

Entrance Examinations 2018 - 2019

Engineering / Science / HND (NS)

Instructions to the candidates:

- 1. Answer all the questions.
- 2. Each question carries 1 (ONE) Mark.
- 3. No negative marks.

Max Marks: 100

Version Code A

DURATION: 1 Hour 30 Mins

| | Category : English | Question No. 1 |
|------|-------------------------------|--------------------------------|
| Choo | ose the correct suitable word | d to the sentence given below. |
| The | The absence of law and order | |
| 0 | Mutiny | |
| 0 | Rebellion | |
| 0 | Anarchy | |
| 0 | Revolt | |

| | Category : English | Question No. 2 |
|------|------------------------------|--|
| Find | out the alternative which wi | ill replace the question mark in the following question. |
| REAS | REASON : SFBTPO :: THINK : ? | |
| 0 | SGHMJ | |
| 0 | UIJOL | |
| 0 | UJKPM | |
| 0 | UHNKI | |

| | Category : English | Question No. 3 |
|------|----------------------------|-----------------------|
| Choo | ose the correct SYNONYM to | the word given below. |
| GEN | GENIAL | |
| 0 | Kind | |
| 0 | cordial | |
| 0 | Unselfish | |
| 0 | Specific | |

| | Category : English | Question No. 4 | |
|-------|--|--------------------------------|--|
| Choo | ose the correct suitable wor | d to the sentence given below. | |
| A sty | A style in which a writer makes a display of his knowledge Pedantic | | |
| 0 | © Pompous | | |
| 0 | Verbose | | |
| 0 | Ornate | | |

| | Category : English | Question No. 5 | |
|-----------|------------------------------|---|--|
| Choo | ose the letter word or phras | se that is closest in meaning to the CAPITALISED Word | |
| SPLE O | SPLEEN Lustre | | |
| 0 | III-tempered | | |
| 0 | Smoothness | | |
| 0 | Surface | | |

| | Category : English | Question No. 6 |
|---|--|--|
| Choose the one which best expresses the given sentence in Indirect/Direct speech from the given alternatives. | | |
| Dhru | Dhruv said that he was sick and tired of working for that company. | |
| 0 | Dhruv said, "I am sick and tired of working for this company." | |
| 0 | Dhruv said, "He was tired | of that company." |
| 0 | Dhruv said to me, "I am sig | ck and tired of working for this company." |
| 0 | Dhruv said, "I will be tired | of working for that company." |

| | Category : English | Question No. 7 | |
|------|---|--------------------------------|--|
| Choo | ose the correct suitable wor | d to the sentence given below. | |
| A sm | A small shop that sells fashionable clothes, cosmetics, etc. Store | | |
| ~ | Booth | | |
| 0 | Stall | | |
| 0 | Boutique | | |

| Category : English | Question No. 8 | |
|--|----------------|--|
| n all organizations formal or informal groups of the workers get formed. These groups have their | | |

own norms and, unwritten standards of work. The individuals have to conform to these standards irrespective of their individual needs. Individuals' needs are sacrificed at the altar of the group needs. A manager is unlikely to get success in motivating individuals, even if he is quite aware of the individuals needs. He can only try to influence the behaviour of the group as a whole. Such cases also have been noticed where the individual needs of all the members are different from the needs of the group as a whole, yet no one breaks the group norms. Individual members are aware of it but nobody wants to break the group norms firs, lest he should be outcast and looked down upon. In such a case, in fact, there is a lack of free communication. The manager's role here is to help the group members to look at their needs in relation to the group needs by making the communication smooth within the group.

The members have to conform to these standards

- irrespective of their individual needs
- according to their individual needs.
- according to the needs of the group
 - (a) and (c)

| Category : English | | Question No. 9 | |
|--------------------|--|----------------|--|
| Choo Wor | Choose the letter word or phrase that is most nearly opposite in meaning to the CAPITALISED Word | | |
| MER | MERITIORIOUS | | |
| 0 | Blameworthy | | |
| 0 | Well-known | | |
| 0 | Worthy of praise | | |
| 0 | Boastful | | |

| Category : English | Question No. 10 | | |
|--|--|--|--|
| Read the following five sentences then answer the questions given | Read the following five sentences in the proper sequence so as to form a meaningful paragraph, then answer the questions given below them. | | |
| I reached office at 11 O' of Some money had to be signal. After that, I spent almost Therefore, I went to bank However, I had no money | clock after sending the money. ent to my parents. : an hour at the Post Office. < to withdraw some money. y with me. | | |
| Which sentence should come fift | h in the paragraph? | | |
| ° 5 | | | |
| ° 4 | | | |
| ° 3 | | | |
| ° 1 | | | |
| ° 2 | | | |

| | Category : English | Question No. 11 | |
|-------|---|--|--|
| Cho | ose the best explanation to | the given sentence in Passive/Active voice. | |
| A ch | A child could not have done this mischief. | | |
| 0 0 0 | This mischief could not be This mischief could not ha | done by a child. ve been done by a child. | |
| 0 | This mischief could not be This mischief a child could | en done by a child. not have been done. | |

| | Category : English | Question No. 12 | |
|-------|----------------------------|----------------------------|--|
| Choo | ose the correct meaning of | proverb/idiom given below. | |
| То са | To catch a tartar | | |
| 0 | To meet with disaster | | |
| 0 | To trap wanted criminal w | ith great difficulty | |
| 0 | To catch a dangerous pers | on | |
| 0 | To deal with a person who | is more than one's match | |

| Category : English C | | | Question No. 13 |
|-----------------------|---|--|---|
| Cho | Choose the correct ANTONYM to the word given below. | | |
| MAI | MALICIOUS | | |
| 0 | Kind | | |
| 0 | Generous | | |
| 0 | Boastful | | |
| 0 | Indifferent | | |
| Category : English | | | |
| | Category : English | | Question No. 14 |
| Grai | Category : English mmatically Rew | vrite the sent | Question No. 14 ence given picking up the correct word given below. |
| Grai We | Category : English mmatically Rew must take it gra | vrite the sente anted that M | Question No. 14 ence given picking up the correct word given below. adhu will not come for todays function. |
| Grai We C | Category : English mmatically Rew must take it grant taking it grant | vrite the sento anted that M ted | Question No. 14 ence given picking up the correct word given below. adhu will not come for todays function. |
| Grai We C | Category : English mmatically Rew must take it gra taking it grant take it for gra | vrite the sento anted that M ted nted | Question No. 14 ence given picking up the correct word given below. adhu will not come for todays function. |
| Grai We C C | Category : English mmatically Rew must take it gra taking it gran take it for gra took it as gran | vrite the sento anted that M ted nted nted | Question No. 14 ence given picking up the correct word given below. adhu will not come for todays function. |

| Category : English | Question No. 15 |
|--|--|
| COMPREHENSION I felt the wall of the tunnel shive simultaneously, Jack yelled dowr spectacular sights snapped into a looming close and big, the dazzli | r. The master alarm squealed through my earphones. Almost a to me that there was a warning light on. Fleeting but an out of view, the snow, the shower of debris, the moon, ng sunshine for once unfiltered by layers of air. The last twelve |

hours before re-entry were particular bone-chilling. During this period, I had to go up in to command module. Even after the fiery re-entry splashing down in 81° water in south pacific, we could still see our frosty breath inside the command module.

The statement that the dazzling sunshine was "for once unfiltered by layers of air" means

- that the sun was very hot
- that there was no strong wind
- that the air was unpolluted
 - none of above

O

| | Category : English | Question No. 16 | |
|------|---------------------------|-------------------------|--|
| Choo | ose the correct ANTONYM t | o the word given below. | |
| EXO | EXODUS | | |
| 0 | Influx | | |
| 0 | Home-coming | | |
| 0 | Return | | |
| 0 | Restoration | | |

| | Category : English | Question No. 17 | |
|---------|---|-----------------|--|
| Fill ir | Fill in the blank with a suitable word given below. | | |
| The | The grapes are now enough to be picked. | | |
| 0 | ready | | |
| 0 | ripe | | |
| 0 | mature | | |
| 0 | advanced | | |

| Category : English | Question No. 18 | | |
|---|---|--|--|
| Read the following five sentence then answer the questions given | Read the following five sentences in the proper sequence so as to form a meaningful paragraph, then answer the questions given below them. | | |
| I reached office at 11 O Some money had to be After that, I spent almost Therefore, I went to bar However, I had no mon | I reached office at 11 O' clock after sending the money. Some money had to be sent to my parents. After that, I spent almost an hour at the Post Office. Therefore, I went to bank to withdraw some money. However, I had no money with me. | | |
| Which sentence should come f i | rst in the paragraph? | | |
| ° 3 | | | |
| ° 2 | | | |
| ° 1 | | | |
| ° 4 | | | |
| ° 5 | | | |

| | Category : English | Question No. 19 | |
|------|--|-----------------|--|
| Find | Find out the alternative which will replace the question mark in the following question. | | |
| Sout | South : North-West :: West : ? | | |
| 0 | North | | |
| 0 | East | | |
| 0 | North-East | | |
| 0 | South-West | | |

| Category : English | Question No. 20 | | |
|---|---|--|--|
| Find out the proper order of the | Find out the proper order of the jumbled sentence given below. | | |
| S ₁ : Calcutta unlike other cities ke P : As a result there horrendous Q : It was going to be the first in R : They run down the centre of S : To ease in the city decided to S ₆ : The foundation stone was lat | S_1 : Calcutta unlike other cities kept its trams. P : As a result there horrendous congestion. Q : It was going to be the first in South Asia. R : They run down the centre of the road S : To ease in the city decided to build an underground railway line. S_6 : The foundation stone was laid in 1972. The Proper sequence should be: | | |
| SQRP PRSQ | | | |
| RPSQ | | | |
| PSQR | | | |

| Category : Mathematics | | Question No. 21 |
|------------------------|---------|-----------------|
| Simplify 3√8 ÷ √18 | | |
| 0 0 | -2 2 | |
| 0 | 4 | |
| 0 | 6 | |

| Category : Mathematics | | Question No. 22 |
|------------------------|------------------------------|-------------------------------------|
| The | length of the tangent from (| (4,5) to the circle $x^2+y^2=25$ is |
| 0 | 5 | |
| 0 | 4 | |
| 0 | 25 | |
| 0 | 16 | |

| Category : Mathematics | | Question No. 23 | |
|------------------------|--|-----------------|--|
| The | The sum to the first 25 terms of the series 1+2+3 is | | |
| 0 | 305 | | |
| 0 | 315 | | |
| 0 | 335 | | |

| Category : Mathematics | | Question No. 24 | |
|------------------------|---|-----------------|--|
| The | The largest coefficient in the expansion of $(1 + x)^{24}$ is | | |
| 000 | 24C24 24C13 | | |
| 0 | 24C12 24C11 | | |

| Category : Mathematics | | Question No. 25 | |
|------------------------|--|-----------------|--|
| А ро | A polygon has 44 diagonals then the number of its sides is | | |
| 0 | 11 | | |
| 0 | 7 | | |
| 0 | 8 | | |
| 0 | 12 | | |

| Category : Mathematics | | Question No. 26 | | |
|------------------------|--|---|--|--|
| If p | \vec{p} , \vec{q} and \vec{p} + \vec{q} are ve | ectors of magnitude λ then the magnitude of $\vec{p} - \vec{q}$ | | |
| 0 | 2λ | | | |
| 0 | &radic.3λ | | | |
| 0 | &radic.2λ | | | |
| 0 | 1 | | | |

| Category : Mathematics | | Question No. 27 | | |
|------------------------|---|-----------------|--|--|
| If th | If the slope of a straight line is then the slope of the line perpendicular | | | |
| 0 | 2/3 | | | |
| 0 | -2/3 | | | |
| 0 | -3/2 | | | |
| 0 | 3/2 | | | |

| Category : Mathematics | | | Question No. 28 | |
|-------------------------------|--|--------------------|-------------------|---------------|
| lf | If $-\overline{z}$ lies in the third quadrant then z lies in the | | | |
| A |) First quadrant | B) second quadrant | C) third quadrant | D) fourth qua |
| 000 | Option A | | | |
| 0 | Option B Option C | | | |
| 0 | Option D | | | |

| Category : Mathematics | | Question No. 29 |
|---------------------------|----------------|---|
| lf 2x | ²+2hxy+by²=0 r | epresents a pair of perpendicular lines then C= |
| 0 | 1 | |
| 0 | 2 | |
| 0 | -2 | |
| 0 | -1 | |

| Category : Mathematics | | Question No. 30 | |
|------------------------|--|-----------------|--|
| A stu | A student is ranked 13th from right and 8th from left. How many students are there in total? | | |
| 0 | 18 | | |
| 0 | 19 | | |
| 0 | 20 | | |
| 0 | 21 | | |

| Category : Mathematics | | Question No. 31 | | | |
|------------------------|-----------------------------|---|---------------|---------------|----|
| Th | e factor of the determinant | $\begin{bmatrix} x+a \\ 0 \\ a \end{bmatrix}$ | b x+b b | c c x+c | is |
| 0 | x | | | | |
| 0 | x+b | | | | |
| 0 | x+c | | | | |
| 0 | x-a+b+c | | | | |

| (| Category : Mathematics | Question No. 32 | |
|-------|-------------------------|-----------------|--|
| 15, 3 | .5, 31, 63, 127, 255, ? | | |
| 0 | 513 | | |
| 0 | 511 | | |
| 0 | 523 | | |
| 0 | 517 | | |

| Category : Mathematics | | Question No. 33 |
|------------------------|---|-----------------|
| Find and | ind the least number which is a perfect square and also divisible by each of the number 16, 20, nd 24 | |
| 0 | 400 | |
| 0 | 1600 | |
| 0 | 256 | |
| 0 | 3600 | |

| Category : Mathematics | Question No. 34 |
|---|--|
| If A = $\begin{bmatrix} 2 & 1 & 4 \\ -3 & 2 & 1 \end{bmatrix}$ and | d X + A = 0 then matrix X is |
| $A) \begin{bmatrix} 2 & -1 & 4 \\ -3 & 2 & 1 \end{bmatrix} B \begin{bmatrix} -2 \\ 3 \end{bmatrix}$ | $ \begin{array}{ccc} -1 & -4 \\ -2 & -1 \end{array} \stackrel{()}{=} \begin{bmatrix} 2 & -1 & 4 \\ -3 & -2 & -1 \end{bmatrix} \stackrel{()}{=} \begin{bmatrix} -2 & 1 & 4 \\ 3 & -2 & -1 \end{bmatrix} $ |
| C Option A Option B | |
| C Option C Option D | |

| Category : Mathematics | | Question No. 35 | |
|------------------------|--|-----------------|--|
| lf n i | f n is a positive integer then the number of terms in the expansion $of(x + a)^n$ is | | |
| 0 | n | | |
| 0 | n – 1 | | |
| 0 | n + 1 | | |
| 0 | n + 2 | | |

| C | Category : Mathematics Question No. 36 | | estion No. 36 | |
|---|---|------------------------------------|---------------------|--|
| 7 | $\vec{s} = \vec{si} + t\vec{j}$ is the equation | on of | | |
| 4 | A) A straight line joining | the points \vec{i} and \vec{j} | B) xoy plane | |
| C | :) <i>yoz</i> Plane | | D) <i>zox</i> plane | |
| | | | | |
| 0 | Option A | | | |
| 0 | Option B | | | |
| 0 | Option C | | | |
| C | Option D | | | |

| C | ategory : Mathematics | Question No. 37 | |
|--------|---|-----------------|--|
| If A a | f A and B are any two matrices such that AB = O and A is non-singular, then | | |
| 0000 | B = O B is singular B is non-singular B = A | | |

| Category : Mathematics | | Question No. 38 | |
|------------------------|--|-----------------|--|
| In ar winr for t | In an election, 25025 villagers voted for one of two candidates for panchayat president. If the winner received 14 votes more than three fourth votes that loser got, how many votes were cast for the winner? | | |
| 0 | 14292 | | |
| 0 | 6242 | | |
| 0 | 3573 | | |
| 0 | 10733 | | |

| Category : Mathematics | | Question No. 39 |
|------------------------|---|-----------------|
| 16 ^{3/} | 16 ^{3/} ₂ is equal to | |
| 000 | 46 -64 81 | |
| 0 | -66 | |

| Category : Mathematics | | Question No. 40 |
|------------------------|--|-----------------|
| The 5)/5 | The shortest distance between the lines ((x-1)/2)=((y-2)/3)=((z-3)/4) and ((x-2)/3)=((y-4)/4)=((z-5)/5) is | |
| 0 | 2/v3 | |
| 0 | 1/v6 | |
| 0 | 2/3 | |
| 0 | 1/2v6 | |

| Category : Physics | Question No. 41 | | |
|--|--|--|--|
| Out of the following which are | Out of the following which are not emitted by a radioactive substance? | | |
| Electrons electromagnetic radiation neutrons helium nuclei with a characteric | ns rge equal to that of two protons | | |

| | Category : Physics | Question No. 42 |
|------|---|-----------------|
| The | The drift velocity of an electron is | |
| 0000 | 0.1m/s 0.01cm/s 10-1cm/s 10-1m/s | |

| | Category : Physics | Question No. 43 | |
|------|---|-----------------|--|
| Whe | When a plane transmission gratting is used, the equation for wave length is | | |
| 0000 | λ=sinθ/m λ=sinθ/N λ=Nm/sinθ λ=sinθ/Nm | | |

| | Category : Physics | Question No. 44 |
|------|---|-----------------|
| A ch | oke is | |
| 0000 | a resister a capacitor an inductance coil an LED | |

| | Category : Physics | Question No. 45 | |
|------|---|-----------------|--|
| The | The property that distinguish the transverse waves from the longitudinal waves is | | |
| 0000 | Reflection dispersion polarization interference | | |

| | Category : Physics | Question No. 46 |
|--------|---|-----------------|
| In fra | In fraunhofer diffraction, the wave front is | |
| 0000 | Spherical wave front plane wave front Cylindrical wave front Elliptical wave front | |

| | Category : Physics | Question No. 47 | |
|------|--|-----------------|--|
| A cu | A current I flows along infinitely long straight thin conductor, then magnetic induction | | |
| 0 | zero µ₀/2πa | | |
| 0 | μ₀I/2πa | | |
| 0 | 2I/r | | |

| | Category : Physics | Question No. 48 | |
|------|--|-----------------|--|
| Whi | Which one the following is not a unit of energy? | | |
| 0000 | Joule electron volt Watt kilowatt hour | | |

| | Category : Physics | Question No. 49 |
|---------|--------------------------------|-----------------|
| The | The unit of resistance is | |
| 0 0 0 0 | 1/mho mho 1/ohm ohm-m | |

| | Category : Physics | Question No. 50 |
|-------|---|-----------------|
| In ar | n an a.c dynamo, the induced current isin nature. | |
| 0000 | alternatively increasing decreasing constant | |

| Cate | egory : Physics | Question No. 51 |
|--|----------------------------------|---|
| The electr | ic field outside the pla | ates of two oppositely charged plane sheets of charge density σ is |
| σ/2ε -σ/2 -σ/2 σ/ε₀ | ε ₀ ε ₀ | |

| | Category : Physics | Question No. 52 |
|------|------------------------------------|----------------------------------|
| 14Ce | $_{5}$ is an isotope of carbon. Ho | w many neutrons does it contain? |
| 0 | 6 | |
| 0 | 8 | |
| 0 | 14 | |
| 0 | 20 | |

| | Category : Physics | Question No. 53 |
|------|--|--|
| An e | lectric dipole placed at an a | angle in a non uniform electric field experience |
| 0000 | Neither a force not a torq torque only both force and torque force only | ue |

| | Category : Physics | Question No. 54 |
|--------|--|-----------------|
| The un | it of permittivity is | |
| | 2 ² N ⁻¹ M ² 2 ⁻² N M ⁻² N M ⁻¹ N C ⁻² M ⁻² | |

| | Category : Physics | Question No. 55 |
|-----|--|-----------------|
| The | unit Henry can also be Writ | ten as |
| 000 | VA ⁻¹ s Ωs Wb A ⁻¹ | |
| 0 | all | |

| | Category : Physics | Question No. 56 |
|-------|-------------------------------|----------------------------------|
| For f | full-wave rectifier the minim | num number of diodes required is |
| 0 | 2 | |
| 0 | 3 | |
| 0 | 4 | |
| 0 | 1 | |

| | Category : Physics | Question No. 57 |
|-----|------------------------------|-----------------|
| Whe | en wt=0 , the induced emf, e | 2=? |
| 0 | Esinwt | |
| 0 | EO | |
| 0 | -E0 | |
| 0 | 0 | |

| | Category : Physics | Question No. 58 |
|-----|---|-----------------|
| The | The unit of reduction factor of tangent galvanometer is | |
| 000 | No unit Tesla | |
| 0 | Ampere/degree | |
| 0 | ampere | |

| | Category : Physics | Question No. 59 |
|-------|---|-----------------|
| In ar | n an a.c generator, the brushes are made of | |
| 0000 | silicon plastic carbon nylon | |

| | Category : Physics | Question No. 60 |
|-------|---|-----------------|
| In Bo | n Boolean algebra, the bar sign() indicates | |
| 0000 | OR Operation AND Operation NOT Operation None of the above | |

| Category : Chemistry | Question No. 61 |
|------------------------------------|-----------------|
| H_2O_2 reduces MnO_4 - ion to | |
| C Mn₊ C Mn₃₊ C Mn₂₊ C Mn. | |

| | Category : Chemistry | Question No. 62 |
|--------------|---|-----------------|
| lf 5. mol | If 5.85 g of NaCl (Molecular weight 58.5) is dissolved in H_2 o and solution made upto 0.5 litre. The molarity of this solution will be | |
| 0 | 0.1 | |
| 0 | 0.4 | |
| 0 | 0.2 | |
| 0 | 1.0 | |

| Treatment of ammonia with excess of ethyl chloride will yield. Diethyl amine Tetraethyl ammonium chloride Ethane Methyl amine | Category : Chemistry | Question No. 63 | |
|--|---|--|--|
| Diethyl amine Tetraethyl ammonium chloride Ethane Methyl amine | Treatment of ammonia with exc | Treatment of ammonia with excess of ethyl chloride will yield. | |
| | Diethyl amine Tetraethyl ammonium chlo Ethane Methyl amine | oride | |

| Category : Chemistry | | Question No. 64 |
|----------------------|---|---------------------|
| Supp the e | Suppose the reaction $PCl_5(g) \rightleftharpoons PCl_3(g) + Cl_2(g)$ is in a closed vessel at equilibrium stage. What is the effect on equilibrium concentration of $Cl_2(g)$ by adding PCl_5 at constant temperature. | |
| 0 | Decreases | |
| O. | Unaffected | |
| 0 | Increases | |
| 0 | Cannot be described with | out the value of kp |

| | Category : Chemistry | Question No. 65 |
|-------|------------------------------------|-----------------|
| In te | rms of energy 1 a.m.u. is ea | qual to |
| 000 | 100 J 931.478 MeV 931.1 kcal | |
| 0 | 107 erg | |

| | Category : Chemistry | Question No. 66 | |
|----------|--|-------------------------------|--|
| Zinc | Zinc and mercury do not show variable valency like d-block elements because. | | |
| 0 | They are soft | | |
| <u> </u> | They have only two electro | ons in the outermost subshell | |
| 0 | Their d- shells are incompl | ete | |
| 0 | Their d-shells are incomple | ete | |

| | Category : Chemistry | Question No. 67 | |
|------|--|-----------------|--|
| Acco | According to law of mass action rate of a chemical reaction is proportional to | | |
| 0 | Concentration of reactant Concentration of products | S 5 | |
| 0 | Molar concentration of reactants | | |
| 0 | Molar concentration of pr | oducts | |

| Category : Chemistry | | Question No. 68 |
|----------------------|--|-----------------|
| 36 g | - 36 g water and 828 g ethyl alcohol form an ideal solution. The mole fraction of water in it, is | |
| 0000 | 1.0 0.4 0.7 | |

| Category : Cher | mistry | Question No. 69 |
|--|----------------------|---|
| Colloidal solutions o | f metals like g | old, silver and platinum are generally prepared by using. |
| Peptization Exchange of sc Bredig arc met Oxidation met | blvent hod hod | |

| | Category : Chemistry | Question No. 70 |
|------|--|-----------------|
| A co | A colloidal solution can be purified by | |
| 0000 | Filtration Coagulation Peptization Dialysis | |

| | Category : Chemistry | Question No. 71 |
|------|---|-----------------|
| One | calorie is equal to | |
| 0000 | 0.4184 Joule 41.84 Joule 4.184 Joule 418.4 Joule | |

| | Category : Chemistry | Question No. 72 |
|------|---|-------------------|
| The | The introduction of a neutron into the nuclear composition of an atom would lead to a change ir | |
| 0000 | The number of the electro Its atomic number The chemical nature of the Its atomic weight | ns also e atom |

| Category : Chemistry | | Question No. 73 |
|----------------------|--|--------------------------------|
| In a | In a reversible reaction, the catalyst??. | |
| 0 0 | Increases the activation er | nergy of the backward reaction |
| 0 | Decreases the activation energy of both, forward and backward reaction | |
| 0 | Decreases the activation e | nergy of forward reaction |

| | Category : Chemistry | Question No. 74 |
|-------------------------------|---|-----------------|
| The oxidation number of As is | | |
| 000 | + 2 and + 3 + 3 and + 4 + 3 and + 5 | |
| 0 | None of these | |

| Category : Chemistry | | Question No. 75 | |
|----------------------|---|-----------------|--|
| Whi | Which of the following is the most powerful oxidizing agent | | |
| 0000 | F ₂ Br ₂ Cl ₂ | | |
| 0 | l ₂ | | |

| | Category : Chemistry | Question No. 76 | |
|------|---|-----------------|--|
| The | The catalyst used in the contact process for manufacturing of sulphuric acid is | | |
| 0000 | Copper Vanadium pentoxide Iron/aluminum oxide Platinized asbestos | | |

| Category : Chemistry | | Question No. 77 | |
|----------------------|---|-----------------|--|
| The o acid | The diazonium salts are the reaction products in presence of excess of mineral acid with nitrous acid and . | | |
| 0 | Primary aliphatic amine | | |
| 0 | Primary aromatic amine | | |
| 0 | Secondary aromatic amin | e | |
| 0 | Tertiary aliphatic amine | | |

| | Category : Chemistry | Question No. 78 | |
|--|--|-----------------|--|
| The com | The transitional metal which form green compound in +3 oxidation state and yellow orange compound in +6 oxidation state is | | |
| 0 0 0 0 | Fe Ni Cr Co | | |
| | | Question No. 70 | |
| | Category : Chemistry | Question No. 79 | |
| Which of the following statements do not define the characteristic property of water ?Water is a universal solvent?? | | | |
| 0 | It can dissolve maximum number of compounds | | |
| 0 | It has high liquid range | | |
| 0 | It has very low dielectric constant | | |
| 0 | None of these | | |

| | Category : Chemistry | Question No. 80 | |
|------------|---|-----------------|--|
| For a cond | For a chemical reaction A> B, it is found that the rate of reaction doubles when the concentration of A increased four times. The order of the reaction is: | | |
| 0 | 4 | | |
| 0 | 1 | | |
| 0 | 2 | | |
| 0 | 1/2 | | |

| Category : Aptitude | | Question No. 81 | |
|---------------------|---|-----------------|--|
| Wha annu | What is the difference between the compound interests on Rs.5000 for 1 1/2 years at 4% per annum compounded yearly and-half yearly? | | |
| 0 | Rs.5.05 | | |
| 0 | Rs.2.04 | | |
| 0 | Rs.1.05 | | |
| 0 | Rs.4.26 | | |

| Category : Aptitude | | Question No. 82 | |
|------------------------|---|-----------------|--|
| If the com | If the simple interest on a sum of money for 2 years at 5% per annum is Rs. 60, what is the compound interest on the same at the same rate and for the same time? | | |
| 0 | Rs.71 | | |
| 0 | Rs.71.5 | | |
| 0 | Rs.61 | | |
| 0 | Rs.61.5 | | |

| Category : Aptitude | | Question No. 83 | |
|---------------------|--|-----------------|--|
| The perc | The population of a town increased from 1,75,000 to 2,62,500 in a decade. What is the average percent increase of population per year? | | |
| 0 | 4% | | |
| 0 | 3% | | |
| 0 | 5% | | |
| 0 | 2% | | |

| | Category : Aptitude | Question No. 84 | |
|-----|-------------------------------------|-----------------|--|
| Wha | What is the number whose 30% is 150 | | |
| 0 | 300 | | |
| 0 | 100 | | |
| 0 | 400 | | |
| 0 | 500 | | |

| | Category : Aptitude | Question No. 85 | |
|------------|---|-----------------|--|
| Two sma | Two numbers are in the ratio 5:6, If 4 is subtracted from each, they are reduced to ratio 4:5. The smaller number is: | | |
| 0 | 50 | | |
| 0 | 40 | | |
| 0 | 30 | | |
| 0 | 20 | | |

| Category : Aptitude | | Question No. 86 | |
|---------------------|---|-----------------|--|
| In a rema | In a certain store, the profit is 320% of the cost. If the cost increases by 25% but the selling price remains constant, approximately what percentage of the selling price is the profit | | |
| 0 | 80% | | |
| 0 | 10% | | |
| 0 | 70% | | |
| 0 | 20% | | |

| | Category : Aptitude | Question No. 87 | |
|------|--|-----------------|--|
| Find | Find the bankers gain on a bill of Rs.6900 due 3 years hence at 5% p.a. S.I. | | |
| 0 | Rs.135 | | |
| 0 | Rs.140 | | |
| 0 | Rs.200 | | |
| 0 | Rs.250 | | |

| | Category : Aptitude | Question No. 88 | |
|------------------------|--|-----------------|--|
| A tra spee stati | A train running between two stations A and B arrives at its destination 15 minutes late, when its speed is 45 km/hr. and 36 minutes late when its speed is 36 km/hr. find the distance between the stations A and B. | | |
| 0 | 30km | | |
| 0 | 54km | | |
| 0 | 56km | | |
| 0 | 63km | | |

| | Category : Aptitude | Question No. 89 |
|--|---------------------|-----------------|
| A man plants his orchid with 5625 trees and arranges them so that there are as many rows as there are trees in a row. How many rows are there? | | |
| 0 | 35 | |
| 0 | 25 | |
| 0 | 75 | |
| 0 | 50 | |

| | Category : Aptitude | Question No. 90 |
|-------------|--|-----------------|
| The by 4 | The product of the ages of Ankit and Nikita is 240. If twice the age of Nikita is more than Ankit ag by 4 years, what is Nikita age? | |
| 0 | 14 years | |
| 0 | 16 years | |
| 0 | 12 years | |
| 0 | 18 years | |

| | Category : Aptitude | Question No. 91 | |
|-----|--|-----------------|--|
| The | The compound interest on Rs. 30,000 at 7% per annum is Rs. 4347. The period (in years) is: | | |
| 0 | 8 | | |
| 0 | 1.5 | | |
| 0 | 5 | | |
| 0 | 2 | | |

| | Category : Aptitude | Question No. 92 |
|-------------|---|-----------------|
| The dete | The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25% then determine the value of x. | |
| 0 | 16 | |
| 0 | 14 | |
| 0 | 13 | |
| 0 | 14 | |

| | Category : Aptitude | Question No. 93 |
|-------------|--|-----------------|
| Ten thei | Ten years ago, P was half of Q in age. If the ratio of their present age is 3:4, what will be total of their present ages? | |
| 0 | 35 | |
| 0 | 40 | |
| 0 | 45 | |
| 0 | 30 | |

| | Category : Aptitude | Question No. 94 |
|------------|--|---|
| How 633 | <pre>/ many of the following num 6</pre> | bers are divisible by 132? 264, 396, 462, 792, 968, 2178, 5184, |
| 0 | 4 | |
| 0 | 6 | |
| 0 | 3 | |
| 0 | 8 | |

| | Category : Aptitude | Question No. 95 | |
|------------|---|-----------------|--|
| The wha | The value of a machine depreciates at the rate of 10% per annum. If its present is Rs.1,62,000 what will be its worth after 2 years ? What was the value of the machine 2 years ago ? | | |
| 0 | Rs.600000 Rs.500000 | | |
| 0 | Rs.300000 Rs.200000 | | |

| | Category : Aptitude | Question No. 96 |
|-------------|----------------------------------|--|
| Find num | a positive number which w ber | hen increased by 17 is equal to 60 times the reciprocal of the |
| 0 | 10 | |
| 0 | 3 | |
| 0 | 17 | |
| 0 | 20 | |

| | Category : Aptitude | Question No. 97 | |
|---------|--|-----------------|--|
| wha | what will come in the place of the question mark 0.006+?=0.6 | | |
| 0 0 0 0 | 0.001 0.01 0.06 0.05 | | |

| | Category : Aptitude | Question No. 98 |
|-------------|---|-----------------|
| A, B mon | A, B and C invested Rs. 8000, Rs. 4000 and Rs. 8000 respectively in a business. A left after six months. If after eight months, there was a gain of Rs. 4005, then what will be the share of B? | |
| 0 | RS.920 | |
| 0 | RS.880 | |
| 0 | RS.890 | |
| 0 | RS.540 | |

| | Category : Aptitude | Question No. 99 | | | | | | |
|---|---------------------|-----------------|--|--|--|--|--|--|
| Find the number of prime factors of $6^{10} \times 7^{17} \times 55^{27}$ | | | | | | | | |
| 0 | 61 | | | | | | | |
| 0 | 71 | | | | | | | |
| 0 | 91 | | | | | | | |
| 0 | 81 | | | | | | | |

| | Category : Aptitude | Question No. 100 | | | | | | |
|---|---------------------|------------------|--|--|--|--|--|--|
| Find the number whose square is equal to the difference between the squares of 75.12 and 60.12. | | | | | | | | |
| 0 | 44.3301 | | | | | | | |
| 0 | 45.0399 | | | | | | | |
| 0 | 53.199 | | | | | | | |
| 0 | 63.211 | | | | | | | |

| English | | Maths | | Physics | | Chemistry | | Aptitude | |
|---------|---|-------|---|---------|---|-----------|---|----------|---|
| Q | Α | Q | Α | Q | Α | Q | Α | Q | Α |
| 1 | 3 | 21 | 2 | 41 | 3 | 61 | 3 | 81 | 2 |
| 2 | 2 | 22 | 2 | 42 | 3 | 62 | 3 | 82 | 4 |
| 3 | 1 | 23 | 2 | 43 | 4 | 63 | 2 | 83 | 3 |
| 4 | 1 | 24 | 3 | 44 | 3 | 64 | 3 | 84 | 4 |
| 5 | 2 | 25 | 1 | 45 | 3 | 65 | 2 | 85 | 4 |
| 6 | 1 | 26 | 2 | 46 | 2 | 66 | 4 | 86 | 3 |
| 7 | 4 | 27 | 4 | 47 | 1 | 67 | 3 | 87 | 1 |
| 8 | 1 | 28 | 1 | 48 | 4 | 68 | 4 | 88 | 4 |
| 9 | 1 | 29 | 2 | 49 | 1 | 69 | 3 | 89 | 3 |
| 10 | 4 | 30 | 3 | 50 | 1 | 70 | 4 | 90 | 3 |
| 11 | 2 | 31 | 1 | 51 | 4 | 71 | 3 | 91 | 4 |
| 12 | 3 | 32 | 2 | 52 | 2 | 72 | 4 | 92 | 1 |
| 13 | 1 | 33 | 4 | 53 | 3 | 73 | 3 | 93 | 1 |
| 14 | 2 | 34 | 2 | 54 | 1 | 74 | 3 | 94 | 1 |
| 15 | 4 | 35 | 3 | 55 | 4 | 75 | 1 | 95 | 4 |
| 16 | 1 | 36 | 1 | 56 | 1 | 76 | 2 | 96 | 2 |
| 17 | 1 | 37 | 1 | 57 | 4 | 77 | 2 | 97 | 2 |
| 18 | 2 | 38 | 4 | 58 | 4 | 78 | 1 | 98 | 3 |
| 19 | 3 | 39 | 2 | 59 | 3 | 79 | 3 | 99 | 3 |
| 20 | 3 | 40 | 2 | 60 | 3 | 80 | 4 | 100 | 2 |

ANSWERS