

COLLEGE OF TEACHER EDUCATION (PGT)

BOYCE ROAD , LAITUMKHRAH

SHILLONG – 793003

NAAC, Accredited with CGPA of 2.81 at B Grade

ENTRANCE TEST

(WRITTEN)

To

THE TWO YEAR B.Ed COURSE

ACADEMIC SESSION

2022 – 2024

DATE: 11TH JUNE 2022

SECTION – I

SUBJECT COMPETENCY - SCIENCE

CANDIDATE'S CODE NO:

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SECTION - I

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(Total Marks: 15)

Tick the correct answer from the given options: (1/2x30 = 15)

1. Which one of the following has the highest value of specific heat?
a) Alcohol b) Methane c) Kerosene d) Water

2. With the increase of pressure, the boiling point of any substance
a) Increases b) Decreases c) Remains Same d) Becomes zero

3. The rotational effect of a force on a body about an axis of rotation is described in terms of the
a) Centre of gravity b) Centripetal force c) Centrifugal force d) Moment of force

4. Which law is also called the law of inertia?
a) Newton's first law b) Newton's Second Law
c) Newton's Third Law d) All of these

5. What is the unit of Astronomical Distance?
a) Light year b) Angstrom c) Weber d) Lux

6. If a lift is going up with acceleration, the apparent weight of a body is
a) More or less the true weight b) Equal to the true weight
c) Less than the true weight d) More than the true weight

7. What is the scale used for measuring the intensity of the earthquake?
a) Metric Scale b) Quake Scale
c) Richter Scale d) Epicentre Scale

8. A jet engine works on the principle of conservation of
a) Linear momentum b) Angular momentum

c) Energy Mass

c) Mass Velocity

9. Bolometer is used to measure

a) Frequency

b) Temperature

c) Velocity

d) Wavelength

10. An artificial Satellite revolves round the Earth in circular orbit, which quantity remains constant?

a) Angular Momentum

b) Linear Velocity

c) Angular Displacement

d) None of these

11. The organic reaction represented by equation $\text{CH}_3 - \text{CH} = \text{O} + \text{H}_2\text{NOH}$ gives $\text{CH}_3 - \text{CH} - \text{NH} + \text{H}_2\text{O}$ is an example of

a) an addition reaction

b) a condensation reaction

c) an oxidation reaction

d) an elimination reaction

12. The human body is made up of several chemical elements; the element present in the highest proportion (65%) in the body is

a) carbon

b) hydrogen

c) oxygen

d) nitrogen

13. 10 The hottest part of the gas flame is known as

a) luminous zone

b) dark zone

c) blue zone

d) non-luminous zone

14. The most extensive, commercially useful source of thorium as monazite sand occurs in India at

a) Orissa coast

b) Travancore coast

c) West Bengal coast

d) Gujarat coast

15. The main active constituent of tea and coffee is

a) nicotine

b) chlorophyll

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- c) caffeine
d) aspirin
16. The hardest form of carbon is
- a) coke
b) graphite
c) diamond
d) charcoal
17. Chlorofluorocarbon are non-flammable chemicals mainly used in ____.
- (a) Perfumes
(b) Refrigerators
(c) Air conditioners
(d) All of the above
18. The method that cannot be used for removing the permanent hardness of water is
- a) adding sodium carbonate
b) distillation
c) adding caustic soda
d) boiling
19. The Galapagos Islands are associated with the visit of
- (a) Jean Lamarck
(b) Charles Darwin
(c) Gregor Mendel
(d) Alfred Wallace
20. The first organisms were
- (a) primitive eukaryotes
(b) aerobic bacteria
(c) prokaryotic
(d) photosynthetic
21. Biologists who study the sequences of organisms in the fossil record are
- (a) taxonomists
(b) palaeobiologists
(c) misologists
(d) systematists
22. Which of the following set is the evidence of evolution?
- (a) Homologous and vestigial organs
(b) Analogous and vestigial organs
(c) Homologous and analogous organs
(d) All of the above
23. The earliest animal to have been domesticated by man most likely the

(a) horse

(b) pig

(c) dog

(d) cow

24. Trees at seashore do not have annual rings because

(a) There is climatic variation

(b) There is no marked climatic variation

(c) There is enough moisture in the atmosphere

(d) Soil is sandy

25. If an Amoeba is placed in salt water, its contractile vacuole will

a) Burst

c) Multiple

c) Enlarge

d) Disappear

26. Which of the following is not a true amphibian animal?

a) Tortoise

b) Frog

c) Toad

d) Salamander

27. Quinine, utilized in the treatment of malaria, is extracted from

a) Red ants

b) Blister flies

c) Cinchona

d) Cinnamon

28. Which one of the following regulates respiration in man?

a) Medulla oblongata

b) Mid brain

c) Spinal cord

d) Fore brain

29. The branch of the science dealing with the study of human skin is called

a) Anatomy

b) Dermatology

c) Bio-chemistry

d) Physiology

30. All of the following foods lack Vitamin C except

a) Milk

b) Cheese

c) Meat

d) Rice.