NATIONAL TALENT SEARCH EXAMINATION
(NTSE-2019) STAGE - 1
STATE : JHARKHAND PAPER : SAT

Date: 04-11-18

Max. Marks: 100 **SOLUTIONS** **Time allowed: 120 minutes**

1. A body describes the first half of the total distance with velocity v_1 and the second half with velocity v_2. The average velocity is :

(1) $\frac{v_1+v_2}{2}$ (2) $\frac{1}{v_1}+\frac{1}{v_2}$ (3) $\frac{v_1v_2}{v_1+v_2}$ (4) $\frac{2v_1v_2}{v_1+v_2}$

Ans. (4)

Sol. Let the total distance be x

The first half distance $=\frac{x}{2}$ is moved with a velocity v_1

And next half distance $=\frac{x}{2}$ is moved with a velocity v_2

$$V_{avg} = \frac{\frac{x}{2}+\frac{x}{2}}{\frac{x}{2v_1}+\frac{x}{2v_2}} = \frac{2v_1v_2}{v_1+v_2}$$

2. In a current carrying conductor the motion of electron is :

(1) accelerated (2) decelerated (3) uniform (4) drifting

Ans. (1)

Sol. When we setup electric field in a conductor an electric force acts on electrons which make them accelerate

$$a=\frac{eE}{m}$$

3. Which of the following particles will experience maximum force when projected with same velocity in a direction perpendicular to the magnetic field.

(1) Electron (2) Proton (3) Helium-ion (4) Lithium-ion

Ans. (3)

Sol. Helium has the high charged value so as per the equation $F = Bqv$, Helium ion experience the maximum force

4. Magnetic meridian is

(1) A point (2) A line along north south

(3) A horizontal plane (4) A vertical plane

Ans. (2)

Sol. The magnetic meridion is an equivalent imaginary line joining the magnetic north and magnetic south pole.

5. A rainbow is formed because of

(1) scattering (2) dispersion

(3) total internal reflection (4) none of these

Ans. (2)

Sol. Small water drops act as a small prism and rainbow is caused by dispersion of sunlight

6. The best quality optical fibres are made of

(1) glass fibres (2) quartz fibres

(3) silica-quartz fibres (4) costly conducting materials

Ans. (3)

7. An object is placed at a distance of 10 cm. from a convex mirror of focal length 15cm. The position and nature of the image are

(1) 3cm in front of the mirror, real & erect (2) 6 cm behind the mirror, virtual & erect

(3) 9 cm infront of the mirror, real & inverted (4) 6 cm behind the mirror, real & inverted

Ans. (2)

Sol. Given $u = -10\,cm, f = 15\,cm, v = ?$

We know from mirror formula $\frac{1}{v}+\frac{1}{u}=\frac{1}{f}$

$$\frac{1}{v}=\frac{1}{f}-\frac{1}{u}=\frac{1}{6}$$

$$m=\frac{-v}{u}=\frac{-6}{-10}=\frac{3}{5}$$

The image distance is 6 cm behind the mirror and the nature of images virtual and erect.

8. The magnetic effect of current was discovered by

(1) Faraday (2) Oersted (3) Joule (4) Ampere

Ans. (2)

9. A thin Prims P_1 with angle 4° and made from glass of refractive index 1.54 is combined with another thin Prism P_2 made from glass of refractive index 1.72 to produce dispersion without deviation. The angle of Prism P_2 is

(1) $5.33°$ (2) $4°$ (3) $3°$ (4) $13°$

Ans. (3)

Sol. For dispersion without deviation

Given $n' = 1.72,\ n = 1.54,\ A = 4°$

$$\frac{A}{A'} = \frac{(n'-1)}{(n-1)} \quad A' = \frac{4\times(1.54-1)}{(1.72-1)} = 3°$$

10. When a conductor of capacitance C is charged to potential V, the total amount of energy present in the field is

(1) $\frac{1}{2}CV$ (2) $\frac{1}{2}C^2V$ (3) $\frac{1}{2}CV^2$ (4) CV

Ans. (3)

Sol. Energy between capacitors $= \frac{1}{2}CV^2$

11. Lighting conductor is provided in tall buildings

(1) to light the building on festive occasions (2) to make it good conducting

(3) to safeguard it from strong lighting (4) to make it foolproof

Ans. (3)

Sol. Lightning conductor is used to save the building from lightning which transfer the electricity to earth.

12. A volt is synonymous with

(1) NC^{-1} (2) NC (3) JC^{-1} (4) JC

Ans. (3)

Sol. We know electric potential $= \frac{\text{work done}}{\text{charge}}$

$$\text{Volt} = \frac{\text{Joule}}{\text{Coulomb}}$$

13. According to wave theory the reasons for the colour of light is

(1) amplitude (2) velocity (3) frequency (4) none of these

Ans. (3)

Sol. According to wave theory the reasons for the colour of light is wavelength or frequency.

Chemistry

14. What happens when dilute Hydrochloric acid is added to iron filings?

(1) Hydrogen gas and iron chloride is produced.

(2) Chlorine gas and iron hydroxide are produced.

(3) No reaction takes place.

(4) Iron salt and water are produced.

Ans. (1)

Sol. $Fe + HCl \rightarrow FeCl_2 + H_2 \uparrow$

15. One of the following is not an organic acid. This is

(1) Ethanoic acid (2) Formic acid (3) Citric acid (4) Carbonic acid

Ans. (4)

Sol. Carbonic acid is a mineral acid.

16. The indicators which turn red in acid solution are :

(1) Turmeric and Litmus (2) Phenolphthalein and Methyl Orange

(3) Litmus and Methyl Orange (4) Phenolphthalein and Litmus

Ans. (3)

Sol. Litmus paper & methyl orange both shows red colour in acidic solution.

17. Fresh milk has a pH of 6. When milk changes into curd. The pH value will

(1) become 7 (2) become more than 7 (3) become less than 7 (4) remain unchanged

Ans. (3)

Sol. Milk gets turned into curd due to the formation of lactic acid. Whose pH range is 4.5 to 6.0 .

18. The real bleaching agent present in bleaching powder is

(1) Oxygen (2) Calcium (3) Chlorine (4) Sulphuric acid

Ans. (3)

Sol. Chlorine itself gets reduced & oxidizes other.

19. An element X forms two oxides XO and XO_2 . The oxide XO is neutral but XO_2 acidic in nature. The element X is most likely to be

(1) Sulphur (2) Carbon (3) Calcium (4) Hydrogen

Ans. (2)

Sol. Sulphur forms only acidic oxide. Calcium forms only basic oxide & hydrogen forms neutral.

20. Which of the following pair of reactants can undergo a displacement reaction under appropriate conditions ?

(1) $MgSO_4 + Fe$ (2) $ZnSO_4 + Fe$ (3) $MgSO_4 + Pb$ (4) $CuSO_4 + Fe$

Ans. (4)

Sol. According to reactivity series $Mg > Zn > Fe > Cu > Pb$. Only reaction of option (4) is possible.

21. The number of protons in one atom of an element X is 8. What will be the number of electrons in its ion X^{-2} ?

(1) 8 (2) 9 (3) 10 (4) 11

Ans. (3)

Sol. In neutral atoms no. of proton = no. of electrons.

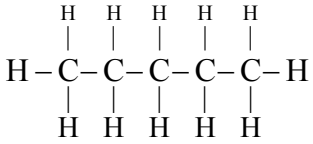
Therefore, x has $8\,P^{+}$ and $8e^{-}$

So, x^{-2} will have $8+2=10$

22. The number of covalent bonds in Pentane $\left(C_5H_{12}\right)$ is :

(1) 5 (2) 12 (3) 17 (4) 16

Ans. (4)

Sol. 

23. 14 elements after actinium is called

(1) Lanthanide (2) Actinide (3) D-block elements (4) P-block elements

Ans. (2)

Sol. Actinides

24. The elements which has the maximum number of valence electron is

(1) Na (2) P (3) Si (4) Al

Ans. (2)

Sol. Configuration of phosphorus is 2, 8, 5

25. A few drops of ethanoic acid were added to solid sodium carbonate. The observation made was that

(1) A hissing sound was produced (2) Brown fumes evolved

(3) Brisk effervescence occurred (4) A pungent smelling gas was evolved

Ans. (3)

Sol. Brisk effervescence occurred due to evolution of CO_2.

26. Which of the following set of elements is written correctly in the order of their increasing metallic character ?

(1) Mg, Al, Si (2) C, D, N (3) Na, Li, K (4) Be, Mg, Ca

Ans. (4)

Sol. Metallic nature increases from top to bottom in a group.

BIOLOGY

27. Ovoviviparous are

(1) Hen (2) Snake (3) Crocodile (4) All of these

Ans. (2)

Sol. Snake is ovoviviparous animal which produce eggs, but instead of laying the eggs, the eggs develop within the mother's body. The egg hatch within the mother.

28. Mendel discovered

(1) Law of linkage (2) 10% energy law (3) Laws of inheritance (4) None of these

Ans. (3)

Sol. Law of inheritance that is

(i) Law of dominance (ii) Law of segregation (iii) Law of independent assortment given by Mendel.

29. 'AIDS' virus is called

(1) ARV (2) HTLV (3) HIV (4) All of these

Ans. (3)

Sol. Human immunodeficiency virus (HIV) is a lentivirus / retrovirus that cases HIV infection and over time acquired immunodeficiency syndrome (AIDS)

30. Organic farming is the technique of raising crops through the use of

(1) Manure (2) Biofertilizers (3) Resistant varieties (4) All of these

Ans. (4)

Sol. All the three components i.e.

(i) Using non synthetic manure

(ii) Using bio fertilizers

(iii) Using disease resistant seeds are practiced under organic farming.

31. In Simple organism, exchange of gases and excretion occur through

(1) Osmosis (2) Diffusion (3) Imbibition (4) All of the above

Ans. (2)

Sol. Diffusion is the perfect means of exchange of gases and excretion in unicellular and less complex organisms.

32. Math the items in column I and column II and select the correct choice:

Column –I	Column –II
A. Lion	I. Produce
B. Cow	II. Decomposer
C. Algae	III Primary consumer
D. Micro-organism	IV. Tertiary consumer

(1) A-II, B-III, C-I, D-IV (2) A-III, B-II,C-IV, D-I

(3) A-IV, B-III,C-I,D-II (4) A-II, B-I,C-IV,D-III

Ans. (3)

Sol. Micro-organisms plays the role of decomposer & algae being a photosynthetic organism is a producer.

33. When offspring is formed by single parent then it is called as

(1) Sexual reproduction (2) Asexual reproduction

(3) Both (1) & (2) (4) Internal fertilization

Ans. (2)

Sol. When offspring is formed by single parent then it is called as Asexual reproduction

34. Which of the following is a plant harmone?

(1) Insulin (2) Thyroxin (3) Astrogen (4) Cytokinin

Ans. Cytokinin is a phytoharmone responsible for cell division.

35. Which of the following enzymes coverts proteins into peptones?

(1) Ptyalin (2) Pepsin (3) Insulin (4) None of these

Ans. (2)

Sol. Pepsin is a proteolytic enzyme

36. Indicator of SO_2 pollution is

(1) Algae (2) Fungi (3) Lichen (4) All of these

Ans. (3)

Sol. Lichens are very sensitive to sulphur dioxide pollution in air.

37. The eukaryotic chromosomes are made up of

(1) DNA (2) DNA and Lipids (3) NA (4) DNA and Proteins

Ans. (4)

Sol. Eukaryotic chromosomes are made up of deoxyribose nucleic acid (DNA) and Histone proteins

38. The basic source of energy for all organism is

(1) Green plants (2) Temperature (3) Water (4) Solar energy

Ans. (4)

Sol. Solar energy is transferred between living things in a process called a food chain

39. T-lymphocytes originate from

(1) Bone-marrow (2) Stomach (3) Thymus (4) Liver

Ans. (1)

Sol. T-lymphocytes originates from stem cells in bone marrow then moves to thymus for maturation

40. What is the number of chromosomes present in human gametes?

(1) 21 (2) 23 (3) 44 (4) 46

Ans. (2)

Sol. Number of chromosomes in gametes is 23.

Mathematics

41. The sum of the five consecutive numbers is equal to 170. What is the product of largest and the smallest numbers ?

(1) 1512 (2) 1102 (3) 1152 (4) 1210

Ans. (3)

Sol. Let the numbers be $x-2,\ x-1,\ x,\ x+1$ & $x+2$

According to question

$$x-2+x-1+x+x+1+x+2=170$$

$\Rightarrow\ 5x=170\ \ \Rightarrow\ x=34$

Numbers are 32, 33, 34, 35, 36.

Hence product of largest & smallest number will be $32\times 36=1152$

42. The HCF of two numbers is 15 and their LCM is 225. If one of the numbers is 75, find the another number

(1) 105 (2) 90 (3) 60 (4) 45

Ans. (4)

Sol. We know that numbers x and y

$\text{HCF}\left(x,\ y\right)\times\text{LCM}\left(x,\ y\right)=$ product of numbers.

$$\Rightarrow\ 15\times 225=75\times x\ .\ \ \Rightarrow\ x=\frac{225\times 15}{75}=45$$

43. The capacity of two pots are 240 litre and 112 litre respectively. Find the capacity of a container which can exactly measure the contents of the two pots

(1) 9000cc (2) 12000cc (3) 16000cc (4) 8000cc

Ans. (3)

Sol. Clearly the required capacity $=\text{HCF}\left(112,\ 240\right)=16$ litre.

$$=16\times 1000\text{ cc}=16000\text{ cc.}$$

44. If $2^{x-1}+2^{x+1}=2560$, find the value of x

(1) 10 (2) 12 (3) 9 (4) 8

Ans. (1)

Sol. $2^{x-1}+2^{x+1}=2560\ \ \Rightarrow\ \frac{2^x}{2}+2^x\times 2=2560$,

let $2^x=m\ \ \therefore\ \frac{m}{2}+2m=2560\ \ \Rightarrow\ 5m=2560\times 2$

$\Rightarrow\ m=1024$, now $2^x=1024=2^{10}$

$\therefore\ x = 10$

45. Simplify $6-\{9-\{18-(15-12-9)\}\}$

(1) 1 (2) 4 (3) 5 (4) 3

Ans. (3)

Sol. $6-\left[9-\left\{18-\left(15-\left(\overline{12-9}\right)\right)\right\}\right] = 6-\left[9-\{18-12\}\right] = 6-[9-6] = 3$

46. If $a^2+b^2 = 234$ and $ab = 108$, find the value of $\frac{a+b}{a-b}$.

(1) 10 (2) 8 (3) 5 (4) 4

Ans. (3)

Sol. $a^2+b^2 = 234$, $ab = 108$

Now, $(a+b)^2 = a^2+b^2+2ab = 234+216$

$(a+b)^2 = 450 \quad \therefore\ a+b = \sqrt{450}$

Also $(a-b)^2 = a^2+b^2-2ab = 234-216 = 18$

$\therefore\ a-b = \sqrt{18}$

Hence, $\frac{a+b}{a-b} = \sqrt{\frac{450}{18}} = \sqrt{25} = 5$.

47. The product of two numbers is 12960 and their HCF is 36. Number of pairs of such numbers that can be formed is

(1) 2 (2) 3 (3) 3 (4) 5

Ans. (3)

Sol. Clearly the no will be $36x$ & $36y$. Then $36x \times 36y = 12960$

$\Rightarrow\ xy = 10$. So possible pair of $(x,\ y)$ can be

$(1, 10), (10, 1), (2, 5), (5, 2)$

Hence 4 pairs are possible.

48. A man had 170 currency notes in all, some of which were of Rs. 100 denominations and some of are Rs. 50 denomination. The total amount of all these currency notes was Rs. 10000. How much amount did he have in the denominations of Rs. 50

(1) Rs. 4000 (2) Rs. 9000 (3) Rs. 7000 (4) Rs. 6000

Ans. (3)

Sol. Let no. of Rs. 100 notes $= x$

Let no. of Rs. 50 notes $= y$

$\therefore\ x + y = 170$ ....(1)

Also $100x + 50y = 10000$

$\Rightarrow\ 2x + y = 200$ ....(2)

Solving (1) and (2), $x = 30$ and $y = 140$

$\therefore$ Total amount of Rs. $50 = 50 \times 140 = 7000$

49. The difference between the ages of Sonu and Sneha is 12 years. If the ratio of their ages is 3 : 5 then the age of Sneha is :

(1) 32 yrs. (2) 24 yrs. (3) 28 yrs. (4) 30 yrs.

Ans. (4)

Sol. Let age of Sonu be x.

Let age of Sneha be y

$\therefore\ x - y = 12$ ...(1)

Also $\frac{x}{y} = \frac{3}{5}$ $\Rightarrow$ $\frac{y+12}{y} = \frac{3}{5}$ (from (1))

$\Rightarrow\ 3y = 5y + 60$ $\Rightarrow\ y = 30$

Hence age of Sneha is 30 years.

50. Five ninth of 60% of a number is equal to 2790. What is the number?

(1) 8100 (2) 7200 (3) 6300 (4) None of these

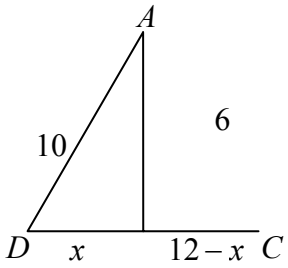
Ans. (4)

Sol. Required no is $\frac{5}{9} \times \frac{60}{100} \times x = 2790$

$\Rightarrow\ x = 8370$

$\therefore$ Option (4) is correct.

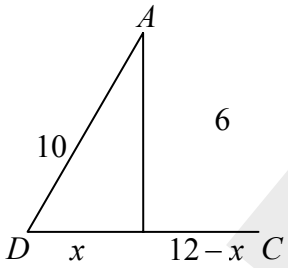
51. In the given figure, AD is the bisector of $\angle BAC$. If $AB = 10$ cm., $AC = 6$ cm, and $BC = 12$ cm., find BD



(1) 4.5 cm (2) 9 cm (3) 7.5 cm (4) 3 cm

Ans. (3)

Sol. $\because$ AD is internal angle bisector,



So, $\frac{BD}{DC}=\frac{AB}{AC} \Rightarrow \frac{x}{12-x}=\frac{10}{6}$

$\Rightarrow 3x=60-5x \Rightarrow x=7.5$ cm

52. The average monthly income of four earning members of a family is Rs. 7350. One member passes away and the average monthly income becomes Rs. 6500. What was the monthly income of the person, who is no more ?

(1) Rs. 6928 (2) Rs. 8200 (3) Rs. 9900 (4) Rs. 13850

Ans. (3)

Sol. Total monthly income of four earning number will be $4\times 7350=29400$, when one member passes away, then total monthly income of 3 earning member will be $3\times 6500=19500$.

$\therefore$ Monthly income of person who is no more is $29400-19500=9900$

53. A class is divided into two sections A and B. Passing average of 20 students of section A is 80% and passing average of 30 students of section B is 70%. What is the passing average of both of the sections?

(1) 72% (2) 74% (3) 75% (4) 77%

Ans. (2)

Sol. Required % $= \frac{20\times80+30\times70}{50} = \frac{1600+2100}{50} = \frac{3700}{50} = 74\%$

54. In the class, the number of boys and girls are in the ratio of 4:5. If 10 more boys join the class, the ratio of numbers of boys and girls become 6:5. How many girls are there in the class?

(1) 20 (2) 30 (3) 25 (4) None of these

Ans. (3)

Sol. Let total number of girls be $5x$ total no of boys be $4x$

According to question $\frac{4x+10}{5x} = \frac{6}{5}$

$\Rightarrow\ 20x+50 = 30x \ \Rightarrow\ x = 5$

$\therefore$ Total no of fiels in the class $= 25$

55. The difference between the two adjacent angles of a parallelogram is 20°. What would be the ratio between the smaller and the longer angles of the -parallelo-gram respectively.

(1) $4:5$ (2) $4:7$ (3) $3:5$ (4) $5:6$

Ans. (1)

Sol. Let two adjancent angles be $x°$ & $(x+20)°$

Then $\angle A+\angle B = 180° \ \Rightarrow\ 2x+20 = 180°$

$\Rightarrow\ 2x = 180-20 \ \Rightarrow\ x = 80°$

$\angle A = 80°,\ \angle B = 100°,\ \angle C = 80°,\ \angle D = 100°$

Here required ratio $= \frac{80}{100} = \frac{4}{5}$

56. A sum becomes 6 times at 5 % per annum. At what rate, the sum becomes 12 times ?

(1) 10% (2) 12% (3) 9 % (4) 11%

Ans. (4)

Sol. $P,\ A = 6P,\ R = 5\%$

S.I. $= 6P-P = 5P,\ 5P = \frac{P.5.T}{100}$

$t = 100,\ 11P = \frac{P\times R\times100}{100} \Rightarrow R = 11\%$

57. If $\sin\theta + \sin^2\theta = 1$, then $\cos^2\theta + \cos^4\theta =$

(1) 1 (2) 2 (3) 0 (4) -1

Ans. (1)

Sol. $\sin\theta = \cos^2\theta$

$\cos^2\theta + \cos^4\theta = \cos^2\theta + \sin^2\theta = 1$

58. The mean age of a combined group of men and women is 25 years. If mean age of men is 26 and that of women is 21, then the percentage of men and women in the group is

(1) 60, 40 (2) 80, 20 (3) 20, 80 (4) 30, 70

Ans. (2)

Sol. $\frac{xM + yW}{x+y} = 25$, $26x + 21y = 25x + 25y$

$x = 4y$

$\%\ \text{man} = \frac{x}{x+y} \times 100 = 80\%$

$\%\ \text{women} = \frac{y}{x+y} \times 100 = 20\%$

59. The curved surface area of a right circular cylinder of base radius r is obtained by multiplying its volume by

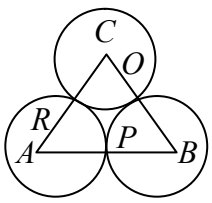
(1) $\frac{2}{r^2}$ (2) $2r^2$ (3) $\frac{2}{r}$ (4) $2r$

Ans. (3)

Sol. C.S.A. $= 2\pi rh$, volume $= \pi r^2 h$

$\frac{\text{CSA}}{\text{Volume}} = \frac{2\pi rh}{\pi r^2 h} = \frac{2}{r}$

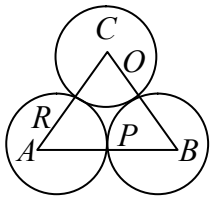
60. In the given figure, three circles with centres A, B, C respectively touch each other externally. If $AB = 5$ cm, $BC = 7$ cm and $CA = 6$ cm, then the radius of the circle with A is :



(1) 1.5 cm (2) 2 cm (3) 2.5 cm (4) 3 cm

Ans. (2)

Sol. Let radius of circle with center A be r,



Then $PB = BQ = 5 - r$ & $RC = CQ = 6 - r$

Now, $CB = CQ + QB$

$\Rightarrow 7 = 5 - r + 6 - r \quad \Rightarrow 2r = 4 \quad r = 2$ cm

Social Science

History

61. Who was known as "Fuhrer" ?

(1) Mussolini (2) Hitler (3) Cavour (4) Bismarck

Ans. (2)

Sol. (i) "Fuhrer" is a German word meaning "Leader" or Guide".

(ii) In Nazi Germany Hitler was generally known as Fuhrer.

62. Who organised the Dalits into the depressed classes association ?

(1) Mahatma Gandhi (2) Subhas Chandra Bose

(3) Jawahar lal Nehru (4) B. R. Ambedkar

Ans. (4)

Sol. Depressed classes association was formed by Dr. B.R. Ambedkar in 1930.

63. The Bolshevik Revolution in Russia began on

(1) 7 October, 1917 (2) 7 November, 1917 (3) 7 December, 1917 (4) 7 March, 1918

Ans. (2)

Sol. (i) "Russia followed the Julian Calendar until 1 February 1918.

(ii) The county then changed to the Gregorian calendar which is followed every where today.

(iii) The Gregorian dates are 13 days ahead of the Julian dates so the October revolution took place on 7th November 1917.

64. Who created the cotton mill ?

(1) Richard Arkwright (2) Williams (3) Newcomen (4) James Watt

Ans. (1)

Sol. Please refer NCERT History Book page no – 106.

65. The main grievance of the peasants of the Champaran Satyagraha was about the

(1) Abwabs and illegal cesses (2) Land revenue demands

(3) Tinkathia System (4) Exploitation by the Moneylenders

Ans. (3)

Sol. Tinkathia system under which the native peasants of Champaran (Bihar) were forced to cultivate 3 Katha Indigo out of every 20 Katha of land.

66. Assertion (A) While joining the mainstream of the National Movement led by Gandhiji the tribal communities where unmindful of the demands of their situation.

Reason (R) Swaraj meant for both the freedom from British rule and freedom from the oppression of the moneylenders, zamindars and feudal overlords.

Code –

(1) Both (A) and (R) are true but (R) is not the correct explanation of (A)

(2) Both (A) and (R) are true and (R) is the correct explanation of (A)

(3) (A) is true but (R) is false

(4) (A) is false but (R) is true

Ans. (4)

Sol. Tribal communities wanted to access the forest to hunt, cultivate and gather after the forest laws.

67. Who was the founder of Bengal Chemicals ?

(1) J. C. Bose (2) P. C.Ray (3) M. L. Sarkar (4) None of these

Ans. (2)

Sol. Bengal chemicals & Pharmaceuticals ltd. Is a public sector understanding established in Kolkata, West Bengal in 1901 by Prafulla Chandra Roy.

68. Which of the following was not true of James Augustus Hickey ?

(1) He was the pioneer of Indian Journalism

(2) He was the founder of the Bengal Chronicle

(3) He always worked for the press freedom

(4) He was sent to prison by Company Government for being feerless journalist

Ans. (2)

Sol. The founder of the Bengal Chronicle was Hugh Boyd.

69. The first President of the Congress Socialist Party was

(1) Jai Prakash Narayan (2) Acharya Narendra Deva

(3) Jawahar Lai Nehru (4) Sampurnanand

Ans. (2)

Sol. The congress socialist party (CSP) was founded in 1934.

Founded by Prakash Naryan, Ramkrishna Benipuri and Acharya Narendra Deva.

70. From the following newspapers with which Gandhiji was not associated ?

(1) Indian Opinion (2) Indian Mirror (3) Harijan (4) Young India

Ans. (2)

Sol. "Indian Mirror" was a newspaper started in 1861 prior to birth of Mahatma Gandhi.

71. The first factory legislation was passed to improve the working conditions of the labour in

(1) 1880 (2) 1881 (3) 1884 (4) 1894

Ans. (2)

72. Gandhiji halted the Non-Cooperation Movement after

(1) Chauri Chaura incident (2) Kheda Satyagrah

(3) Ahmedabad mill works strike (4) Bardoli Strike

Ans. (1)

73. Which of the following novel is not written by Munshi Premchand ?

(1) Rangbhoomi (2) Godan (3) Sewasadan (4) Indulekha

Ans. (4)

Sol. "Indulekha" was written by O Chandu Manon in 1889.

74. Who wrote "The Bitter Cry of Outcast London"?

(1) Durga Charan Ray (2) Charles Dickens

(3) Andrew Mearns (4) Thomas Hardy

Ans. (3)

Sol. Written by Andrew Mearnes in 1883 on housing problem in London.

75. Who was the founder of the 'Hoa Hao' movement ?

(1) BoiChan (2) Liang Qichao (3) Huynh Phu So (4) Phanchu Trinh

Ans. (3)

Geography

76. Alluvial Soil is a very fertile soil. The soil is principally found in the states of :

(1) Telangana, Gujarat and Rajasthan (2) Uttar Pradesh, Bihar and West Bengal

(3) Kerala, Goa and Rajasthan (4) Chattisgarh, Jharkhand and Nagaland

Ans. (2)

77. Bhakra - Nangal multi-purpose river valley project is situated on river :

(1) Damodar (2) Sutlej (3) Mahanadi (4) Yamuna

Ans. (2)

78. Which pair of states is famous for the production of petroleum in India ?

(1) Maharashtra and Goa (2) Punjab and Gujarat

(3) Assam and Gujarat (4) Rajasthan and Punjab

Ans. (3)

79. Select the row of towns who are famous for atomic power plants :

(1) Tarapur, Ankleshwar, Nagpur, Kaiga (2) Tarapur, Nagarjunsagar, Mathura, Meerut

(3) Tarapur, Rawatbhata, Vadodara, Narora (4) Tarapur, Narora, Kakrapar, Kaiga

Ans. (4)

80. Sudarbans National Park is famous for :

(1) Elephant (2) Wild Pigs (3) Bengal Tiger (4) Gangetic Dolphin

Ans. (3)

81. Blue Revolution is associated with

(1) Development of food crops farming (2) Development of hydel power projects

(3) River management (4) Development of fisheries

Ans. (4)

Sol. In 1970 Blue revolution is India was started from development of fisheries

82. Durgapur steel plant is situated in the state of

(1) Chhattisgarh (2) West Bengal (3) Madhya Pradesh (4) Jharkhand

Ans. (2)

Sol. Durgapur steel plant is situated in Bardhman district of west Bengal

83. Which group of ports are major ports on the Western Coast of India?

(1) Mangalore, Kochi, Tuticorin (2) Kochi, Tuticorin, Paradeep

(3) Kandala, Marmagao, Mangalore (4) Kandala, Porbandar, Paradeep

Ans. (3)

Sol. Refer to "NCERT geography class X page 89"

84. The national waterways no 1 extends from

(1) Haldia to Varanasi (2) Haldia to Allahabad (3) Haldia to Patna (4) Haldia to Guwahati

Ans. (2)

Sol. Also called Ganga Bhagirathi Hooghly river system which runs from Haldia to Allahabad

85. Which of the following resources is very useful in maintaining ecological balance

(1) Minerals (2) Suitable Land for Transport

(3) Forest (4) Building

Ans. (3)

Sol. Since ecological balance is asked it should be option (3), forest.

86. Which of the following is the greatest and the most important resource of a country?

(1) Minerals (2) Land (3) Water (4) People of the Country

Ans. (4)

Sol. People of the country through their skill convert other things into resources

87. Which of the following crops is grown by shifting agriculture

(1) Cotton (2) Cereals (3) Sugarcane (4) Tea

Ans. (2)

Sol. Since shifting cultivation is done for subsistence, cereals are grown by it.

88. Which are the commercial crops:

Name of crops:

(i) Groundnut (ii) Wheat (iii) Sugarcane (iv) Rice

(v) Mustard

(1) i, ii & iii (2) i, iii & v (3) i, iii & iv (4) iii, iv & v

Ans. (2)

89. River Damodar is a tributary of River:

(1) Ganga (2) Swarnrekha (3) Barakar (4) Hooghly

Ans. (4)

90. Which cities are to be connected by Golden Quadrilateral Super Highways

Name of Cities:

I. Delhi II. Mumbai III. Bengaluru IV. Mysore

V. Chennai VI. Kolkata

Select the correct answer from the following options:

(1) I, II, III & IV (2) II, III, IV & V (3) I, II, V & VI (4) II, III, IV & V

Ans. (3)

Sol. It connects the four metro cities forming a quadrilateral.

Civics :

91. Who is the present UN Secretary General ?

(1) Kofi Annan (2) Antonio Guterres (3) Ban Ki-Moon (4) None

Ans. (2)

92. The Chief Justice of Supreme Court of India is –

(1) Deepak Mishra (2) T. S. Thakur (3) RanjanGogoi (4) Jagdish Singh Khehar

Ans. (3)

Sol. Since 3rd October 2018, Ranjan Gogoi is the 46th CJI

93. Which of the following Countries has adopted the One Party System ?

(1) India (2) USA (3) China (4) Japan

Ans. (3)

Sol. "China", where only political party is the communist party of china

94. What is the full name of UPA ?

(1) United Party Alliance (2) United People's Alliance

(3) United Progressive Alliance (4) United Progressive Axis

Ans. (3)

5. Which constitutional amendment granted reservation to women in Panchayats ?

(1) 42nd (2) 44th (3) 65th (4) 73rd

Ans. (4)

Sol. In 1992 by 73rd amendment of constitution.

Economics

96. Due to Inflation, Market items

(1) gets cheaper (2) gets expensive (3) Price remains the same (4) None of the above

Ans. (2)

Sol. Inflation is a condition of excess money is market which results in high demand creating price rise.

97. The Reserve Bank of India was nationalised in :

(1) 1945 (2) 1947 (3) 1949 (4) 1950

Ans. (3)

98. When the New Economic Policy came into force in India ?

(1) 1990 (2) 1991 (3) 1993 (4) 1994

Ans. (2)

99. Who wrote the book "Wealth of Nations"?

(1) Marshall (2) Piggu (3) Adam Smith (4) Kinns

Ans. (3)

100. The main feature of the New Economic Policy of India -

(1) Liberalisation (2) Globalisation (3) Privatisation (4) All of them

Ans. (4)

* * * * *