

Monthly Test

Standard X

Science

Time : 2 hrs

Mark: 50 marks

PART A

(10 X 1 = 10)

I. CHOOSE THE BEST ANSWER

1 . IN WHICH OF THE FOLLOWING SPORT THE TURNING OF EFFECT OF FORCE USED ?

A - SWIMMING

C - CYCLING

B - TENNIS

D - HOCKEY

2 . 1 KG FORCE IS EQUALS TO ?

A – 9.8 dyne

C – 98×10^4 dyne

B – 9.8×10^4 N

D – 980 dyne

3 . INERTIA OF A BODY DEPENDS ON ?

A – WEIGHT OF THE OBJECT

C – MASS OF THE OBJECT

B – ACCELERATION DUE TO GRAVITY
OF THE PLANET

D – BOTH A AND B

4 . WHICH OF THE FOLLOWING IS A TRI ATOMIC MOOLECULE ?

A - GLUCOSE

C - CARBONDIOXIDE

B - HELIUM

D - HYDROGEN

5 . THE VOLUME OCCUPIED BY 4.4 g OF CO₂ AT S.T.P ?

A - 22.4 litre

c – 0.24 litre

B - 2.24 litre

d – 0.1 litre

6 . THE GRAM MOLECULAR MASS OF OXYGEN MOLECULE IS ?

A – 16 g

C – 32 g

B – 18 g

D – 17 g

7 . CASPARIAN STRIPS ARE PRESENT IN THE OF THE ROOT ?

A - CORTEX

C - PERICYCLE

B - PITH

D - ENDODERMIS

8 . KERB'S CYCLE TAKES PLACE IN ?

A – CHLOROPLAST

B – MITOCHONDRIAL MATRIX

C – STOMATA

D – INNER MITOCHONDRIAL
MEMBRANE

9 . WHICH IS FORMED DURING ANAEROBIC RESPIRATION ?

A - CARBOHYDRATE

B – ETHYL ALCOHOL

C – ACETYL CoA

D - PYRUVATE

10 . TO THE PROJECT ROCKET WHICH OF THE FOLLOWING PRINCIPLE IS REQUIRED?

A – NEWTON'S THIRD LAW OF MOTION

B – NEWTON'S LAW OF GRAVITATION

C – LAW OF CONSERVATION OF LINEAR MOMENTUM

D – BOTH (A) AND (C)

PART B

(5 X 2 = 10)

I. ANSWER THE FOLLOWING QUESTIONS

(QUESTION NUMBER 15 IS COMPULSORY)

11 . STATES NEWTON SECOND LAW .

12 . HOW DOES AN ASTRONAUT FLOAT IN A SPACE SHUTTLE ?

13 . NAME THE THREE BASIC TISSUES SYSTEM IN FLOWRING PLANTS ?

14 . WHAT IS COLLATERAL VASCULAR BUNDLE ?

15 . CALCULATE THE NUMBER OF MOLES IN .

I. 27 g OF Al

II. 1.51×10^{23} molecule of NH_4Cl

PART C**(5 X 4 = 20)****I. ANSWER THE FOLLOWING QUESTIONS****(QUESTION NUMBER 20 IS COMPULSORY)**

16 . DERIVE THE RELATIONSHIP BETWEEN RELATIVE MOLECULAR MASS AND VAPOUR DENSITY

17 . DIFFERENTIATE MASS AND WEIGHT

18 . WHAT IS RESPIRATORY QUOTIENT ?

19 . DRAW AND LABEL THE STRUCTURE OF MITOCHONDRIA

20 . HOW MANY GRAMS ARE IN THE FOLLOWING .

- I. 3 MOLES OF CHLORINE MOLECULE Cl_2
- II. 5 MOLES OF SULPHUR MOLECULE S_8
- III. 4 MOLES OF PHOSPHOROUS MOLECULE P_4

PART D**(2 X 5 = 10)****I. ANSWER THE FOLLOWING QUESTIONS**

21 . STATE THE UNIVERSAL LAW OF GRAVITATION AND DERIVE IT'S MATHEMATICAL EXPRESSION

22 . DIFFERENTIATE THE FOLLOWING .

- A. MONOCOT AND DICOT ROOT
- B. AEROBIC AND ANAEROBIC RESPIRATION

***** ALL THE BEST *****

“ ZERO IS BETTER THAN COPYING “