**CPN NPT – 2024**

**CLASS-10TH Maximum Marks: 100**

 **Duration : 45 min.**

**General Instructions**

1. The test if of 45 mins. Duration and the maximum marks is 100.
2. The question paper consists of 3 parts (Part 1: Physics, Part II: Chemistry, part III: Mathematics).
3. Contains 20 multiple choice Questions. Each question has 4 choices (a), (b), (c) and (d), out of which **ONE CHOICE** is correct.
4. No candidate is allowed to carry any textual material, printed or written, bits of papers, pager, mobile phone, any electronic device, etc. inside the examination room/hall.
5. On completion of the test, the candidate must hand over t he Answer sheet to the **Invigilator** on duty in the Room/Hall. **However, the candidates are allowed to take away this Test Booklet with them.**

**Marking Scheme**

1. +5 for correct answer, -1 (negative marking) for incorrect answer, 0 for all other cases.

**Questions:-**

Q.1 A 30cm high bucket is completely filled with a liqu A coin of its bottom appears to be raised by 12cm T Refractive index of Liquid is:-

a) 3 b) 1.33 c) 1.67 d) 1.25

Q.2 A ray of light of red colour travelling in air en into water [µ =4], its colour will becomes / remain.

 3

a) Red b) Blue c) Yellow d) Green

Q.3 The focal length of eye lens is controlled by

a) Iris b) Cornea c) Ciliary Muscles d) Optic Nerve

Q.4 The magnetic field produced by a current – carrying straight wire depends \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the distance from it.

a) directly b) inversely c) independent d) None of Above

Q.5 Identify the incorrect statement.

a) A Galvanometer is an instrument that can detect the prese of a current in a circuit.

b) The pointer remains at Zero for Zero current flowing through it.

c) It can deflect either to the left or to the right of the zero mark depending on the direction of cu.

d) None of the above.

Q.6 Which of the following pairs of elements belong to the same period of the periodic table ?

a) C g b) N c) Ca, Cl d) K, Cu

Q.7 Which of the following contains both ionic and covalent bond ?

a) CCl4 b) NH4Cl c) CaCl2 d) H2O

Q.8 Which is a base and not an alkali ?

a) KOH b) NaoH c) Fe(OH)3 d) none is true

Q.9 Which of the following is a non-electrolyte ?

a) KOH Solution b) Glucose c) CuSO4 (aq.) d) dil. HNO3

Q.10 The IUPAC name of the compound having the formula (CH3)3 CCH -= CH2 is -

a) 3, 3, 3- Trimethyl -1-propane b) 1, 1, 1- Trimethyl-1-butene

c) 3, 3- Dimenthyl-1-butene d) 1,1-Dimenthyl-1,3-butene

Q.11 the ratio of LCM and HCF of the least composite and the least prime numbers is:

a) 1:2 b) 2:1 c) 1:1 d) 1:3

Q.12 The value of k for which the lines 5x + 7y = 3 and 15x + 21y = k coincide is :

a) 9 b) 5 c) 7 d) 18

Q.13 A girl walks 200 m towards East and then 150 m towards North. The distance of the girl from the starting point is :

a) 350m b) 250m c) 300m d) 225m

Q.14 The lenths of the diagonals of a rhombus are 24 cm and 32 cm, then the length of the altitude of the rhombus is:

a) 12cm b) 12.8 cm c) 19 cm d) 19.2 cm

Q.15 Two fair coins are tossed. What is the probability of getting at the most one head ?

a) 3 b) 1 c) 1 d) 3

 4 4 2 8

Q.16 ABC ˜ PQR. If AM and PN are altitudes of ABC and PQR respectively and AB2 : PQ2 = 4:9, then AM : PN =

a) 16:81 b) 4:9 c) 3:2 d) 2:3

Q.17 If 2 sin2 β – cos2 β = 2, then β is :

a) 00 b) 900 c) 450 d) 300

Q.18 Prime factors of the denominator of a rational number with the decimal expansion 44.123 are:

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

Q.19 The lines x = a and y = b, are :

a) intersecting b) parallel c) overlapping d) None of these

Q.20 The distance of point A(-5, 6) from the origin is :

a) 11 units b) 61 units c) √11 units d) √ 61 units