# PHYSICS -FORM 2 MID TERM 1-EXAMS- 2020 



1. The mass of a density bottle is 20 g when empty and 45 g when full of water. When full of mercury, its mass is 360 g . Calculate the density of mercury. (3mks)
$2.100 \mathrm{~cm}^{3}$ of fresh water of density $1000 \mathrm{~kg} / \mathrm{m}^{3}$ is mixed with $100 \mathrm{~cm}^{3}$ of sea water of density $1030 \mathrm{~kg} / \mathrm{m}^{3}$. Calculate the density of the mixture.

## PHYSICS -FORM 2 MID TERM 1-EXAMS- 2020

5.Determine $f_{2}$ in the figure below. Density of the liquid $=800 \mathrm{~kg} / \mathrm{m}^{3}$ and $\mathrm{g}=10 \mathrm{~N} / \mathrm{kg}$ (7mks)

6.The distance between the pinhole and screen of a pinhole camera is 10 cm . The height of the screen is 20 cm . At what distance from the pinhole must a man 1.6 m tall stand if a full length is required
7.Calculate the amount of current flowing through a bulb if 300 coulombs of charge flows through it in 2.5 minutes

## PHYSICS -FORM 2 MID TERM 1-EXAMS- 2020

8. cells of electromotive force (e.m.f) 1.2 V are connected in series. What is the effective voltage? (3mks)
9. The diagram below shows the magnetic field pattern between two magnets, P and Q

a) Identify the poles of P and Q

## PHYSICS -FORM 2 MID TERM 1-EXAMS- 2020

b) State which of the two magnets P and Q is stronger. Explain

## 11. Give 5 branches of physics

(5mks)
12. State the Relationship between physics and other subjects.

