human rights activist Bezwada Wilson and Carnatic musician Thodur Madabusi Krishna are winners of the Magsaysay Award from India in 2016.

**Part-II : English Language & Comprehension**

26. (d) \* Dogra General Zorawar Singh Kahluria led successful military expedition to Laddakh, Baltistan and parts of Tibet between 1834 and 1841. প্র্যাচিভর্স

\* In reference to his legacy of conquests in the Himalaya Mountains including Ladakh, Skardu as General and Wazir, Zorawar Singh has been referred to as the "Napoleon of India", and "Conqueror of Ladakh".

\* He was a military general of Dogra ruler Gulab Singh of Jammu. প্র্যাচিভর্স

27. (a) Let's first see the meanings of the given words:

Inflammation = a red, painful, and often swollen area in or on a part of your body

Operation = an occasion when a doctor cuts a body for medical reasons in order to repair, remove, or replace an unhealthy or damaged part

Implantation = the action of inserting a device or tissue into the body প্র্যাচিভর্স

Dissection = the action of cutting something open, especially a dead body or plant, in order to study its structure

The sentence talks about analyzing the inner workings of the animal and one can do that only when one cut something open. প্র্যাচিভর্স

The word 'operation' is used for medical reasons (and not for analyzing purposes).

Thus, the word 'dissection' is suitable for the blank.

28. (d) Geological = relating to the study of the earth's physical structure and substance.

Geotag = a piece of electronic data that shows where someone or something is and can, for

example, be attached to a photograph or comment প্র্যাচিভর্স

Geometric = consisting of shapes such as squares, triangles, or rectangles

Geostationary = an orbit in which a satellite always remains over the same place on the earth's surface.

29. (c) The idiom 'with open arms' means with great affection or enthusiasm. Option C "warmly" is closest to this meaning. প্র্যাচিভর্স

30. (a) Option A has the correctly spelt word. "Zenith" means the highest point reached by a heavenly body as it travels around, or appears to travel around, another body.

31. (c) Option C has the incorrectly spelt word. The correct spelling is 'demagogue'. It means a leader who seeks support by appealing to popular passions. প্র্যাচিভর্স

Other words and their meanings:  
Amorphous = without a clearly defined shape or form.

Circumlocution = the use of many words where fewer would do, especially in a deliberate attempt to be vague or evasive.

Heterogeneous = diverse in character or content.

32. (a) Option A has the grammatically incorrect part. The past perfect continuous tense is an extension of the past perfect tense and its structures.

Past perfect continuous is used to demonstrate an action that continued for a specific period of time but stopped before another action.

For example: প্র্যাচিভর্স

The program that was terminated had been working well since 1945. প্র্যাচিভর্স

Thus, use "had been living" in place of "was living" to make the sentence grammatically correct.

The correct sentence will be: Sheetal had been living in Mumbai since 2012 before she moved to her hometown. প্র্যাচিভর্স

33. (c) Let's first see the meanings of the given words:  
Sustenance = the act of sustaining life by food or providing a means of subsistence.

Injury = any physical damage to the body caused by violence, accident or fracture etc.

Aid = the activity of contributing to the fulfilment of a need or furtherance of an effort or purpose.



- Blockage = the physical condition of blocking or filling a passage with an obstruction.  
Extras = added to what is normal প্র্যাচিভর্স
34. (a) The given sentence is of direct speech. The speech is an imperative sentence. Follow the rules given below to change it to indirect speech:  
The inverted commas (“ ”) used in Direct Narration are removed in Indirect Narration. The reported speech here is a direction i.e., a teacher asked students not to run. প্র্যাচিভর্স  
The reporting verb "said" will be changed to "asked" in indirect speech.  
The preposition 'to' should be used to connect the reported speech to reporting speech i.e. "don't run" will be changed to "not to run".  
The sentence in indirect speech will be: The teacher asked the students not to run on the road.
35. (a) The given sentence is in the active form. It is in the simple past tense. প্র্যাচিভর্স  
The structures for active/passive voices are:  
Active: Subject + verb (IInd form) + object...  
Passive: Object + was/were + verb (IIIrd form) + by + subject...  
So, with the help of the above structures, we can convert the given sentence into passive voice: The keys were left on the table by her.
36. (c) The idiom "keep your shirt on" means not to lose your temper; stay calm. প্র্যাচিভর্স  
e.g. I borrowed my friend's laptop for a week. On the day I was supposed to give it back, I accidentally spilled water all over it! Needless to say, he wasn't happy. So I told him to keep his shirt on because I would buy him a new one.
37. (b) Let's first see the meanings of the given words:  
Redemption = the action of saving or being saved from sin, error, or evil. প্র্যাচিভর্স  
e.g. He craves redemption for his sins.  
Forfeit = lose or be deprived of (property or a right or privilege) as a penalty for wrongdoing.  
Atonement = the action of making amends for a wrong or injury.  
e.g. He wanted to find a way to make atonement for his sins. প্র্যাচিভর্স  
Retribution = punishment inflicted on someone as vengeance for a wrong or criminal act.  
Penalty = a punishment imposed for breaking a law, rule, or contract.
38. (c) The underlined part is grammatically incorrect. 'It's' is the contracted form of 'it is' or 'it has'. We do not need it here. প্র্যাচিভর্স  
In its place, we need a possessive adjective 'its' for the noun 'herb'.  
The word 'potent' is an adjective.  
But after the adjective 'high', we need a noun i.e. 'potency'.  
Thus, replace the underlined part with "its high potency". প্র্যাচিভর্স  
The correct sentence will be: Because of its high potency, the herb can make people act in strange ways.
39. (c) Let's first see the meanings of the given words:  
Optimistic = hopeful and confident about the future.  
e.g. She is optimistic about her chances of winning a gold medal.  
Energetic = showing or involving great activity or vitality. প্র্যাচিভর্স  
Realistic = having or showing a sensible and practical idea of what can be achieved or expected.  
Pessimistic = tending to see the worst aspect of things or believe that the worst will happen.  
e.g. The tone of the meeting was very pessimistic.  
Idealistic = characterized by idealism; unrealistically aiming for perfection. প্র্যাচিভর্স
40. (c) The given sentence is grammatically incorrect. The error is in the part "dispatched officers to investigate".  
After a modal verb, we use the base form of the verb.  
After the modal 'can', we have used the verb 'identify' in the base form. Thus, after the conjunction 'and', we need the base form 'dispatch'.  
Replace 'dispatched' with "dispatch" to make the sentence grammatically sound. প্র্যাচিভর্স  
The correct sentence will be: Within seconds the university police can identify the exact origin of the alarm and dispatch officers to investigate.
41. (b) Let's first learn the meanings of the given phrasal verbs:  
Made over = Improve upon and/or take in a new direction প্র্যাচিভর্স  
Made up for = Do something to show that you are sorry about the problems you have caused someone

- Made away with = Steal  
 Made of = Form an opinion about (someone or something) প্র্যাচিভর্ন
42. (b) Borrow = a slope or other irregularity on a golf course  
 Burrow = a hole or tunnel dug by a small animal, especially a rabbit, as a dwelling.  
 Stable = a farm building for housing horses or other livestock প্র্যাচিভর্ন  
 Cave = a natural underground chamber in a hillside or cliff.
43. (a) Option A has the grammatically incorrect part. The error is in the use of the adjective "bigger". After the article "the", we use the superlative degree of the adjective.  
 Also, we use the superlative degree when we talk about the highest or very high degree of quality of something. Here, we are talking about the main source of freshwater (which are 'glaciers').  
 Thus, replace 'bigger' with 'biggest' to make the sentence grammatically sound. প্র্যাচিভর্ন  
 The correct sentence will be: The glaciers are the biggest sources of fresh water, and millions of people depend on the rivers that source their water from them.
44. (d) Let's first see the meanings of the given words:  
 Squander = to waste money or supplies, or to waste opportunities by not using them to your advantage  
 Spend = to give money as a payment for something প্র্যাচিভর্ন  
 Reduce = to become or to make something become smaller in size, amount, degree, importance, etc  
 Slander = a false spoken statement about someone that damages their reputation, or the making of such a statement  
 Skimp = to not spend enough time or money on something, or to not use enough of something in order to do a job or activity as it should be done প্র্যাচিভর্ন  
 e.g. Many old people skimp on food and heating in order to meet their bills.
45. (b) The underlined part is grammatically incorrect. First of all, 'many + of' should be followed by the objective form of the pronoun.  
 For example:  
 Many of them were ready to put up a fight.  
 So in the sentence, "we" must be replaced
- with "us" - the objective case of the pronoun "we". প্র্যাচিভর্ন  
 Since the subject (many) is plural, it will take a plural verb; thus replace 'listens' with 'listen'. Also, to modify the verb "listen" we need an adverb. 'Happy' is an adjective and cannot describe a verb, it can only describe a noun or a pronoun.  
 For example: প্র্যাচিভর্ন  
 They lived happily ever after. (Lived = verb)  
 Let us put on our happy faces. (Faces = noun)  
 Thus, 'happy' should be replaced by 'happily'. The correct sentence will be: Many of us happily listen to our favourite songs on repeat and watch our favourite movies and TV shows.
46. (d) The sentence cannot end with part S as it has a conjunction 'when' in it; it also has the pronoun 'he' in it which suggests that a person's name must be used before it.  
 It is only given in part P (Tenzing Norgay). This sequence must start with P and be followed by S. প্র্যাচিভর্ন  
 The subject "he and Sir Edmund Hillary" needs a verb. The verb is given in part R (became). Thus, R will be next in the sequence.  
 Q will be the last in the sequence.  
 The correct sequence will be: PSRQ.  
 After rearranging the parts, the sentence will be: Tenzing Norgay created history on May 29, 1953, when he and Sir Edmund Hillary became the first men to conquer Mount Everest. প্র্যাচিভর্ন
47. (b) The given passage clearly mentions that one cannot destroy plastics. One can only burn them which in turn causes the emission of toxic gases. This quality makes plastics unfavourable.
48. (c) The given passage clearly mentions that improper or unregulated disposal of plastics can be hazardous in nature. This is because they release hazardous substances when they decompose. প্র্যাচিভর্ন
49. (b) The given passage clearly mentions that the authors wants to restrict the thoughtless usage of plastic in the industries. The author is not advocating for complete ban on plastic because he has classified some of them as good.
50. (b) The given passage clearly mentions that when plastic is burnt it emits toxic gases in the environment and thus causing respiratory issues in human beings.