Q1) fill in the blank like the example : (1 mark)

| Mass | kilogram | kg |
|---------------------------|----------|----|
| Thermodynamic Temperature | | |

Q2) change : (1 marks)

 $120 \ \text{ft to} \ m$

Q3) fill in the blank : (1 mark)

| 10^{X} | prefix | Symbol |
|-------------------|--------|--------|
| 12 | | |

Q4) fill in the blank : (1 mark)

| Quantity | Formulation | Complex unit | For short |
|----------|-------------|--------------|-----------|
| Pressure | | | |

Q5) mass is A) basic quantity B) derived quantity (1 mark)

Q6) classify in to scaler or vector .(3 marks)

| Displacement | Momentum | Speed |
|--------------|----------|--------|
| Acceleration | Force | Energy |

Q7) Complete these two equations : (2 marks)

 $V = V_0 + \dots$

 $X = X_O + \dots + \dots$

Q8) Solve this equation: (5 marks)

A car passes telephone pole number 1, located 70ft down the street from the corner lamp post, at a time t1=10sec. It then passes telephone pole number2, located 300ft from the lamp post, at a time of t2 = 20sec . what was the average velocity of the car between the position 1 and 2?

Q9) fill in the blanks like the example : (5 marks)

| Mass | kilogram | kg |
|---------------------|----------|----|
| Time | | |
| Electric Current | | |
| Thermodynamic | | |
| Temperature | | |
| Luminous Intensity | | |
| Amount of Substance | | |

Q10) change : (5 marks)

5 inch to cm

60 mile to km

10 slug to kg

25 lb to kg

55 ft to m

Q11)

The pilot of a hovering helicopter drops a lead brick from a height of 1000 m. How long does it take to reach the ground and how fast is it moving when it gets there? (Neglect air resistance).

Q12) Choose the correct answer for each of the following: (5 marks)

1- The Luminous Intensity's (SI) unit is:

Candela, mole, kelvin, ampere

2- The Prefixes for SI Units of (10^6) is:

giga, mega, deca, peta

3- The formulation of the frequency is :

force/area, cycles/second, velocity/time, energy/time

4- 1 inch =

| 2.54 cm . 12 cm 3.25 cm , 1.6 cm | | | |
|--|--|--|--|
| 5- branch of physics; study of motion : | | | |
| Fluids, mechanics, biophysics, Kinematics | | | |
| Q13) Fill in the following blanks as appropriate: (5 marks) | | | |
| 1- Near the surface of the Earth, all objects accelerate at the same | | | |
| | | | |
| 2- $X = X_0 + V_0 t + \dots$ | | | |
| 3- For every action there is an equal but opposite | | | |
| 4- $a^2 = b^2 + c^2 + \dots$ | | | |
| 5- For short of pressures unit is | | | |
| Q14) A car passes a green traffic light while moving at a velocity of 6m/s. It | | | |
| then accelerates at 0.300 m/s2 for 15s. What is the cars velocity at 15s? (5 | | | |
| marks) | | | |
| Q15) Classify in to vector and scalars. (5 marks) | | | |
| Displacement Time Energy Momentum Acceleration | | | |

| Displace | ment Tir | ne Ene | ergy Mom | entum | Acceleration |
|----------|----------|--------|----------|-------|--------------|
| Force | Distance | Speed | Velocity | Mass | |

Q16) Fill in the blanks with suitable words . (5 marks)

- 1- Kinematics branch of physics; study of motion
- 2- Vector quantity with both magnitude (size) and Direction
- 3- The Displacement of the object is defined as the change in its position
- 4- Speed is the magnitude of Velocity
- 5- On the moon, your mass would be The Same

Q17) A car goes from 20 km/h $\,120$ km/h in 15 sec find the average acceleration . (5 marks)