## Paid Practice Test Bundle 2 Paper 3



|  | C |
| :---: | :---: |
| TT degrees |  |
|  | D |
| $\pi^{\wedge} 2$ degrees |  |
|  | Q 5 |
| When Ns>Np then transformer is |  |
|  | A |
| step up |  |
|  | B |
| step down |  |
|  | C |
| primary |  |
|  | D |
| secondary |  |
|  | Q 6 |
| An electrical instrument which is used to measure potential difference between two points is called A |  |
| Barometer |  |
|  | B |
| Manometer |  |
|  | C |
| Galvanometer |  |
|  | D |
| Voltmeter |  |
|  | Q 7 |
| relationship exists between current and voltage in terms of Ohm's law |  |
|  | A |
| Non linear |  |
|  | B |
| Varying |  |
|  | C |
| Linear |  |
|  | D |
| None of them |  |
|  | Q 8 |
| When total work done on a particle is positive then |  |
| KE remain constant A | A |
| KE remain constant |  |
|  | B |
| momentum increases |  |
|  | C |
| KE decreases |  |

all of these $\quad \mathrm{D}$

Q 9
Phase difference between two particles of a medium lying between two consecutive nodes is:
Zero

| $\pi / 2$ | B |
| :--- | :---: |
| $\pi / 4$ | C |

D
$\pi$
B- decay means emission of electron from Q 10
radioactive nucleus
B
innermost electron orbit
a stable nucleus
outer mot electron orbit
Q 11
Which of the following statement is not true about heat engine?
A
All real engines are less efficient than Carnot engine
B
All real engines are less efficient due to friction and heat losses
C
efficiency of Carnot engine working between same two temperatures, depends on the nature of working substance

D
the larger the temperature difference of two reservoirs, the greater is the efficiency
Q 12
Which of the following substances cannot be emitted by radioactive substances during their decay? A

## protons

B
neutrinos
C
helium nuclei

## D

electrons


```
2
D
```

5

Q 17
What will be the decay constant of 1 Curie sample of radioactive substance of mass 214 , its half life is 26.8 min ?
$4.31^{*} 10^{\wedge}-4$
B
$4.31^{*} 10^{\wedge}-5$
$4.31^{* 1} 0^{\wedge} 5$
0.431

D
$\square$
The four bulbs of 40 W each are connected in series with a battery across them. Which of the following statement is true?

## A

The current through each bulb in same B
The voltage across each bulb is not same

The power dissipation in each bulb is not same

## D

None of the above

| Q 19 |  |
| :---: | :---: |
| The star which is very hot will emit color |  |
|  | A |
| Blue |  |
|  | B |
| red |  |
|  | C |
| orange |  |
|  | D |
| green |  |
|  | Q 20 |
| Atomic spectra is a ___ spectra |  |
|  | A |
| continuous |  |



| neutrons | C |
| :--- | :--- |
| all of these | D |

## Q 25

| The coulomb constant is defined as:... |  |
| :--- | :--- |
| $1 /(4 \pi \varepsilon)$ | A |
| $4 /(\pi \varepsilon)$ | C |
| $4 \pi \varepsilon$ | D |
| $\pi /(4 \varepsilon)$ | Q 26 |

When a man walks on a surface horizontally with constant velocity, work done by

```
friction is zero
```

| contact force is zero | B |
| :--- | :--- |

gravity is zero

| all of these | D |
| :--- | :--- |

What is the measure in radians of the angle $\mathrm{A}=330^{\circ}$ ?
$11 \pi / 3$

| $7 \pi / 4$ | B |
| :--- | :--- |
|  | C |

$7 \pi / 6$

| $11 \pi / 6$ | D |
| :--- | :--- |
|  | Q 28 |

The direction of induced current is always so as to oppose the change which causes the current is A

## Faraday's Law

## B

## Lenz's Law

## Ohm's Law

Kirchoff's Law
The terminal potential difference of a battery is greater than its emf when
The internal resistance of a battery is infinite A
The internal resistance of a battery is zero

| The battery is charged |  |
| :--- | :--- |
| The battery is discharged | B |
| work on arbitrary system means a transfer of energy to the system  <br> Positive A <br> negative B <br> Can be positive or negative C <br> None of the above D |  |

Determine the linear velocity of a point rotating at an angular velocity of $12 \pi$ radians per second at a distance of 8 centimeters from the center of the rotating object.

A
$31.6 \mathrm{~cm} / \mathrm{s}$
$301.6 \mathrm{~cm} / \mathrm{s}$
$30.6 \mathrm{~cm} / \mathrm{s}$

3016 cm/s
Q 32
Find the Lorentz force of a charge 2.5C having an electric field of 5 units and magnetic field of 7.25 units with a velocity $1.5 \mathrm{~m} / \mathrm{s}$.

| 68.93 | B |
| :--- | :--- |
| 89.39 | C |
| 63.98 | D |



| using interferometer |  |
| :---: | :---: |
|  | C |
| using a rotating plane mirror |  |
|  | D |
| using an octagonal rotating mirror D |  |
| Q 37 |  |
| Centripetal acceleration always acts | the center |
|  | A |
| away |  |
| B |  |
| towards |  |
| C |  |
| normally |  |
| D |  |
| tangentially |  |
| Q 38 |  |
| A gas expands from V1 to V2. The amout of work done is greatest in |  |
|  | A |
| Adiabatic |  |
| B |  |
| Isobaric |  |
| C |  |
| Isochoric |  |
| D |  |
| Isothermal |  |
| Q 39 |  |
| A wave passes through a medium, each particle of the medium performs 100 complete vibrations in 5 seconds. What is the frequency of the wave: |  |
| , | A |
| 2 Hz |  |
| B |  |
| 20 Hz |  |
| C |  |
| 4 Hz |  |
| D |  |
| 40 Hz |  |
| Q 40 |  |
| x-rays are produced in ___ tube |  |
| Ar filled A |  |
|  |  |
| He filled B |  |
|  |  |





| orange D |
| :---: |
|  |  |
|  |
| The energy stored in a parallel plate capacitor is 24 J . What is the potential difference between the plates if the capacitance of the capacitor is $3 \mu \mathrm{~F}$ ? |
| A |
| 4 kV |
| B |
| 16 kV |
| C |
| 54 kV |
| D |
| 8 kV |
| Q 54 |
| A beam of ion with velocity $2^{*} 10^{\wedge} 5 \mathrm{~m} / \mathrm{s}$ enters normally into a magnetic field of 0.04 T . The specific charge of ion is $5^{*} 10^{\wedge} 7 \mathrm{C} / \mathrm{kg}$. Radius of circle is |
| A |
| 0.1 m |
| B |
| 0.16 m |
| C |
| 0.2 m |
| D |
| 0.25 m |
| Q 55 |
| The unstable atom means |
| A |
| electrons are increasing |
| B |
| protons are increasing |
| C |
| neutrons are increasing |
| D |
| any of these |
| Q 56 |
| Two tuning forks produces N beats. If one of these tuning forks has the frequency $f$, then the frequency of the other would be: |
| A |
| N-f |
| B |
| N/f |
| C |
| N * |



| cell wall | C |
| :--- | :--- |
| capsule | D |
| Its protein in nature | Q 61 |
| fats /cholestrol | A |
| ATP | B |
| not knwon without screening test | C |
| Ligase | D |
| What are the Phages that show lysogenic cycle called? |  |
| Lytic phages | A |
| virulent phages | B |
| Temperate phages | C |
| None of these | D |
| Evaporation of water from aerial parts of plants is called: |  |
| ascent of sap | A |
| deplasmolysis | B |
| none of these | D |







| midbrain D |
| :---: |
|  |  |
|  |
| Which of the following is a mesh of interconnected membranes involved in protein synthesis and transport? |
| A A |
| ER |
| B |
| cytoskeleton |
| C |
| golgi apparatus |
| D |
| all of these |
| Q 87 |
| Where in the female reproductive system thousands of eggs are found? |
|  |
| ovaries |
| B |
| vagina |
| C |
| fallopian tube |
| D |
| uterus |
| Q 88 |
| Which of the following are assembled and disassembled during the cell cycle? |
| A |
| microtubules |
| B |
| microfilaments |
| C |
| all of these |
| D |
| none of these |
| Q 89 |
| Which of the following would not be found in a prokaryotic cell? |
| A |
| mitochondria |
| B |
| RNA |
| C |
| Ribosomes |
| D |
| plasma membrane |







| Viruses without nuclear envelope is called as? |  |
| :---: | :---: |
|  |  |
|  | A |
| icosahedral virus |  |
|  | B |
| naked virus |  |
|  | C |
| enveloped virus |  |
|  | D |
| bilayer virus |  |
|  | Q 112 |
| Who proposed pressure flow theory? |  |
|  | A |
| Dixon |  |
|  | B |
| Mohl |  |
|  | C |
| Sanger |  |
|  | D |
| Munch |  |
|  | Q 113 |
| Which of the following substance is most favorable to form structural component of biological membranes? |  |
|  | A |
| Hydrophilic Carbohydrates |  |
|  | B |
| Hydrophobic fats |  |
|  | C |
| both a and b |  |
|  | D |
| none of these |  |
|  | Q114 |
| Omnis cellula e cellula is hypothesized by? |  |
|  | A |
| schleiden |  |
|  | B |
| lorenz oken |  |
|  | C |
| louis pasteur |  |
|  | D |
| rudolph virchow |  |
|  | Q 115 |
| Which of the following statement about neuron is | is incorrect? |



| Gram-negative bacteria are more likely to cause systemic effects because their outer membrane protects them from antibiotics |
| :---: |
| C |
| both a and b |
| D |
| none of these |
| Q 120 |
| The epididymis, vas deferens, and urethra are a series of ducts found in which body system? |
| A |
| Endocrine |
| B |
| Lymphatic |
| C |
| Digestive |
| D |
| Male reproductive |
| Q 121 |
| The Urey-Miller experiment determined which of the following results? |
| A |
| DNA replicates by semiconservative replication |
| B |
| Cyanobacteria were responsible for the oxygenation of the atmosphere |
| C |
| The early atmosphere was composed of ammonia and methane |
| D |
| Organic molecules can arise from inorganic precursors |
| Q 122 |
| Which hormone is involved in opening and closing of stomata? |
| A |
| citric acid |
| B |
| Oxaloacetic acid |
| C |
| abscisic acid |
| D |
| None of these |
| Q 123 |
| What types of viruses contain the enzyme lysozyme to aid in their infection? |
| A |
| bacteriophage |
| B |
| animal viruses |





Phenols and ethers


| Cation |
| :---: |
| Q 139 |
| Which of the carboxylic acid is used in medicine as local irritant; |
| A |
| formic acid |
| B |
| acetic acid |
| C |
| benzoic acid |
| D |
| amino acid |
| Q 140 |
| Which of the following causes the inactivation of enzymes ___? |
| A |
| Concentration of substrate |
| B |
| Optimum temperature |
| C |
| Beta radiation |
| D |
| Optimum pH |
| Q 141 |
| In oxidation number method of Balancing the first step is to write |
| A |
| Oxidation number on Reactants |
| B |
| Oxidation number on products |
| C |
| Oxidation number for both reactants \& Products |
| D |
| None of these |
| Q 142 |
| Proteoses enzyme \& peptones belong to which type of protein? |
| A |
| Simple protein |
| B |
| Derived proteins |
| C |
| Conjugated proteins |



| NH3 |
| :---: |
| B |
| $\mathrm{H}_{2} \mathrm{O}$ |
| C |
| HF |
| D |
| $\mathrm{CH}_{4}$ |
| Q 147 |
| Which one of the following is not an example of state function? |
| A |
| Temperature (T) |
| B |
| Volume (V) |
| C |
| Enthalpy (E) |
| D |
| Heat (q) |
| Q 148 |
| Fractions of Crude petroleum can be obtained by using ? $\qquad$ |
| Destructive distillation |
| B |
| Fractional distillation |
| C |
| Vacuum distillation |
| D |
| Distillation |
| Q 149 |
| The maximum probability of finding an electron is at distance of |
| 0.53 mm |
| B |
| 0.53nm |
| C |
| 0.153 nm |



[Ar]4s13d5

| d-block elements are present _ | Q 157 |
| :--- | :--- |
| Right of the periodic table | in the periodic table ? |
| Left of the periodic table | B |
| Bottom of periodic table | D |
| Between s and p block elements |  |

## Q 158

The elements of which group show abnormally very low values of electron affinity in every period of periodic table
group 2A

```
group 5A
```

C
both A \& B

```
none of these
```

```
159
```

When does it mean, when a reaction is exothermic? A
Energy content of product is more

## B

Energy content of reactant is less
Heat is transferred from the system to surrounding
D
Heat is transferred from the Surrounding to the system

| In which direction Cathode rays deflected in the presence of magnetic A |
| :---: |
| Moves upward |
| B |
| Moves downward |
| C |
| Move randomly |
| D |
| Moves in straight line |
| Q 161 |
| More energy to remove an electron from_? |
| A |
| Half filled subshell |
| B |
| Completely Filled Subshell |
| C |
| Partially filled subshell |
| D |
| Both a and b |
| Q 162 |
| The E.m.f of a Cell is equals to |
| A |
| Emf(oxidation) - Emf(Reduction) |
| B |
| Emf(oxidation) + Emf(Reduction) |
| C |
| Emf(oxidation) x Emf(Reduction) |
| D |
| None of these |
| Q 163 |
| Which of the following is correct relationship between Boiling point and Intermolecular forces? |
| A |
| Boiling point increases if intermolecular forces increases |
| B |
| Boiling point decreases if intermolecular forces increases |


| Boiling point increases if intermolecular forces decreases |
| :---: |
|  |  |
|  |
| Boiling point is not affected by intermolecular forces |
| Q 164 |
| Addition of 2\% gypsum in cement |
| A |
| Triggers hydration |
| B |
| Triggers hydrolysis |
| C |
| Prevents rapid hardening |
| D |
| All of the above |
| Q 165 |
| The increase in size of an anion is due to increase in repulsion of |
| electron-proton |
| B |
| electron-electron |
| C |
| electron-nucleus |
| D |
| proton-nucleus |
| Q 166 |
| Charles's law is not being obeyed when temperature is measured on Celsius scale. Thatâ $\epsilon^{T M}$ s why new scale called $\qquad$ has been developed |
| A |
| zero Fahrenheit |
| B |
| zero Kelvin |
| C |
| absolute Fahrenheit |
| D |
| all of these |


|  | Q 167 |
| :---: | :---: |
| Reaction of Sodium with water is an ex | example of |
|  | A |
| Reversible reaction |  |
|  | B |
| Endothermic |  |
|  | C |
| Irreversible |  |
|  | D |
| Slow |  |
|  | Q 168 |
| The second bond in ethyne is: |  |
|  | A |
| Pi bond between hybridized orbitals |  |
|  | B |
| Sigma bond between hybridized orbita |  |
|  | C |
| Pi bond between unhybridized orbitals |  |
|  | D |
| Sigma bond between unhybridized orb | bitals |
|  | Q 169 |
| In Which of the following reaction of $c$ bonding and OH group is replaced? | carboxylic acids only $\mathrm{C}=\mathrm{O}$ group involved in |
|  | A |
| Reaction of carboxylic acid with NaOH |  |
|  | B |
| Reaction of carboxylic acids with Carb | bonate |
|  | C |
| Formation of anhydride |  |
|  | D |
| Reaction of carboxylic acids with SOC |  |
|  | Q 170 |
| lodoform test is performed to distinguis | ish between |
|  | A |
| alcohols and phenols |  |



| none of these |
| :---: |
| Q 174 |
| Which of the following is formed during $\mathrm{SN}_{1}$ reactions? |
| A |
| Secondary carbocation |
| B |
| Primary carbocation |
| C |
| Tertiary carbocation |
| D |
| Methyl carbocation |
| Q 175 |
| If 9.8 g of sulfuric acid dissolved in excess quantity of water, it will yield moles of hydrogen ion ( $\mathrm{H}+$ ) and ___mole of sulphate ions (SO4 -2) |
| A |
| 0.1, 0.2 |
| B |
| 0.1, 0.3 |
| C |
| 0.2, 0.4 |
| D |
| 0.2,0.1 |
| Q 176 |
| The transition elements belongs to Group VIB are |
| A |
| Zn ,Cd, Hg |
| B |
| Fe, Ru, Os |
| C |
| Mn, Te, Re |
| D |
| Cr, Mo, W |
| Q 177 |
| Ice occupies more space than liquid water by __? |
| A |
| 0.1 |


| B |
| :---: |
| 0.09 |
| C |
| 0.05 |
| D |
| 0.06 |
| Q 178 |
| If Kp and Kc have same values $\Delta \mathrm{n}$ will be |
| A |
| Maximum |
| B |
| Minimum |
| C |
| Zero |
| D |
| Negligible |
| Q 179 |
| The element caesium bears resemblance with |
| A |
| Ca |
| B |
| Cr |
| C |
| Both of the above |
| D |
| None of the above |
| Q 180 |
| Enzymes which bring about exchange of functional group is called |
| Oxidoreductase |
| B |
| Hydrolases |
| C |
| Ligases |
| D |

## Transferases

## English

Q 181

## it was raining, he went out without a raincoat. <br> A

## Even

Since

| Unless |
| :--- |
| Although |
|  |
| I found this bangle (A) while digging (B) in the backyard.(C) I don't know who it | belonged to. (D)

I found this bangle

## B

while digging
C
in the back yard.
D
I don't know who it belonged to.

## Q 183

We will need umbrella today.
a
an
the

## D

no article



| Sarah is so lazy. She never __ to help her mum. |
| :---: |
| A |
| try |
| B |
| trying |
| C |
| tries |
| D |
| trys |
| Q 192 |
| The thief __ before the policeman reaches. |
| A |
| will have escape |
| B |
| will have escaped |
| C |
| will escaped |
| D |
| will escape |
| Q 193 |
| she is |
| A |
| shes |
| B |
| shes' |
| C |
| she's |
| D |
| sh'es |
| Q 194 |
| My father $\qquad$ (buy) us popcorn and orange juice. A |
| buy |
| B |
| will buy |



| Q 198 |  |
| :---: | :---: |
| We have $\qquad$ small house in $\qquad$ village in Netherlands. |  |
|  |  |
| A |  |
| the... an...a |  |
| B |  |
| an...a... the |  |
| C |  |
| a...a...the |  |
| D |  |
| a...an... the |  |
| Q 199 |  |
| None of them ___ able to solve this question. |  |
|  |  |
| is |  |
| B |  |
| were |  |
| C |  |
| was |  |
| D |  |
| would be |  |
| Q 200 |  |
| Find the error? |  |
| It has not rained since April. A |  |
|  |  |
| B |  |
| The jurors walked solemnly into the room. |  |
| C |  |
| Had we known, we would not have come. |  |
| D |  |
| No mistakes |  |

## Logical Reasoning




| 1, 3, 2, 4, 5 |
| :---: |
| C |
| 1, 2, 3, 4, 5 |
| D |
| 2, 3, 5, 1, 4 |
| Q 208 |
| Statement The availability of imported fruits has increased in the indigenous market and so the demand for indigenous fruits has been decreased. I. To help the indigenous producers of fruits, the Government should impose high import duty on these fruits, even if these are not of good quality. II. The fruit vendors should stop selling imported fruits. So that the demand for indigenous fruits would be increased. |
| A |
| both of them follows |
| B |
| None of them follows |
| C |
| Only I follows |
| D |
| Only II follows |
| Q 209 |
| Statement: There has been a high increase in the incidents of atrocities against women in the city during the past few months. The police authority has been unable to nab the culprits who are committing crime against women. |
| A |
| Statement I is the cause and statement II is its effect. |
| B |
| Statement II is the cause and statement I is its effect |
| C |

Both the statements I and II are independent causes
Both the statements I and II are effects of independent causes

## Q 210

Fact 1 Pictures can tell a story Fact 2 All storybooks have a picture Fact 3 Some story books have words If the above three statements are facts than which of the following statement will also be a fact I. Pictures can tell a story better than words
can II. The stories in storybooks are simple III. Some story books have both pictures and words

$$
\mathrm{A}
$$

Only I

## B

Only II
C
Only III

## D

None of them is a fact

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