UNIVERSITY OF MUMBAI'S

GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT

M.SC. (PAINT TECHNOLOGY)

DATE : 08/06/2025   ENTRANCE EXAMINATION   TIME : 11.00 Am To 12.00 Noon   MARKS : 50

SR. NO	QUESTION TEXT	OPTION 1	OPTION 2	OPTION 3	OPTION 4
1	who is the first person of india ?	Prime minister	chief Minister	chief justice	President
2	what is full form of GST	good system tax	good supply tax	good and service tax	All of the above
3	the vander walls equation explains	ideal gases	real gases	vapour	non- real gases
4	the purity of an organic compound is determined by	size	melting point	molecular weight	none of above
5	pH of KOH.is---	acidic	nuetral	alkaline	slightly acidic
6	capital of maharashtra is	Pune	Mumbai	Lucknow	Patna
7	Highest electron negative atom in periodic table is	chlorine	helium	fluorine	nitrogen
8	IUPAC name of compound (CH3-CH2-CHBr-CH3)	3 bromo-Butane	Butane -3 bromine	butane	2 bromo-Butane
9	Asian Paint headquater in ?	Kashmir	Mumbai	Lucknow	Patna
10	the grignard reagent is	Rh(pph3)3	RMgX	H2Pd	raney nickel
11	two step reaction in elimination reaction	SN1	SN2	SN1cb	All of the above
12	Na contain how many electrons in their outer orbital?	2	8	1	11
13	allotrope of carbon is	fullerene	graphite	diamond	All of the above
14	The cation is-------charged	positively	negatively	nuetral	none of above
15	Molecular weight of NaOH is	40	18	10	32
16	the conversion of solid to direct gas this process is known as---	sublimation	boiling point	melting point	crystalisation
17	the molecular formula of acetic acid is	C5H6OH	C2H6OH	CH3CH2OH	CH3COOH
18	amorphous material is like	crystaline	solid	plasma	powder
19	Electron configuration of oxygen is	1s2 2s2 2P3	1s2 2s2 2p4	1s2 2s2 2p1	1s2 2s2 2p5
20	JSW is the business of the following organization	Food	Paint &Steel	Textile	Oil and Gas
21	Which of the following is inorganic compound	CH3COOH	CH3CN		3 bromo-Butane
22	Functional group of aldehyde	ROH	R-O-R	R-CO-R	R-CO-H
23	Which are the following is inorganic compound	CH3COOH	C5H5N	TiO2	CH3CHO
24	Chemical formula of Glucose	C6H11O5	C6H12O6	C2H4O5	All of the above
25	the following technique is used to sepration of two liquids	crystalisation	condensation	sublimation	All of the above

UNIVERSITY OF MUMBAI'S

GARWARE INSTITUTE OF CAREER EDUCATION AND DEVELOPMENT

M.SC.(PAINT TECHNOLOGY)

ENTRANCE EXAMINATION

DATE : 05-07-25   TIME : 11 AM TO 12 PM   MARKS : 50

SR. NO	QUESTION TEXT	OPTION 1	OPTION 2	OPTION 3	OPTION 4
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2	what is full form of GST	good system tax	good supply tax	good and service tax	All of the above
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25	the following technique is used to sepration of two liquids	crystalisation	condensation	sublimation	All of the above

ROLL NO. _____

SUPERVISORS SIGN : _____

DATE : 18-May-24   TIME : 11 AMTO 12 NOON   MARKS : 50

NOTE   ☐ DO NOT CARRY MOBILE / DIGITAL WATCH IN THE EXAMINATION HALL
        ☐ PLEASE TICK THE CORRECT ANSWER (2 MARKS EACH)

SR. NO	QUESTION TEXT	OPTION 1	OPTION 2	OPTION 3	OPTION 4
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Subject Name : MSC(PT)　　　　　　　　　　　　　　　　　　　　**Paper Set :** 1

Exam Name : MSC(PT) ENTRANCE EXAM 24 JUNE 2023　　　　**Exam Date :** 24/06/2023

　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Duration : 01:20Hour

　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Max Marks : 50.00

Q 1. 0 degree Celsius = 　　　　　　　　　　　　　　　　　　2.00 Marks(Easy)

A) 373.15　　　　　B) 173.15　　　　　C) 288.15

D) 273.15

Q 2. Aromatic compound consists of 　　　　　　　　　　　　2.00 Marks(Easy)

A) Ring structure　　　B) Straight chain　　　C) Branched chain

D) All of the above

Q 3. Asian Paint is from which country? 　　　　　　　　　　2.00 Marks(Easy)

A) India　　　　　B) China　　　　　C) Pakistan

D) USA

Q 4. Atomic number of hydrogen is 　　　　　　　　　　　　2.00 Marks(Easy)

A) 3　　　　　B) 1　　　　　C) 5

D) 20

Q 5. Benzene has chemical formula of 　　　　　　　　　　　2.00 Marks(Easy)

A) C_5H_6　　　　　B) C_6H_6　　　　　C) C_4H_5

D) C_6H_4

Q 6. Chemical formula of sodium chloride
                                                    2.00 Marks(Easy)

A) KCl   B) NaOH   C) NaCl

D) H2O

Q 7. Communication is a _____ process.
                                                    2.00 Marks(Easy)

A) Three-way   B) Two-way   C) Four-way

D) Five-way

Q 8. d-orbitals consists of how many electrons?
                                                    2.00 Marks(Easy)

A) 2   B) 8   C) 12

D) 10

Q 9. Formula of Alkane
                                                    2.00 Marks(Easy)

A) CnH2n+2   B) CnH2n+1   C) CnH2n-2

D) All of the above

Q 10 Full form of IUPAC
                                                    2.00 Marks(Easy)

A) International Union of Pure & Applied chemistry   B) Indian Union of Pure & Applied chemistry   C) International Union of Practical & applied chemistry

D) None of the above

Q 11 Functional group of acid is
                                                    2.00 Marks(Easy)

A) hydroxyl group   B) Carboxylic group   C) Carbonyl Group

D) Amino group

Q 12 Functional group present in Glucose is
                                                    2.00 Marks(Easy)

A) Ester   B) Alcohol   C) Ketone

D) Aldehyde

Q 13 How many periods & groups are there in periodic table?   2.00 Marks(Easy)

A) 18 periods & 7 groups   B) 14 periods & 6 groups   C) 18 groups & 7 periods

D) 14 periods & 6 groups

Q 14 Kansai Nerolac is the business of the following organization   2.00 Marks(Easy)

A) Automobile   B) Paint   C) Textile

D) Oil and Gas

Q 15 Methane is   2.00 Marks(Easy)

A) Aromatic compound   B) Cyclic compound   C) Aliphatic compound

D) All of the above

Q 16 Molecular weight of HCl is   2.00 Marks(Easy)

A) 36.5   B) 25.5   C) 35.5

D) 37

Q 17 Molecular weight of water is   2.00 Marks(Easy)

A) 25   B) 18   C) 10

D) 32

Q 18 pH value of hydrogen chloride in water   2.00 Marks(Easy)

A) 2   B) 7   C) 14

D) 6

Q 19 Raju age after 15 years will be 5 times his age 5 years back, What is the present age of Raju   2.00 Marks(Easy)

A) 15   B) 12   C) 10

D) 20

Q 20 Unsaturated hydrocarbon must have ------   2.00 Marks(Easy)

A) Single bonds   B) Double bonds   C) Triple bonds

D) All of the above

Q 21 What is the name of compound H2O2?   2.00 Marks(Easy)

A) Hydrogen dioxide   B) Hydrogen peroxide   C) Hydrogen tetraoxide

D) None of the above

Q 22 Which of the following is inorganic solvent   2.00 Marks(Easy)

A) Water   B) Ethanol   C) Acetone

D) Toluene

Q 23 Which of the following is metal?   2.00 Marks(Easy)

A) Carbon   B) Helium   C) Iron

D) Chloride

Q 24 Which one is Inert gas?   2.00 Marks(Easy)

A) Oxygen   B) Carbon   C) Silicon

D) Helium

Q 25 Who hosts the flag on Independence Day at Delhi Fort?   2.00 Marks(Easy)

A) President   B) Chief Justice   C) Prime Minister

D) Vice President

Subject Name : MSC(PT)

Exam Name   : MSC(PT) ENTRANCE EXAM MAY 2023

Paper Set : 1

Exam Date   : 17/05/2023

Duration   : 01:10Hour

Max Marks :   50.00

Q 1. 0 degree Celsius =   2.00 Marks(Easy)

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Applied chemistry   chemistry   applied chemistry

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SUPERVISORS SIGN : _____

UNIVERSITY OF MUMBAI'S
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT
M.SC.(PAINT TECHNOLOGY) (MPT)

DATE : 18-May-24   TIME : 11 AMTO 12 NOON   MARKS : 50

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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) 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 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) 12%   d) 12.35%

13) If the ½ + ¼ =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 ride S, then the attitude 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

16) If 25 men can unload a truck in 1 hour 30 minutes, how long should it take 15 men to unload the truck
 a) 2hrs
 b) 2 ¼ hrs
 c) 2 1/3 hrs
 d) 2 ½ hrs

17) If the side of a square increases by 30%, then its area is increased by
 a) 9%
 b) 60%
 c) 69%
 d) 130%

18) If a rectangle has length 'L' and the breadth is one half of the length, then the area of the rectangle is,
 a) L^2
 b) $\frac{1}{2} L^2$
 c) $\frac{1}{4} L^2$
 d) 2L

19) If a worker can pack 1/6 of a carton of canned food in 15 minutes and there are 40 workers in a factory, How many carton should be packed in the factory in 1 2/3 hours
 a) 40 2/9
 b) 43 4/9
 c) 44 4/9
 d) 45 2/3

20) The sum of the 5 consecutive integers is 35. How many of the 5 consecutive integers are prime numbers.
 a) 1
 b) 2
 c) 3
 d) 4

Q III Expand the following abbreviations   [2 Marks]
 a) MB A _____

 b) IPS _____

 c) LBW _____

 d) BHMS _____

Q IV What is the Business of the following Organizations   [2 Marks]
 a) AKZO Noble _____

 b) ICI (Imperial chemical industries) _____

 c) Godrej & Boyce _____

 d) Amazon.in _____

Q V What is the Atomic number of   [3 marks]
 a) Hydrogen _____

 b) Calcium _____

 c) Nickel _____

 d) Potassium _____

 e) Sulphur _____

 f) Carbon _____

3/4

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≤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) Galvanisation 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

16) If the product of two numbers is 5, and one of the numbers is 3/2 , then the sum of two numbers is
    a) $4^{1/3}$
    b) $4^{2/3}$
    c) $5^{1/6}$
    d) $4^{5/6}$

17) If x/y=2, then y^2/x^2
    a) 1/4
    b) 1/2
    c) 2
    d) 4

18) If it takes 12 Workers working independently 3 hours to make 500 boxes, how many minutes should it take for 16 workers to make 300 boxes.
    a) 72
    b) 81
    c) 98
    d) 60

19) The area of a then how many rectangular field is 1000 sq.meters Meters is the perimeter of if the the, length of the field is y meters field
    a) 2y+1000
    b) y+1000/y
    c) 2y+1000/y
    d) 2y+2000/y

20) Which of the following Integers has the most divisors
    a) 88
    b) 91
    c) 95
    d) 99

Q III   Expand the following abbreviations   [2 Marks]
    a) IPL   _____

    b) IAS   _____

    c) WHO   _____

    d) M.Sc. _____

Q IV   What is the Business of the following Organisation   [2 Marks]
    a) Kansai Nerolac   _____

    b) Blue Dart   _____

    c) Air India   _____

    d) Larsen and Toubro   _____

Q V   What is the Atomic number of   [3 marks]
    a) Sodium   _____

    b) Magnesium   _____

    c) Helium   _____

    d) Iron   _____

    e) Oxygen   _____

    f) Cobalt   _____

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

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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   (20 marks)

1. Proton were discovered by
   a) Chadwick   b) Goldstein

   c) Rutherford   d) Bohr

2. Brass consists of
   a) Zn and Cu   b) Zn and Sn

   c) Cu, Sn and Zn   d) Zn, Ni and Sn

3. Chloromyactin is effective in the treatment of
   a) Cholera
   b) Typhoid
   c) Tuberculosis
   d) Malaria

4. Molality is expressed
   a) Litre/mole   b) mole/litre
   c) moles/kg   d) grams/litre

5. pH+pOH is,
   a) 7   b) 0
   c) 10   d) 14

6. Formic acid is obtained from
   a) Vinegar   b) Red ants
   c) Butter   d) Oil

7. 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 present the area of the triangle increases

    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 digit is equal to 4

    a) 31   b) 22

    c) 13   d) 40

20. A number is as much greater them 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

*   *   *   *   *

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) H_2O
   b) Na
   c) H_2
   d) O_2

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 ares 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) rtght 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) $2B^2$

3/4

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

*   *   *   *   *

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

QI. 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

8. Which of the following is not a vegetable fiber

    a) hemp   b) jute

    c) cotton   d) keratin

9. Which of the following is not sugar,

    a) sucrose   b) starch

    c) fructose   d) glucose

10. A chemical substance, which, reduces the temperature of the body in fever is,

    a) anti- inflammatory   b) pyretic

    c) anti-pyretic d) antiseptic

11. Which of the following numbers is closest to zero,

    a) $(1-0.9)^2$ b) $1- (0.9)^2$

    c) 0.09   d) $(0.09)^2$

12. 2/5 + 1/3 =x/30, where x is,

    a) 7   b) 11

    c) 16   d) 22

13. A car wash can wash 8 cars in 18 minutes. At this rate, how many cars can the car wash wash in 3 hours.

    a) 13   b) 40.5

    c) 80   d) 125

14. How many squares with sides ½ inch long are needed to convert a rectangle which is 6 feet long and 4 feet wide.

    a) 96   b) 3456

    c) 13824   d) 14266

15. The next number in the arithmetical progression, 5, 11, 17, ...is

    a) 18   b) 22

    c) 23   d) 28

16. Successive discounts of 20 % and 15% are equal to a single discount of

    a) 32%   b) 34%

    c) 35%   d) 36%

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 3/2, then the sum of the two numbers is

    a) 4 1/3   b) 4 2/3

c) 4 5/6   d) 5 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   –

✳ ✳ ✳ ✳ ✳

UGDPAT

SEAT NO. _____

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) A sodium salt of an alcohol
   b) A potassium salt of an ester
   c) A sodium salt of glycerin
   d) A sodium salt of higher fatty acids

11) If a worker can pack 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 2/3 hours;
   a) 33
   b) 43 4/9
   c) 44 4/9
   d) 45 2/3

12) If the sum of 5 consecutive integers is 35, How many of these five consecutive integers are prime numbers;
   a) 1
   b) 2
   c) 3
   d) 4

13) If the operation * is defined by $*a = a^2 - 2$, then $*(*5)$ is,
   a) 527
   b) 529
   c) 621
   d) 623

14) If $Y/X = 1/3$ and $X + 2Y = 10$, then X is,
   a) 3
   b) 4
   c) 5
   d) 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.
   a) Y + 1000/Y
   b) 2Y + 1000
   c) 2Y + 1000/Y
   d) 2Y + 2000/Y

16) Which of the following integers has the most divisors,
   a) 88
   b) 91
   c) 95
   d) 99

17) What is the next number in the geometric progression 4, 12, 36 ?
   a) 60
   b) 72
   c) 108
   d) 144

18) If an angle of X degrees has the property that its complement is equal to 1/6 of its supplement, where X is,
   a) 30
   b) 60
   c) 63
   d) 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

****

(4)

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,
   a) Reserve acidity
   b) Reserve basicity
   c) pH = 7
   d) Reserve acidity and reserve basicity

4) Evaparation of sweat from human body is,
   a) An exothermic process
   b) An endothermic process
   c) A spontaneous process
   d) An adiabatic process

5) The important and necessary blood additives are
   a) Antibiotics
   b) Analgesic compounds
   c) Antacids
   d) Antioxidants

6) Silk is,
   a) An artificial fibre
   b) Vegetable fibre
   c) A regenerative fibre
   d) An animal fibre

7) Phenol is ,
   a) Acidic in nature
   b) Neutral in nature
   c) Basic in nature
   d) Amphoteric in nature

8) Butter contains,
   a) Lactic acid
   b) Butyric acid
   c) Citric acid
   d) Acetic acid

9) Chemically soap is,
   a) A base
   b) An acid
   c) A salt
   d) A fat

10) Lower members of alcohol are,
   a) Insoluble in water
   b) Soluble in water
   c) Insoluble in acetaldehyde
   d) Insoluble in petrol

11) If the product of 2 numbers is 5 and one of the numbers is 3/2, then the sum of the two numbers is
   a) 4 1/3
   b) 4 2/3
   c) 4 5/6
   d) 5 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
   a) $\sqrt{258}$
   b) 15.8
   c) 16
   d) 17.

13) If the product of 3 consecutive integers is 210, then the sum of the two smaller integers is,
   a) 11
   b) 12
   c) 13
   d) 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
   a) 4
   b) 8
   c) 16
   d) 27

15) If it takes 12 workers, working independently 3 hours to make 500 boxes, how many meriutes should it take for 16 workers to make 300 boxes;
   a) 60
   b) 72
   c) 81
   d) 98

16) If $X + Y = 5$ and $2X + Y = 12$, then $3X + Y$ is,
   a) 11
   b) 13
   c) 17
   d) 19

17) If $\frac{1}{2} + 1/4 = X/15$, then X is
   a) 10
   b) 11.25
   c) 12
   d) 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
   a) 11 %
   b) 21 %
   c) 110%
   d) 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,
   a) S
   b) 2 S
   c) 3 S
   d) 4 S

20) If the numbers 7, 9, 11, 13, 29, 33 how many are prime numbers,
   a) None
   b) 4
   c) 5
   d) All

③

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) Suphuric acid
    2) Ethyl alcohol
    3) Sodium Thiosuphate
    4) Sodium Carbonate
    5) Potassium Dichromate
    6) Ferric phosphate

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UGDPAT III

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 anglers 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 in 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) pH + 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

②

9) A number is as much greater than 17 as it is less then 57, Find the number

   a) 36   b) 37
   c) 40   d) 44

10) ¾ th of a number is equal to 4/3 rd of another number. What is the ratio between these

   a) 7 : 12   b) 9 : 16
   c) 16 : 12   d) 6 : 8

11) 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 4.

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

12) 0.03 times 0.05 is

   a) 15 %   b) 1.5 %
   c) 0.15 %   d) 0.015 %

13) A triangle has a base B and the altitude of the triangle is twice the base, then the area of the triangle is

   a) AB   b) ½ B^2
   c) B^2 d) 2 B^2

14) 1/3 + 2/7 = X/42, when X is,

   a) 13/21   b) 13
   c) 21   d) 26

15) The next number is the arithmetic progression 5,11,17,............ is

   a) 23   b) 18
   c) 22   d) 28

16) If the angles of a triangle are in the ratio 1 : 2 : 2 , then the triangle is

   a) Isosceles   b) Obtuse
   c) Right angle   d) Equilateral

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) $\dfrac{1}{(0.05)}$

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

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

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

④

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 Paint of a liquid is _____

   _____

4) Disinfectants are _____

   _____

5) A reversible Process is _____

   _____

6) Solution is defined as _____

   _____

7) Dissociation is _____

   _____

8) Galvanisation is _____

   _____

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 paint 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 tines, its pH will be,

   a) Increased by one   b) decreased by one

   c) remains uncharged   d) increased by ten

5) Fat and oils are the trirsters 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

7) What is the ratio of 2/3 to 5/4

    a) 1/4   b) 10/12

    c) 8/15   d) 2/7

8) What is the next number in the geometric progression 4 , 12 , 36 , ?

    b) 44   b) 60

    c) 72   d) 108

9) If $\frac{1}{2} + \frac{1}{4} = x/15$, then X is

    a) 10   b) 11.25

    c) 12   d) 13.75

10) If the area of a square increases by 44 % then the side of the square increases by,

    a) 12 %   b) 20 %

    c) 24 %   d) 30 %

11) 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)   b) 4

    c) (n+1)   d) $\sqrt{n^2+1}$

12) If the radius of a sphere is increased by a factor of 2, then the volume of the sphere is increased by a factor of

    a) 2   b) 4

    c) 6   d) 8

13) If 25 men can unload a truck in 1 hour and 30 minutes, how long would it take 15 men to unload the truck

    a) 2 hours   b) 2 ¼ hours

    c) 2 1/3 hours   d) 2 ½ hours

14) 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) ½ S   b) S

    b) 2 S   d) 2 S

(3)

15) If the altitude of a triangle increases by 5 % and the base of the triangle increases by 7%, by what percentage will the area of the triangle increase

a) 3.33 %

b) 06 %

c) 12 %

d) 12.35 %

16) If the ratio of radii of two circles is 3 to 2 then the ratio of the areas of the two circles is

a) 2 to 3

b) 4 to 9

c) 9 to 4

d) 3 to 2

17) The product of 3 consecutive integers is 120,   then the sum of the integers is,

a) 12

b) 14

c) 15

d) 18

18) It takes 3 tons of copper ore and 5 tons of iron ore to make one ton of alloy A How many tons of alloy A can be made from 60 tons of copper ore and 90 tons of iron ore.

a) 18

b) 20

c) 30

d) 50

19) The product of two numbers is $3/2$, then the sum of the two numbers is,

a) 4 $1/3$

b) 4 $2/3$

b) 4 $5/6$

d) 5 $1/6$

20) An angle of X degrees has the property that, its complement is equal to $\underline{1}^{th}$ of its supplement, where X is, $\dfrac{}{6}$

a) 45

b) 60

c) 63

d) 72

Q.3] Expand the following abbreviations.   [3 Marks]

1) UGDPAT

2) BCA

3) MSc

4) DNA

5) WHO

6) IPL

(4)

Q.4] Where are the following situated.   [2 Marks]

1) The Taj Mahal

2) Howrah Bridge

3) Vrindavan Gardens

4) Nehru Planatorium

Q.5] What is the business of the following organizations.   [2 Marks]

1) Flipkart

2) Akzo Nobel

3) L I C 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

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DPAT

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)   p OH 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 solutions is,

   A) Strong acid   B) a very weak acid

   C) Netral   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 nuclear 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] pH + p OH 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] $2/5 + 1/3 = X/30$, 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] Sulpher - _____

   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 - _____

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DPAT

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 ....

....

....

....

7. Thermochimistry 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 $x - y = 3$, them $(x + 2y)$ is,

    a) 0.5   b) 3.5   c) 4   d) 4.5

7) A tank contains 10 gallons of water, If a pump tanks $\left(15 - \dfrac{x}{10}\right)$ 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) $\dfrac{x}{x}$ 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 $\dfrac{X}{y} = \dfrac{3}{Z}$, then $9y^2$ equals.

    a) $\dfrac{x^2}{9}$ 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) $\dfrac{2}{5} + \dfrac{1}{3} = \dfrac{X}{30}$, 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 8xm and 15cm respectively, then the length of the side apposite 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.   GICED _____

2.   UNO _____

3.   WHO _____

4.   B.Com _____

5.   IAS _____

6.   MBA _____

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 _____

Q.6   Write the molecular formula of

     1.   Sulphuric acid _____

     2.   Potassium Permanganate _____

     3.   Calcium Phosphate _____

     4.   Aluminium Sulphate _____

     5.   Phosphoric acid _____

     6.   Sodium Carbonate _____

----------X ----------

UGIDPAT

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 endothrmic reaction is _____

_____

_____

_____

1

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.II] 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%
   b) 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

3

15) lg x=y=2z, and x. y. 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 3/2, then the sum of the two numbers is,
   a) 4 ½   b) 4 2/3   c) 4 5/6   d) 5 1/6

18) If the area of a tringale 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 2/3 to 5/4
   a) ¼   b) 10/12   c) 8/15   d0 2/7

20) 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) $1/\sqrt{3}$

.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 manes of :   [2]

   1) Prime Minister of India _____

   2) Union Home Minister _____

   3) Union Finance Minister _____

   4) Chief Minister of Maharashtra _____

4

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 _____

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DPAT

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)   3/4th of a number is equal to 4/3rd 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 _____

2

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 _____

****

4

Subject Name : MSC(PT)	**Paper Set :** 1
Exam Name : MSC(PT) ENTRANCE EXAM 24 JUNE 2023	**Exam Date :** 24/06/2023
	Duration : 01:20Hour
	Max Marks : 50.00

Q 1. 0 degree Celsius =   2.00 Marks(Easy)

A) 373.15   B) 173.15   C) 288.15

D) 273.15

Q 2. Aromatic compound consists of   2.00 Marks(Easy)

A) Ring structure   B) Straight chain   C) Branched chain

D) All of the above

Q 3. Asian Paint is from which country?   2.00 Marks(Easy)

A) India   B) China   C) Pakistan

D) USA

Q 4. Atomic number of hydrogen is   2.00 Marks(Easy)

A) 3   B) 1   C) 5

D) 20

Q 5. Benzene has chemical formula of   2.00 Marks(Easy)

A) C_5H_6 B) C_6H_6 C) C_4H_5

D) C_6H_4

Q 6. Chemical formula of sodium chloride   2.00 Marks(Easy)

A) KCl   B) NaOH   C) NaCl

D) H2O

Q 7. Communication is a _____ process.   2.00 Marks(Easy)

A) Three-way   B) Two-way   C) Four-way

D) Five-way

Q 8. d-orbitals consists of how many electrons?   2.00 Marks(Easy)

A) 2   B) 8   C) 12

D) 10

Q 9. Formula of Alkane   2.00 Marks(Easy)

A) CnH2n+2   B) CnH2n+1   C) CnH2n-2

D) All of the above

Q 10 Full form of IUPAC   2.00 Marks(Easy)

A) International Union of Pure &   B) Indian Union of Pure & Applied   C) International Union of Practical &
   Applied chemistry   chemistry   applied chemistry

D) None of the above

Q 11 Functional group of acid is   2.00 Marks(Easy)

A) hydroxyl group   B) Carboxylic group   C) Carbonyl Group

D) Amino group

Q 12 Functional group present in Glucose is   2.00 Marks(Easy)

A) Ester   B) Alcohol   C) Ketone

D) Aldehyde

Q 13 How many periods & groups are there in periodic table?   2.00 Marks(Easy)

A) 18 periods & 7 groups   B) 14 periods & 6 groups   C) 18 groups & 7 periods

D) 14 periods & 6 groups

Q 14 Kansai Nerolac is the business of the following organization   2.00 Marks(Easy)

A) Automobile   B) Paint   C) Textile

D) Oil and Gas

Q 15 Methane is   2.00 Marks(Easy)

A) Aromatic compound   B) Cyclic compound   C) Aliphatic compound

D) All of the above

Q 16 Molecular weight of HCl is   2.00 Marks(Easy)

A) 36.5   B) 25.5   C) 35.5

D) 37

Q 17 Molecular weight of water is   2.00 Marks(Easy)

A) 25   B) 18   C) 10

D) 32

Q 18 pH value of hydrogen chloride in water   2.00 Marks(Easy)

A) 2   B) 7   C) 14

D) 6

Q 19 Raju age after 15 years will be 5 times his age 5 years back, What is the present age   2.00 Marks(Easy)
of Raju

A) 15   B) 12   C) 10

D) 20

Q 20 Unsaturated hydrocarbon must have ------ 2.00 Marks(Easy)

A) Single bonds   B) Double bonds   C) Triple bonds

D) All of the above

Q 21 What is the name of compound H2O2? 2.00 Marks(Easy)

A) Hydrogen dioxide   B) Hydrogen peroxide   C) Hydrogen tetraoxide

D) None of the above

Q 22 Which of the following is inorganic solvent 2.00 Marks(Easy)

A) Water   B) Ethanol   C) Acetone

D) Toluene

Q 23 Which of the following is metal? 2.00 Marks(Easy)

A) Carbon   B) Helium   C) Iron

D) Chloride

Q 24 Which one is Inert gas? 2.00 Marks(Easy)

A) Oxygen   B) Carbon   C) Silicon

D) Helium

Q 25 Who hosts the flag on Independence Day at Delhi Fort? 2.00 Marks(Easy)

A) President   B) Chief Justice   C) Prime Minister

D) Vice President

Subject Name : MSC(PT)

Exam Name   : MSC(PT) ENTRANCE EXAM MAY 2023

Paper Set : 1

Exam Date   : 17/05/2023

Duration   : 01:10Hour

Max Marks : 50.00

Q 1. 0 degree Celsius =   2.00 Marks(Easy)

A) 373.15   B) 173.15   C) 288.15

D) 273.15

Q 2. Aromatic compound consists of   2.00 Marks(Easy)

A) Ring structure   B) Straight chain   C) Branched chain

D) All of the above

Q 3. Asian Paint is from which country?   2.00 Marks(Easy)

A) India   B) China   C) Pakistan

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Q 4. Atomic number of hydrogen is   2.00 Marks(Easy)

A) 3   B) 1   C) 5

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D) Vice President