

SEAT NO. : _____

SUPERVISOR'S SIGN.: _____

**UNIVERSITY OF MUMBAI'S
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY (DPAT)
SECOND ROUND
ENTRANCE EXAM**

DATE: 29-JUL-16

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

NOTE: ANSWER ALL THE QUESTIONS

Q1 : Define the following:

[20 MARKS]

1) Isothermal process is -----

2) Atomic number is -----

3) Neutralisation is -----

4) Molality is -----

5) Thermodynamics deals with -----

6) Galvanisation is -----

7) Rusting is -----

8) Oils are -----

9) An antiseptic is -----

10) Dissociation is -----

Q.2] Circle Your choice a,b,c,or d.

[20 marks]

- 1) Buffer solution is one which has
 - a) Reserve acidity
 - b) Reserve basicity
 - c) $\text{pH} = 7$
 - d) Reserve acidity and Reserve basicity
- 2) The pH value of a solution is zero, the solution is,
 - a) A strong acid
 - b) A very weak acid
 - c) neutral
 - d) A base
- 3) If vapour pressure of water at 298 k in 18 mm Hg, its vapour pressure at 373 k would be
 - a) 760 mm
 - b) 76 mm
 - c) 760 cm
 - d) 18 mm
- 4) When gas expands in vacuum, the work done by the gas is
 - a) Maximum
 - b) Zero
 - c) Less than zero
 - d) Greater than zero
- 5) pH of blood is maintained constant by mechanism of
 - a) Common ion effect
 - b) Buffer
 - c) Solubility
 - d) All of these
- 6) Brass consists of
 - a) Zn and Cu
 - b) Zn & Sn
 - c) Cu, Sn & Zn
 - d) Zn, Ni & Sn
- 7) Lower number of alcohols
 - a) Are insoluble in water
 - b) Are soluble in water
 - c) Are insoluble in acetaldehyde
 - d) Are insoluble in petrol
- 8) Chemically soap is
 - a) A base
 - b) An acid
 - c) A salt
 - d) A fat
- 9) Ether free from moisture and alcohol is known as
 - a) Dry ether
 - b) Absolute ether
 - c) Pure ether
 - d) Spirit ether
- 10) Fats contain higher percentage of
 - a) Unsaturated fatty acids
 - b) Saturated fatty acids
 - c) Monohydric alcohols
 - d) Dihydric alcohols
- 11) Which of the following number is the least common multiple of the numbers 2, 3, 4 and 5
 - a) 24
 - b) 30
 - c) 40
 - d) 60
- 12) If the altitude of a triangle increases by 5% and the base of the triangle increases by 7%, by what percent the area of the triangle increases?
 - a) 3.33%
 - b) 6%
 - c) 12%
 - d) 12.35%
- 13) If the $\frac{1}{2} + \frac{1}{4} = \frac{x}{15}$, then x is,
 - a) 11.25
 - b) 12
 - c) 13.75
 - d) 14
- 14) If the area of a triangle with base S is equal to the area of a square with side S, then the altitude of the triangle is
 - a) S
 - b) 2S
 - c) 3S
 - d) 4S
- 15) Of the number 7, 9, 11, 13, 29 and 33 how many are prime numbers
 - a) None
 - b) 4
 - c) 5
 - d) All

Q VI Write the molecular Formula of

[3 Marks]

a) Hydrochloric acid

b) Sodium Carbonate

c) Ferrous Sulphate

d) Carbon tetra chloride

e) Acetone

f) Butyl alcohol

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**UNIVERSITY OF MUMBAI'S
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
(DPAT)
ENTRANCE EXAM**

DATE: 18-JUL-16

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

NOTE: ANSWER ALL THE QUESTIONS

Q1 : Define the following:

[20 MARKS]

1) Buffer Solution is -----

2) 0.1N NaOH means -----

3) Tranquillizers are -----

4) Adiabatic reaction is -----

5) Supplementary angles are -----

6) The third law of Thermodynamics states -----

7) Heat of reaction is -----

8) pOH is -----

9) Ionisation is -----

10) Atomic mass number is-----

Q.2] Circle Your choice a,b,c,or d.

[20 marks]

- 1) Cane Sugar on hydrolysis gives
 - a) glucose and maltose
 - b) Glucose and Lactose
 - c) Glucose and fructose
 - d) only glucose
- 2) Solution Of Phenol is used as
 - a) an antibiotic
 - b) an analgesic
 - c) an antioxidant
 - d) a disinfectant
- 3) If M and m are the molarity and molality of the given aqueous solution, thus
 - a) $M=m$
 - b) $M<m$
 - c) $M>m$
 - d) $M\leq m$
- 4) If an Acid is diluted
 - a) pH increases
 - b) pH decreases
 - c) No change occurs
 - d) Can vary depending on the acid
- 5) Protons Were discovered by
 - a) Chadwick
 - b) Goldstein
 - c) Rutherford
 - d) Bohr
- 6) Zinc is Mainly extracted from
 - a) Willinite
 - b) Calamine
 - c) Zinc Blende
 - d) Pyrolurite
- 7) Galvanis ation Process is
 - a) Deposition of Zinc on iron
 - b) Deposition of Nickel on iron
 - c) Deposition of aluminum on iron
 - d) Deposition of Copper on iron
- 8) Chloroform is readily soluble in
 - a) ether
 - b) acetone
 - c) water
 - d) both in a &b
- 9) Butter Contains
 - a) lactic acid
 - b) Butyric acid
 - c) citric acid
 - d) acetic acid
- 10) Fats are esters of
 - a) fatty acid
 - b) Glycerol
 - c) glyceride
 - d) Both a &b
- 11) An angle of x degrees has the property that of its Complement is equal to 1/6 of its supplement where x is
 - a) 30
 - b) 60
 - c) 63
 - d) 72
- 12) It takes 50 workers 4 hours to dig a sewer the same how long should it take 30 workers today the same sewer
 - a) 5 hrs 12 minutes
 - b) 6 hrs 12 minutes
 - c) 6 hrs 20 minutes
 - d) 6 hrs 40 minutes
- 13) If the length of a Rectangle is increased by the 11% and the width remains the same than the area of rectangle is increased by
 - a) 11%
 - b) 21%
 - c) 110%
 - d) 121%
- 14) The angles of a triangle are in the ratio 2:3:4:, the largest angle in the triangle is
 - a) 40°
 - b) 70°
 - c) 75°
 - d) 80°
- 15) If the ratio of the radic of two circles is 3 to 2, then the ratio of the areas of the two circles is
 - a) 3 to 4
 - b) 4 to 9
 - c) 9 to 4
 - d) 3 to 2

Q VI Write the molecular Formula of

[3 Marks]

- a) Phosphoric acid _____

- b) Hydrogen peroxide _____

- c) Potassium Permanganate _____

- d) Ethyl alcohol _____

- e) Methane _____

- f) Acetic acid _____

SEAT NO. : _____

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
(DPAT)
ENTRANCE EXAM
THIRD ROUND

DATE: 17-AUG-15

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

NOTE: 1) DO NOT USE YOUR MOBILE IN THE EXAMINATION HALL
2) ANSWER ALL QUESTIONS

Q1. DEFINE THE FOLLOWING (20 marks)

- 1) Boiling point of a water is -----

- 2) Isothermal process is -----

- 3) Normality is -----

- 4) pH is -----

- 5) Neutralization is -----

- 6) Electrolysis is -----

- 7) Atomic mass number is -----

- 8) Analgesic is -----

- 9) Thermochemistry is -----

- 10) Calorie is -----

QII. CIRCLE YOUR CHOICE a, b, c, or d
marks)

(20

- Proton were discovered by
a) Chadwick b) Goldstein
c) Rutherford d) Bohr
- Brass consists of
a) Zn and Cu b) Zn and Sn
c) Cu, Sn and Zn d) Zn, Ni and Sn
- Chloromyactin is effective in the treatment of
a) Cholera
b) Typhoid
c) Tuberculosis
d) Malaria
- Molality is expressed
a) Litre/mole b) mole/litre
c) moles/kg d) grams/litre
- $\text{pH} + \text{pOH}$ is,
a) 7 b) 0
c) 10 d) 14
- Formic acid is obtained from
a) Vinegar b) Red ants
c) Butter d) Oil
- The substance which can act both as an antiseptic and disinfectant is
a) aspirin b) chloroxylenol c) Bethional d) Phenol

8. When NaCl is added to water
- a) freezing point is raised
 - b) boiling point is depressed
 - c) freezing point does not change
 - d) boiling point is raised
9. pH of blood is maintained constant by mechanism of
- a) Common ion effect
 - b) Buffer
 - c) Solubility
 - d) all of these
10. Cane sugar on hydrolysis gives
- a) glucose and maltose
 - b) glucose and Lactose
 - c) glucose and fructose
 - d) only glucose
11. What is ratio of $2/3$ to $5/4$
- a) $10/12$
 - b) $8/15$
 - c) $20/6$
 - d) $2/7$
12. Of the numbers 7,9,11,13,29,33 how many are prime numbers
- a) none
 - b) 4
 - c) 5
 - d) all
13. 25 men can unloaded a truck in 1 hour and 30 minutes, how long should it take for 15 men to unload the truck
- a) 2 hour
 - b) 2.3 hours
 - c) 2.5 hours
 - d) 3 hours
14. Which of the following numbers is the least common multiple of the numbers, 2,3,4&5
- a) 24
 - b) 30
 - c) 40
 - d) 60
15. of $1/3 + 2/7 = X/42$, where X is
- a) 13
 - b) 21
 - c) 24.5
 - d) 26
16. If, the radius of a sphere is increased by a factor of 2, then the volume is increased by a factor of
- a) 2
 - b) 4
 - c) 6
 - d) 8
17. The area of a rectangular field is 1000 square yards , if the length of the field is "y" yards , then . how many yards in the parameter of the field
- a) $2y+1000$
 - b) $2y+2000/y$
 - c) 1000
 - d) $2y+1000/y$

18. If the altitude of the triangle increases by 5% and the base of the triangle increases by 7%, by what percent does the area of the triangle increase?

- a) 3.33%
- b) 6%
- c) 18%
- d) 12.35%

19. If the number of two digits are reversed, it becomes 18 greater than the number. Find the number if the sum of the digits is equal to 4.

- a) 31
- b) 22
- c) 13
- d) 40

20. A number is as much greater than 17, as it is less than 57, find the number.

- a) 32
- b) 37
- c) 40
- d) 44

Q III. EXPAND THE FOLLOWING ABBREVIATIONS (02 marks)

1. IPS
2. MBA
3. MSc
4. UNO

Q IV. WHAT IS THE BUSINESS OF THE FOLLOWING ORGANISATIONS (02 marks)

1. LARSEN AND TOUBRO
2. ASHOK LEYLAND
3. BLUE DART
4. KANSAI NEROLAC

QV. WHAT IS THE ATOMIC NUMBER OF (03 marks)

1. Hydrogen
2. Nitrogen
3. Oxygen
4. Aluminium
5. Sodium
6. Helium

QVI. WRITE THE MOLECULAR FORMULA OF

(03 marks)

1. Sodium hydroxide
2. Phosphoric acid
3. Ethyl alcohol
4. Ferric phosphate
5. Potassium permanganate
6. Calcium carbonate

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UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
(DPAT)
ENTRANCE EXAM

DATE: 13-Jul-15

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

NOTE: ANSWER ALL THE QUESTIONS

Q1] Define the following :

(20 Marks)

- 1) Solution is _____

- 2) Thermochemistry is _____

- 3) Disinfectants are _____

- 4) Reversible process is _____

- 5) Antioxidants are _____

- 6) Endothermic reaction is _____

- 7) Molality is _____

- 8) Complementary angles are _____

- 9) The First law of Thermodynamics states _____

- 10) Specific gravity is _____

Q. II] Circle your choice a, b, c or d.

(20 Marks)

- 1) During rusting of iron it gets,
a) oxidised b) reduced c) oxidised and hydrated
d) hydrated

- 2) If the Hydrogen ion concentration of an acid is decreased ten times, its pH will be,
- a) increased by one b) decreased by one
c) remains unchanged d) increased by two
- 3) Formic Acid is obtained from,
- a) vinegar b) red ants
c) butter d) oil
- 4) Which of the following is not a Thermodynamic property
- a) time b) temperature
c) pressure d) volume
- 5) Solution of Phenol is used as,
- a) an antibiotic b) an analgesic
c) an antioxidant d) a disinfectant
- 6) The substance obtained at the cathode on electrolysis of NaOH solution is,
- a) H₂O b) Na
c) H₂ d) O₂
- 7) Galvanisation process is,
- a) deposition of Zinc on iron b) deposition of Aluminium on iron
c) deposition of Nickel on iron d) deposition of copper on iron.
- 8) The number of neutrons in the nucleus of an atom is represented by,
- a) $A - Z$ b) $Z - A$
c) A d) Z
- 9) Which of the following is an example of a homogeneous system,
- a) ice in contact with water b) chlorine, water and chloroform
c) a mixture of oxygen and nitrogen gas d) all of these

- 10) Sleep inducing drug is called,
 a) analgesic b) tranquilizer
 c) antibiotic d) antiseptic
- 11) 0.03 times 0.05 is
 a) 15% b) 1.5%
 c) 0.15% d) 0.015%
- 12) $x + y = 4$ and $x - y = 3$ then $x + 2y$ is,
 a) 0.5 b) 3.5
 c) 4 d) 4.5
- 13) If the ratio of the areas of two squares is 2 : 1, then the ratio of the perimeters of the squares is,
 a) 1 : 2 b) $1 : \sqrt{2}$
 c) $\sqrt{2} : 1$ d) 2 : 1
- 14) If 15 men working independently and at the same rate can manufacture 27 baskets in an hour, how many baskets would 45 men working independently and at the same rate manufacture in 40 minutes,
 a) 27 b) 40
 c) 54 d) 81
- 15) The area of a square increases by 69%, then the side of the square increases by,
 a) 13% b) 30%
 c) 39% d) 69%
- 16) The next number in the geometric progression, 5, 10, 20 is,
 a) 25 b) 30
 c) 40 d) 50
- 17) The angles of a triangle are in the ratio 1 : 2 : 2, then the triangle is,
 a) isosceles b) obtuse
 c) equilateral d) right triangle
- 18) The addition of a positive number with its reciprocal is twice of their difference, the number is,
 a) $\sqrt{2}$ b) $1/\sqrt{2}$
 c) $\sqrt{3}$ d) $1/\sqrt{3}$
- 19) If the triangle has a base B, and the altitude of the triangle is twice the base, then the area of the triangle is,
 a) $1/2 AB$ b) AB
 c) B^2 d) $2B^2$

20) If the product of 3 consecutive integers is 210, then the sum of two smaller integers is,

- a) 11
- b) 12
- c) 13
- d) 18

Q III] Expand the following abbreviations. (2 Marks)

- a) GICED
- b) ILO
- c) MBA
- d) PTO

Q IV] What is the business of the following organisations (2 Marks)

- a) Jenson Nicholson
- b) Ashok Leyland
- c) Amazon.com
- d) Mazagaon Docks

Q V] What is the atomic number of, (3 Marks)

- a) Nitrogen
- b) Potassium
- c) Chromium
- d) Manganese
- e) Carbon
- f) Helium

Q VI] Write the molecular formula of (3 Marks)

- a) Sulphuric Acid
- b) Sodium Thiosulphate
- c) Potassium Dichromate
- d) Ferric Phosphate
- e) Acetone
- f) Butyl Alcohol

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SEAT NO. : _____

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
(DPAT)
ENTRANCE EXAM
SECOND ROUND

DATE: 03-Aug-2015 TIME : 11.00AM TO 12.00 NOON MARKS : 50

NB: ANSWER ALL QUESTIONS

Q1. DEFINE THE FOLLOWING (20 marks)

- 1) Buffer solution is -----

- 2) Polymerization is -----

- 3) Antibiotics are -----

- 4) Neutron number is -----

- 5) Irreversible process is -----

- 6) Ionisation is -----

- 7) Exothermic reaction is -----

- 8) Supplementary angles are -----

- 9) Pythagoras theorem states -----

10) An Erg is

QII. CIRCLE YOUR CHOICE a,b, c, or d

(20 marks)

1. Molarity is expressed as,
a) Litres/mole b) moles/litre
c) moles/kg d) grams/litre
2. When a solution contains equal concentration of hydrogen ions and hydroxyl ions, its PH will be around,
a) 14 b) 0
c) 10 d) 7
3. Thermodynamics is concerned with,
a) only the initial state of the system
b) only the final state of the system
c) only the time taken by the system
d) both, the initial and final state of the system
4. Fat and oils are the triesters of glycerol with,
a) amino acids, b) fatty acids
c) mineral acids d) glucose
5. If the PH value of a solution is zero, then the solution is,
a) a strong acid b) a very weak acid
c) neutral d) a base
6. Bronze consists of,
a) Zn and Cu b) Zn and Sn
c) Cu, Sn and Zn d) Zn, Si and Sn
7. Formalin is an aqueous solution of,
a) methylformate b) formic acid
c) formaldehyde d) potassium formate

17. The sum of 5 consecutive integers is 25, How many of the 5 consecutive integers are prime numbers.

- a) 2 b) 3
c) 1 d) 4

18. The product of two numbers is 5, and one of the numbers is $\frac{3}{2}$, then the sum of the two numbers is

- a) $4\frac{1}{3}$ b) $4\frac{2}{3}$
c) $4\frac{5}{6}$ d) $5\frac{1}{6}$

19. If the area of a triangle with base S, is equal to the area of a square of side S, then the altitude of the triangle is

- a) S b) 2S
c) 3S d) 4S

20. If the side of a square increases by 40% then the area of the square increases by

- a) 16% b) 40%
c) 96% d) 116%

Q III. EXPAND THE FOLLOWING ABBREVIATIONS (02 marks)

1. UGDPAT -
2. IAS -
3. WHO -
4. TOI -

Q IV. WHAT IS THE BUSINESS OF THE FOLLOWING ORGANISATIONS (02 marks)

1. Blue Dart -
2. Godrej and Boyce Ltd -
3. Akzo Nobel -
4. Jindal -

QV. WHAT IS THE ATOMIC NUMBER OF

(03 marks)

1. Sulphur -
2. Calcium -
3. Oxygen -
4. Lead -
5. Phosphorous -
6. Magnesium -

QVI. WRITE THE MOLECULAR FORMULA OF

(03 marks)

1. Lead Phosphate -
2. Water -
3. Benzene -
4. Hydrogen Peroxide -
5. Nitric acid -
6. Sodium Carbonate -

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UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
ENTRANCE EXAMINATION
DIPLOMA IN PAINT APPLICATION TECHNOLOGY (DPAT)

DATE : 26/06/2014

TIME : 11.00 AM TO 12.00 NOON

MARKS : 50

NOTE :- ANSWER ALL THE QUESTIONS.

Q.1] Define the following.

[20 marks]

1) Normality is _____
_____2) Freezing point of a liquid is _____
_____3) Isothermal process is _____
_____4) pOH is _____
_____5) Thermochemistry is _____
_____6) Antacid is _____
_____7) Atomic mass number is _____
_____8) Galvanisation is _____
_____9) Viscosity is _____
_____10) Density is _____

Q.2] Circle your choice A,B,C, or D

[20marks]

- 1) Rate of reaction depends on,
 - a) Concentration of reactants
 - b) Temperature
 - c) Catalyst
 - d) Concentration, Temperature and Catalyst

- 2) Protons were discovered by,
 - a) Chadwick
 - b) Goldstein
 - c) Rutherford
 - d) Bohr

- 3) pH of blood is maintained constant by mechanism of
 - a) Common ion effect
 - b) Buffer
 - c) Solubility
 - d) All of them

- 4) Thermodynamics is concerned with,
 - a) Only the initial state of the system
 - b) Only the final state of the system
 - c) Only the time taken by the system
 - d) Both the initial and final state of the system

- 5) Molality is expressed as,
 - a) Litres / mole
 - b) Moles / litre
 - c) Moles / kg
 - d) Grams / litre

- 6) Which of the following is a natural fibre,
 - a) Rayon
 - b) Jute
 - c) Terylene
 - d) Nylon

- 7) The instrument used to measure an optical rotation of a compound is,
 - a) Potentiometer
 - b) Polarimeter
 - c) Polarograph
 - d) Calorimeter

- 8) Chloroform is readily soluble in,
 - a) Ether
 - b) Acetone
 - c) Water
 - d) Both A & B

- 9) Cane sugar on hydrolysis gives,
 - a) Glucose and maltose
 - b) Glucose and lactose
 - c) Glucose and fructose
 - d) Only glucose

- 10) Soap is,
- A sodium salt of an alcohol
 - A potassium salt of an ester
 - A sodium salt of glycerin
 - A sodium salt of higher fatty acids
- 11) If a worker can pack $\frac{1}{6}$ of a carton of canned food in 15 minutes and there are 40 workers in the factory, how many cartons will be packed in the factory in $1\frac{2}{3}$ hours;
- 33
 - $43\frac{4}{9}$
 - $44\frac{4}{9}$
 - $45\frac{2}{3}$
- 12) If the sum of 5 consecutive integers is 35, How many of these five consecutive integers are prime numbers;
- 1
 - 2
 - 3
 - 4
- 13) If the operation $*$ is defined by $*a = a^2 - 2$, then $*(5)$ is,
- 527
 - 529
 - 621
 - 623
- 14) If $Y/X = 1/3$ and $X + 2Y = 10$, then X is,
- 3
 - 4
 - 5
 - 6
- 15) The area of a rectangular field is 1000 square meters. If the length of the field is Y meters, then how many meters is the perimeter of the field.
- $Y + 1000/Y$
 - $2Y + 1000$
 - $2Y + 1000/Y$
 - $2Y + 2000/Y$
- 16) Which of the following integers has the most divisors,
- 88
 - 91
 - 95
 - 99
- 17) What is the next number in the geometric progression 4, 12, 36 ?
- 60
 - 72
 - 108
 - 144
- 18) If an angle of X degrees has the property that its complement is equal to $\frac{1}{6}$ of its supplement, where X is,
- 30
 - 60
 - 63
 - 72

19) If the attitude of a triangle increases by 5 % and the base of the triangle increases by 7 % , by what percent the area of the triangle increases.

- a) 3.33 %
- b) 6 %
- c) 18 %
- d) 12.35 %

20) The angles of a triangle are in the ratio 2 : 3 : 4, then the largest angle in the Triangle is

- a) 40°
- b) 70°
- c) 75°
- d) 80°

Q.3] Expand the following abbreviations.

[02 marks]

- 1) UGDPAT
- 2) BHMS
- 3) IAS
- 4) TOI

Q.4] What is the business of the following Organisations.

[02 marks]

- 1) Amazon.com
- 2) Akzo Nobel
- 3) Larsen and Toubro
- 4) TISCO

Q.5] What is the atomic number of

[03 marks]

- 1) Oxygen
- 2) Sodium
- 3) Zinc
- 4) Carbon
- 5) Iron
- 6) Nickel

Q.6] Write the molecular formula of

[03 marks]

- 1) Potassium Permanganate
- 2) Hydrogen peroxide
- 3) Phosphoric acid
- 4) Chloroform
- 5) Sodium Chloride
- 6) Aluminium Sulphate

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
ENTRANCE EXAMINATION
DIPLOMA IN PAINT APPLICATION TECHNOLOGY (DPAT)
SECOND ROUND

UGDPAT II

DATE : / / 2014

TIME : 11.00 AM TO 12.00 NOON

MARKS : 50

NOTE:- ANSWER ALL QUESTIONS.

Q.1] Define the following.

[20 marks]

- 1) Neutralisation is _____

- 2) Boiling point of a liquid is _____

- 3) Exothermic reaction is _____

- 4) pH is _____

- 5) Thermodynamics is _____

- 6) Analgesics are _____

- 7) Atomic number is _____

- 8) Electrolysis is _____

- 9) Adiabatic process is _____

- 10) Joule is _____

Q.2] Circle your choice A,B,C or D.

[20 marks]

- 1) Brass consists of
 - a) Zn & Cu
 - b) Zn & Sn
 - c) Cu, Sn & Zn
 - d) Zn, Ni & Sn
- 2) If an acid is diluted
 - a) pH increases
 - b) pH decreases
 - c) No change occurs
 - d) Can vary depending on the acid

- 3) Buffer solution is one which has,
- Reserve acidity
 - Reserve basicity
 - $\text{pH} = 7$
 - Reserve acidity and reserve basicity
- 4) Evaporation of sweat from human body is,
- An exothermic process
 - An endothermic process
 - A spontaneous process
 - An adiabatic process
- 5) The important and necessary blood additives are
- Antibiotics
 - Analgesic compounds
 - Antacids
 - Antioxidants
- 6) Silk is,
- An artificial fibre
 - Vegetable fibre
 - A regenerative fibre
 - An animal fibre
- 7) Phenol is ,
- Acidic in nature
 - Neutral in nature
 - Basic in nature
 - Amphoteric in nature
- 8) Butter contains,
- Lactic acid
 - Butyric acid
 - Citric acid
 - Acetic acid
- 9) Chemically soap is,
- A base
 - An acid
 - A salt
 - A fat
- 10) Lower members of alcohol are,
- Insoluble in water
 - Soluble in water
 - Insoluble in acetaldehyde
 - Insoluble in petrol
- 11) If the product of 2 numbers is 5 and one of the numbers is $\frac{3}{2}$, then the sum of the two numbers is
- $4 \frac{1}{3}$
 - $4 \frac{2}{3}$
 - $4 \frac{5}{6}$
 - $5 \frac{1}{6}$

- 12) If the lengths of the two sides of a right triangle adjacent to the right angle are 8 and 15 respectively, then the length of the side opposite the right angle is
- $\sqrt{258}$
 - 15.8
 - 16
 - 17
- 13) If the product of 3 consecutive integers is 210, then the sum of the two smaller integers is,
- 11
 - 12
 - 13
 - 18
- 14) If the radius of a sphere is increased by a factor of 3, then the volume of the sphere is increased by a factor of
- 4
 - 8
 - 16
 - 27
- 15) If it takes 12 workers, working independently 3 hours to make 500 boxes, how many workers should it take for 16 workers to make 300 boxes;
- 60
 - 72
 - 81
 - 98
- 16) If $X + Y = 5$ and $2X + Y = 12$, then $3X + Y$ is,
- 11
 - 13
 - 17
 - 19
- 17) If $\frac{1}{2} + \frac{1}{4} = \frac{X}{15}$, then X is
- 10
 - 11.25
 - 12
 - 13.75
- 18) If the length of a rectangle is increased by 11 % and the width remains the same then the area of the rectangle is increased by
- 11 %
 - 21 %
 - 110%
 - 111%
- 19) If the area of the triangle with base S, is equal to the area of a square with side S, then the altitude of the triangle is,
- S
 - 2 S
 - 3 S
 - 4 S
- 20) If the numbers 7,9,11, 13, 29, 33 how many are prime numbers,
- None
 - 4
 - 5
 - All

Q.3] Expand the following abbreviations.

[2 marks]

- 1) WHO
- 2) MBA
- 3) IPS
- 4) C.C

Q.4] What is the business of the following Organisations.

[2 marks]

- 1) Flipkart
- 2) Kansai Nerolac
- 3) Ashok Leyland
- 4) LIC of India

Q.5] What is the atomic number of

[3 marks]

- 1) Hydrogen
- 2) Potassium
- 3) Copper
- 4) Calcium
- 5) Helium
- 6) Magnesium

Q.6] Write the molecular formula of :

[3 marks]

- 1) Sulphuric acid
- 2) Ethyl alcohol
- 3) Sodium Thiosulphate
- 4) Sodium Carbonate
- 5) Potassium Dichromate
- 6) Ferric phosphate

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
ENTRANCE EXAMINATION
DIPLOMA IN PAINT APPLICATION TECHNOLOGY (DPAT)
THIRD ROUND

DATE : 22 /07/2014

TIME : 11.00 AM TO 12.00 NOON

MARKS : _____

NOTE:- Answer all the questions.

(20 Marks)

Q.1] Define the following

1. Solution is _____

2. Dissociation is _____

3. Molality is _____

4. Buffer solution is _____

5. Disinfectants are _____

6. A reversible process is _____

7. Ionization is _____

8. Supplementary angles are _____

9. Litmus paper is used to check _____

10. Atomic mass number is _____

Q.2 Circle your choice a, b, c or d

(20 mark)

1) If the pH value of a solution is zero, the solution is

- a) Strong acid
- b) a very weak acid
- c) Neutral
- d) a base

2) The number of neutrons in the nucleus of an atom is represented by

- a) $A - Z$
- b) $Z - A$
- c) A
- d) Z

3) Chloromycetin is effective in the treatment of

- a) Cholera
- b) Typhoid
- c) Tuberculosis
- d) Malaria

4) $\text{pH} + \text{pOH}$ is

- a) 7
- b) Zero
- c) 10
- d) 14

5) Which of the following is not a thermodynamic property

- a) Time
- b) Temperature
- c) Pressure
- d) Volume

6) Solution of phenol is used as

- a) An antiseptic
- b) An analgesic
- c) An antioxidant
- d) A disinfectant

7) During rusting of iron it gets

- a) Oxidant
- b) Reduced
- c) Oxidised and hydrated
- d) Hydrated

8) Area of a circle of radius 10 cms is

- a) 348 cm^2
- b) 384 cm^2
- c) 314 cm^2
- d) 444 cm^2

17) If the two sides of a right angle triangle adjacent to the right angle have lengths $(n - 1)$ and $2\sqrt{n}$, then the length of the side of the triangle opposite the right angle is

- a) $(n - 1)$
c) $(n + 1)$

- b) $4\sqrt{n}$
d) $\sqrt{n^2 + 1}$

18) Which of the following numbers is the largest

a) $\frac{1}{(0.05)}$

B) $\frac{1}{(0.5)^2}$

c) $\frac{1}{0.5}$

d) 5

19) It takes 50 workers 4 hours to dig a sewer. How long would it take 30 workers to dig the same sewer.

- a) Two hours 20 minutes
c) 6 hrs 12 minutes

- b) 5 hrs 12 minutes
d) 6 hrs 40 minutes

20) If $X = Y = 2Z$ and $X.Y.Z = 256$, then X equals

- a) 2
c) 6

- b) 4
d) 8

Q.3] Answer the following

(3 Marks)

- 1) Who is the President of India - _____
- 2) Where is Taj Mahal situated - _____
- 3) What is the Colour of Fire brigade - _____
- 4) Where is Nehru Planatorium - _____
- 5) Where is Howrah Bridge situated - _____
- 6) What is the Colour of Airforce uniform - _____

Q.4] Expand the following abbreviations.

(3 Marks)

- 1) M. A
- 2) M. T. N. L
- 3) IPL
- 4) TIFR
- 5) MCA
- 6) B. Ed

What is the business of following organisations.

(2 Marks)

- 1) Mazagon Dock
- 2) DHL
- 3) Tech Mahindra
- 4) Godrej and Boyee

Q.6] Write the molecular formula of

(2 marks)

- 1) Benzene
- 2) Chloroform
- 3) Nitric acid
- 4) Potassium permanganate

DPAT

SEAT NO. : _____

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
ENTRANCE EXAM

DATE : 26/06/13

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

Q.1] Complete the following.

[20 Marks]

1) An exothermic reaction is _____

2) Molality is _____

3) Boiling Point of a liquid is _____

4) Disinfectants are _____

5) A reversible Process is _____

6) Solution is defined as _____

7) Dissociation is _____

8) Galvanisation is _____

D.P.A.T.

9) Buffer Solution is _____

10) Neutralisation is _____

Q.2] Circle your choice a , b , c , or d

[20 Marks]

1) If an acid is diluted ,

- a) pH increases
- b) pH decreases
- c) no change occurs
- d) can vary depending on the acid

2) When NaCl is added to water,

- a) Freezing Point is raised
- b) boiling point is depressed
- c) freezing point does not change
- d) boiling point is raised

3) During rusting of iron it gets,

- a) Oxidised
- b) reduced
- b) Oxidised and hydrated
- d) hydrated

4) If the hydrogen ion concentration of an acid is decreased ten times, its pH will be,

- a) Increased by one
- b) decreased by one
- c) remains unchanged
- d) increased by ten

5) Fat and oils are the tristers of glycerol with

- a) Amino acid
- b) fatty acid
- c) mineral acids
- d) Glucose

6) Formalin is an aqueous solutions of

- a) Methyl Formate
- b) formic acid
- c) Formaldehyde
- d) Potassium formate

Q.4] Where are the following situated.

[2 Marks]

- 1) The Taj Mahal
- 2) Howrah Bridge
- 3) Vrindavan Gardens
- 4) Nehru Planetarium

Q.5] What is the business of the following organizations.

[2 Marks]

- 1) Flipkart
- 2) Akzo Nobel
- 3) LIC of India
- 4) Godrej and Boyee Ltd.

Q.6] Write the Molecular Formula of

[3 Marks]

- 1) Sulphuric acid
- 2) Potassium Dichromate
- 3) Sodium Chloride
- 4) Nitric acid
- 5) Ferric Phosphate
- 6) Hydrogen Peroxide

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
SECOND ROUND
ENTRANCE EXAM

DATE : 15-Jul-2013

TIME : 11.00 AM TO 12.00 NOON

MARKS : 50

Q.1] Complete the following. [20]

1) Normality is defined as _____

_____2) Thermodynamics is _____

_____3) Endothermic reaction is _____

_____4) pOH is _____

_____5) Electrolysis is _____

_____6) Atomic mass member is _____

_____7) Antacid is _____

- 8) Viscosity is _____

- 9) Specific gravity means _____

- 10) Isothermal process is _____

Q.2] Circle the right answer.

[20]

- 1] If pH of a solution is Zero, the solution is,
A) Strong acid
B) a very weak acid
C) Neutral
D) a base
- 2] Brass consists of
A) Zn and Cu
B) Zn and Sn
C) Cu, Sn and Zn
D) Zn, Ni and Sn
- 3] A Buffer Solution has always
A) pH = 7
B) pH = 9
C) A definite pH
D) Equal number of H⁺ and OH⁻ ions.
- 4] The number of neutrons in the nucleus of an atom is represented by
A) $A - Z$
B) $Z - A$
C) A
D) Z
- 5] Chloromycetin is effective in the treatment of
A) Cholera
B) Typhoid
C) Tuberculosis
D) Malaria
- 6] Formic acid is obtained from
A) Vinegar
B) Red ants
C) Butter
D) Oil
- 7] Solution of Phenol is used as
A) An antibiotic
B) an analgesic
C) An Antioxidant
D) A disinfectant

- 8] $\text{pH} + \text{pOH}$ is
- A) 7
B) 0
C) 10
D) 14
- 9] 0.03 times 0.05 is
- A) 15 %
B) 1.5 %
C) 0.15 %
D) 0.015 %
- 10] If $X^2 - Y^2 = 15$ and $X + Y = 3$ then $X - Y$ is
- A) 3
B) 0
C) 5
D) Cannot be determined
- 11] If $X = Y = 2Z$ and $X \cdot Y \cdot Z = 256$, then X equals
- A) 2
B) 4
C) 6
D) 8
- 12] The addition of a positive number with its reciprocal number is twice of their difference, the number is
- A)
B)
C)
D)
- 13] The side of a square increases by 40%, then the area of the square increases by
- A) 16%
B) 40%
C) 96%
D) 116%
- 14] If the number of two digits is reversed it becomes 18 greater than the number, Find the number, if, the sum of the digits is equal to 4,
- A) 31
B) 22
C) 13
D) 40
- 15] The sum of 5 consecutive integers is 35, How many of these consecutive integers are prime numbers
- A) 0
B) 2
C) 3
D) 4
- 16] If it takes 50 workers 4 hours to dig a sewer, how long would it take 30 workers To dig the same sewer
- A) 2 hours 24 minutes
B) 5 hours 12 minutes
C) 6 hours 12 minutes
D) 6 hours 40 minutes

17] The ratio of the area of two squares is 2:1, then the ratio of the perimeter of the squares is

A) 1 : 2

B) 1 : 2

C) 2 : 1

D) 2 : 1

18] Successive discount of 20% and 15% are equal to a single discount of

A) 30%

B) 32%

C) 34%

D) 35%

19] The next number in the geometric progression 5, 10, 20, ... is

A) 25

B) 30

C) 35

D) 40

20] $\frac{2}{5} + \frac{1}{3} = \frac{X}{30}$, where X is

A) 4

B) 11

C) 16

D) 22

Q.3] Expand the following abbreviations.

[03]

1] B.Com - _____

2] M B A - _____

3] B H M S - _____

4] U N O - _____

5] W H O - _____

6] I A S - _____

Q.4] What is the business of the following organization.

[02]

1] LARSEN AND TOUBRO - _____

2] KANSAI NEROLAC - _____

3] ASHOK LEYLAND - _____

4] DHL - _____

Q.5] What is the atomic number of

[02]

1] Oxygen - _____

2] Carbon - _____

3] Sulphur - _____

4] Sodium - _____

6] Write the molecular formula of

[03]

1] Water - _____

2] Sodium Carbonate - _____

3] Potassium Permanganate - _____

4] Phosphoric acid - _____

5] Hydrochloric acid - _____

6] Methyl Alcohol - _____

DPAT

SEAT NO. : _____

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
ENTRANCE EXAM

DATE : 27-Jun-12

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

Q.1 Complete the following.

20

1. An isothermal process is

.....
.....
.....

2. Atomic mass number is

.....
.....

3. Freezing point of a liquid is

.....
.....

4. Molarity is defined as

.....
.....

5. Analgesics are

.....
.....
.....

6. Supplementary angles are

.....
.....
.....

D.P.V.L

7. Thermochemistry is

8. Electrolysis is

9. Buffer solution is

10. pOH is defined as

Q.2] Circle your choice a,b,c or d **20**

- 1) Rate of reaction depends on
 - a) concentration of the reactants
 - b) temperature
 - c) catalyst
 - d) all the above

- 2) If the pH value of a solution is zero. The solutions is
 - a) a strong acid
 - b) a very weak acid
 - c) neutral
 - d) a base

- 3) Bronze consists of
 - a) Zn and Cu
 - b) Zn and Sn
 - c) Cu, Sn and Zn
 - d) Zn, Ni and Sn.

- 4) The pOH value of a solution is 4, its hydrogen ion concentration will be
 - a) 10^{-4}
 - b) 10^{-10}
 - c) 1010
 - d) 104

- 5) When a solution contains equal concentration of hydrogen ions and hydroxyl ions, its pH will be around.
- a) 14 b) 10 c) 7 d) 0
- 6) If $x + y = 4$ and $x - y = 3$, then $(x + 2y)$ is,
- a) 0.5 b) 3.5 c) 4 d) 4.5
- 7) A tank contains 10 gallons of water, If a pump tanks $\left(15 - \frac{x}{10}\right)$ minutes to pump 1 gallon of water out of the tank, how many minute it will take for the pump to empty the tank.
- a) $\frac{x}{x}$ b) $15 - 10x$ c) $150 - 10x$ d) $150 - x$
- 8) If the ratio of the areas of two squares is 2:1, then the ratio of the perimeters of the squares is
- a) 1:2 b) $1:\sqrt{2}$ c) $\sqrt{2}:1$ d) 2:1
- 9) If 15 men working independently and at the same rate can manufacture 27 baskets in an hour, how many baskets would 45men working independently and at the same rate manufacture in 40 minutes?
- a) 27 b) 35 c) 54 d) 81.
- 10) If $\frac{X}{y} = \frac{3}{Z}$, then $9y^2$ equals.
- a) $\frac{x^2}{9}$ b) x^2z c) x^2z^2 d) $3x^2$
- 11) The next number in the geometric progression 5, 10, 20 is
- a) 25 b) 30 c) 35 d) 40
- 12) Successive discounts of 20% and 15% are equal to a single discount of
- a) 30% b) 32% c) 34% d) 35%
- 13) If $X = Y = 2Z$ and $x.y.z = 108$, then x equals.
- a) 3 b) $3\sqrt{2}$ c) 6 d) $2\sqrt{2}$
- 14) If the area of a square increases by 69% then the side of the square increases by
- a) 13% b) 30% c) 39% d) 69%
- 15) $\frac{2}{5} + \frac{1}{3} = \frac{X}{30}$, where X is
- a) 4 b) 11 c) 16 d) 22
- 16) A number is as much greater than 17 as it is less than 57, find the number
- a) 36 b) 37 c) 40 d) 44
- 17) If the number of two digits is reversed it becomes 18 greater than the number, find the number if the sum of the digits is equal to 4.
- a) 31 b) 22 c) 13 d) 40

18) If the product of two numbers is 10 and the sum of the two numbers is 7, then the larger of the two numbers is

- a) -2 b) 2 c) 3 d) 5

19) If the lengths of the two sides of right angle triangle adjacent to the right angle are 8cm and 15cm respectively, then the length of the side opposite the right angle is

- a) 15.8cm b) 16 cm c) 17cm d) 17.9cm

20) The sum of 5 consecutive integers is 35. How many of these consecutive integers are prime numbers.

- a) 0 b) 2 c) 3 d) 4

Q.3 Expand the abbreviations given below. 3

1. G I C E D _____

2. U N O _____

3. W H O _____

4. B.Com _____

5. I A S _____

6. M B A _____

Q.4 What is the businesses of the following organizations 2

1. KANSAI NEROLAC _____

2. BLUE DART _____

3. LARSEN AND TOUBRO _____

4. ASHOK LEYLAND _____

Q.5 What is the atomic number of 2

1. Oxygen _____

2. Carbon _____

3. Sulphur _____

4. Sodium _____

1. Sulphuric acid _____
2. Potassium Permanganate _____
3. Calcium Phosphate _____
4. Aluminium Sulphate _____
5. Phosphoric acid _____
6. Sodium Carbonate _____

-----X-----

UGDPAT

Seat no.:- _____

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
ENTRANCE EXAM

DATE : 15/07/2011

TIME : 11 AM. TO 12 PM.

MARKS :50

Q.1] Complete the following:

[20]

1) A solution is defined as _____

2) Boiling point is _____

3) Thermodynamics is _____

4) An endothermic reaction is _____

5) Neutralisation is _____

6) pOH is defined as _____

7) Buffer solution is _____

8) Atomic number is _____

9) Galvanisation is a process _____

10) Antacid is _____

Q.III] Answer the following and circle your choice.

[20]

- 1) Which of the following is not a thermodynamic property.
a) Time b) Temperature c) Pressure d) Volume
- 2) If an acid is diluted.
a) pH increases b) pH decreases c) No change occurs d) Can vary depending upon the acid
- 3) A buffer solution has always.
a) pH=7 b) pH=9 c) a definite pH d) Equal number of H⁺ and OH⁻ ions
- 4) If the pH value of a solution is zero the solution is.
a) a strong acid b) a very weak acid c) Neutral d) a base
- 5) The number of neutrons in the nucleus of an atom is represented by
a) A-Z b) Z-A c) A d) Z
- 6) Brass consists of
a) Zn and Cu b) Zn and Sn c) Cu, Sn and Zn d) Zn, Ni and Sn
- 7) Formic acid is obtained from
a) Vinegar b) Red ants c) Butter d) Oil
- 8) Chloromycetin is effective in the treatment of
a) Cholera b) Typhoid c) Tuberculosis d) Malaria
- 9) Solution of phenol is used as
a) an antibiotic b) an analgesic c) an antioxidant d) a disinfectant
- 10) pH + pOH is,
a) 7 b) Zero c) 10 d) 14
- 11) If the length of a rectangle is increased by 20% and the breadth is decreased by 20%, then the area
a) Decreases by 20% b) Decreases by 4%
c) Remains the same d) Increases by 10%
- 12) 0.03 times 0.05 is
a) 15% b) 1.5% c) 0.15% d) 0.015%
- 13) The ratio of the areas of two squares is 2:1 then the ratio of the perimeters of the squares is
a) 1:2 b) $1:\sqrt{2}$ c) $\sqrt{2}:1$ d) 2:1
- 14) If 0.2% of x is 0.03 then x is
a) 150 b) 66.5 c) 15 d) 1.5

- 15) If $x=y=2z$, and $x \cdot y \cdot z = 256$, then x equals
 a) 2 b) 4 c) 6 d) 8
- 16) If the side of a square increases by 40% then the area of the square increases by
 a) 16% b) 40% c) 96% d) 116%
- 17) The product of 2 numbers is 5 and one of the numbers is $\frac{3}{2}$, then the sum of the two numbers is,
 a) $4\frac{1}{2}$ b) $4\frac{2}{3}$ c) $4\frac{5}{6}$ d) $5\frac{1}{6}$
- 18) If the area of a triangle with base s , is equal to the area of a square of side s , then the altitude of the triangle is
 a) s b) $2s$ c) $3s$ d) $4s$
- 19) What is the ratio of $\frac{2}{3}$ to $\frac{5}{4}$
 a) $\frac{1}{4}$ b) $\frac{10}{12}$ c) $\frac{8}{15}$ d) $\frac{2}{7}$
- 20) The addition of a positive number with its reciprocal is twice of their difference, the number is
 a) $\sqrt{2}$ b) $\frac{1}{\sqrt{2}}$ c) $\sqrt{3}$ d) $\frac{1}{\sqrt{3}}$

III] Expand the following abbreviations. [2]

- 1) IPL _____
- 2) DPAT _____
- 3) M. Sc _____
- 4) UNO _____

IV] What is the business of the following organisations. [2]

- 1) Kansai Nerolac _____
- 2) DHL _____
- 3) Godrej and Boyce _____
- 4) Maruti Suzuki _____

V] Give the names of : [2]

- 1) Prime Minister of India _____
- 2) Union Home Minister _____
- 3) Union Finance Minister _____
- 4) Chief Minister of Maharashtra _____

VI] What is the atomic number of: [2]

1) Hydrogen _____

2) Oxygen _____

3) Nitrogen _____

4) Iron _____

VII] Write the molecular formula of: [2]

1) Nitric acid _____

2) Potassium Dichromate _____

3) Methyl alcohol _____

4) Phosphoric acid _____

DPAT

Seat no.:- _____

UNIVERSITY OF MUMBAI
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
DIPLOMA IN PAINT APPLICATION TECHNOLOGY
ENTRANCE EXAM

DATE : 16/07/2010

TIME : 11 AM. TO 12 PM.

MARKS :50

Note: Answer all Question.

Q.1] Define the following: (20)

- i) pH is _____
- ii) Viscosity is _____
- iii) Density is _____
- iv) Neutralisation reaction means _____
- v) Buffer solution is _____
- vi) Normality means _____
- vii) Ionisation is _____
- viii) Thermodynamics means _____
- ix) Galvanisation is _____
- x) An Exothermic reaction is _____

Q.2] Circle the right answer: (10)

- i) If an acid is diluted –
 - a) pH increases
 - b) pH decreases
 - c) No change occurs
 - d) Can vary depending on acid.

- ii) If ph value of a solution is zero, the solution is:
 - a) Strong acid
 - b) A very weak acid
 - c) Neutral
 - d) A base

- iii) In an electrochemical cell oxidation occurs on :
a) Negative electrode
b) Positive electrode
c) Reference electrode
d) None of these.
- iv) The area of a circle of radius 10 cms is :
a) 348 cm^2 b) 384 cm^2
c) 314 cm^2 d) 444 cm^2
- v) 167° F is equal to :
a) 85° c b) 67° c
c) 75° c d) 92° c
- vi) Brass consists of :
a) Zn & Cu b) Zn & Sn
c) Cu, Sn & Zn d) Zn, Ni & Sn.
- vii) The Speed of a chemical reaction increases with
a) increase in temperature b) decrease in temperature
c) increase in concentration d) None of these.
- viii) A number is as much greater than 17 as it is less than 57. Find the number
a) 36 b) 37
c) 40 d) 44.
- ix) $\frac{3}{4}$ th of a number is equal to $\frac{4}{3}$ rd of another number , what is the ratio between them
a) 7:12 b) 9:16
c) 16:12 d) 6:8.
- x) If the number of two digits is reversed it becomes 18 greater than the number, find the number, if the sum of the digits is equal to 4.
a) 31 b) 22 c) 13 d) 40

Q.3] Answer the following:

(5)

- i) Who is the president of India _____
- ii) Which is the capital of Maharashtra _____

iii) Who is the Chief Minister of Maharashtra _____

iv) Who is the Union Finance Minister _____

v) Where is Tajmahal situated _____

Q.4] What is the standard colour for: (5)

i) Fire Brigade _____

ii) Ambulance _____

iii) Army Vehicle _____

iv) Road marking paints _____

v) Air force uniform _____

Q.5] Expand the following abbreviations: (3)

i) IAS _____

ii) B.Sc _____

iii) MA _____

iv) DPAT _____

v) MBA _____

vi) UNO _____

Q.6] What is the business of the following companies: (2)

i) Tata Motors _____

ii) LIC of India _____

iii) Mazagaon docks _____

iv) DHL _____

Q.7] What is the atomic number of : (2)

i) Hydrogen _____

ii) Oxygen _____

iii) Carbon _____

iv) Sodium _____

Q.8] Write the molecular formula for : example sodium hydroxide is NaOH (3)

i) Sulphuric acid _____

ii) Phosphoric acid _____

iii) Potassium Dichomate _____

iv) Ethyl alcohol _____

v) Potassium Permanganate _____

vi) Hydrochloric acid _____
