BIOLOGY:-

1. Glucose and amino acids are reabsorbed in the

A. proximal tubule B. distal tubule C. collecting duct D. loop of Henle

2. The amount of CSF in the cranial cavity

A. 500 ml B. 140 ml C. 1 litre D. 1.5 ml

3. Which one is imino acid?

A. Pepsin B. Proline C. Cysteine D. Renin

4. The main difference between Gram positive and Gram negative bacteria is

A. Cell membrane B. Cell Wall C. Ribosome D. Mitochondria

5. ACTH is secreted from

A. Adrenal cortex B. Pituitary C. Adrenal Medulla D. Thyroid

6. Inner surface of the bronchi, bronchioles and fallopian tubes are line by

A. cubical epithelium B. columnar epithelium C. squamous epithelium D. ciliated epithelium

7. Electric potential of the brain is recorded by

A. CT Scan B. Sphygmomanometer C. ECG D. EEG

8. Which of the following is related to humoral immunity ?

A. T-lymphocyte B. B-lymphocyte C. I-lymphocyte D. P-lymphocyte

9. Fertilization occur in

A. Uterus B. Ureter C. Vagina D. Fallopian tube

10. The Gastrin is secreted from

A. Intestine B. Stomach C. Pancreas D. Rectum

Questions of physics in "sample paper for Assam JAT"

PHYSICS:-

1.Choke coil is :

(1) induction coil of high resistance and high inductance

(2) induction coil of high resistance and low inductance

(3) induction coil of low resistance and high inductance

(4) induction coil of low resistance and low inductance

2. A parallel plate condenser is charged with a battery. After changing of the condenser battery is removed and two plates are separated from each other with the help of insulating handles, than :

(1) capacitance decreases

(2) capacitance increases

(3) charge on plates increases

(4) voltage between plates increase

3.In closed organ pipe the produced harmonics are :

(1) no harmonics is produced

(2) even and odd both

(3) odd only

(4) even only

4. Light velocity in vacuum depends upon :

1) wavelength

(2) frequency

(3) intensity

(4) none of these

5. In a coil the current changes from 2A to 4A, 0.05 sec. and the induced enf is 8 volt, the coefficient of self induction will be :

(1) 8H

(2) 0.02 H

(3) 0.2 H

(4) 0.8 H

6. In wattles current phase difference between current and voltage is :

(1) п/4

(2) п/2

(3) п

(4) zero

7.The ionization potential of hydrogen is 13.6 eV. The total energy of an electron in its third orbit will be :

(1) 3.4 eV

(2) – 3.4 eV

3) 1.5 eV

(4) – 1.5 Ev

8. A metal surface emitted electrons of 3 eV, when a light of 4 eV are made to incident on the same metal surface the energy of the emitted photons will be :

(1) 3 eV

(2) 4 eV

(3) 5 eV

(4) 2 eV

9. Forbidden energy gap in Ge is :

(1) 0.75 eV

(2) 2.5 eV

(3) 1.1 eV

(4) 5 eV

10. The energy of mono atomic gas is :

(1) only rotational

(2) only vibrational

(3) only translatory

(4) all the above

Questions of chemistry in" Sample paper for Assam JAT"

CHEMISTRY:-

1.The hybridization state of C atom in butendioic acid is :

(1) sp2

(2) sp3

(3) both two

(4) sp

2. Which of the following is not a isomer of pentane :

(1) n-pentane

(2) 2, 2-dimethy 1 propane

(3) 2, 3-dimethy 1 butane

(4) 2-methy 1 butane

3.The oxidation number of C atom in Ch2CI2 and CCI4 are respectively :

(1) -2 and – 4

(2) 0 and – 4

(3) 0 and 4

(4) 2 and 4

4. Which of the following dissolves in lonic solvents :

(1) C6H5

(2) CH3OH

(3) CCI4

(4) C5H12

5. The conjugate acid of HS is :

(1) S-2

(2) H2S2

(3) both two

(4) none

6. Phenolphthalein of pH range [8-10] is used in which of the following type of titration as a suitable indicator :

(1) NH4OH and HCI

(2) NH4OH and HCOOH

(3) NH4OH and C2H4O2

(4) NaOH and C2O4H2

7. Which of the following is iron are :

(1) Malachite

(2) Hernatite

(3) Siderite

(4) Limonite

8. The molar concentration of chloride ions in the resulting solution of 300 ml.of 3.0 M NaCI and 200 ml. of 4.0 M BaCl2 will be :

(1) 1.7 M

(2) 1.8 M

(3) 5.0 M

(4) 3.5 M

9.Which of the following compound is not aromatic :

(1) 1, 3-cyclobutene

(2) pyridine

(3) furane

(4) thiophene

10. Which of the following compound is used as refrigerant :

(1) CCI2F2

(2) CCI4

(3) CF4

(4) Acetone

Questions of mathematics in "sample paper for Assam JAT"

MATHEMATICS:-

1.The equation of the normal to the circle x2 + y2 = a2 at point (x' y') will be :

(1) x'y – xy' = 0

(2) xx' – yy' = 0

(3) x'y + xy' = 0

(4) xx' + yy' = 0

2.If the second term of a G.P. is 2 and the sum of its infinite terms is 8, theni ts first therm is :

(1) 2

(2) 4

(3) 6

(4) 8

3. (1+2+3+....+n) is equal to :

(1) [n(n + 1) 2]/2

(2) n2

(3) n(n + 1)/2

(4) n(n-1)/2

4. If x = 2 + 21/3 + 22/3, then x3 – 6×2 + 6x is equal to :

(1) 0

(2) 1

(3) 2

(4) 3

5. The value of sin 3x is :

(1) 4 sin x – 3 sin3 x

(2) 4 sin x + 3 sin3 x

(3) 3 sin x – 4 sin3 x

(4) 3 sin x + 4 sin3 x

6. A straight line through (1, 1) and parallel to the line 2x + 3y – 7 = 0 is :

(1) 2x + 3y + 5 = 0

(2) 3x – 2y + 7 = 0

(3) 3x + 2y – 8 = 0

(4) 2x + 3y – 5 = 0

7. Equation of the straight line passing through the points (-1, 3) and (4, -2) is :

(1) x- y = 3

(2) x + y = 3

(3) x – y = 2

(4) x + y = 2

8. The equation of the radial axis of two circle x2 + y2 + 2g1x + 2f1y + c1 = 0 and x2 + y2 + 2g2x + 2f2y + c2 = 0, is :

(1) 2 (g1 – g2) x + 2 (f1 – f2) y – c1 – c2 =0

(2) 2 (g2 – g1) x + 2 (f1 – f2) y + c1 – c2 = 0

(3) 2 (g1 – g2) x + 2 (f1 – f2) y + c1 – c2 = 0

(4) 2 (g1 – g2) x + 2 (f1 – f2) y + c2 – c1 = 0

9. d (2 x) /dx is equal to :

(1) 1

(2) 2x log 2

(3) x log 2

(4) 0

10. d (tan x)/dx is equal to :

(1) cosec2 x

(2) sec x tan x

(3) cosec x cot x

(4) sec2x

Answers:-

Biology answers:-

(1)A (2)B (3)B (4)B (5)B (6)D (7)D (8)B (9)D (10)B

Physics answers:-

(1)3 (2)1 (3)3 (4)4 (5)3 (6)2 (7)4 (8)3 (9)1 (10)3

Chemistry answers:-

(1)2 (2)3 (3)3 (4)2 (5)2 (6)4 (7)1 (8)3 (9)1 (10)1

Mathematics answers:-

(1)4 (2)2 (3)3 (4)3 (5)3 (6)4 (7) 4 (8)3 (9)4 (10)4