GATITU MIXED SECONDARY SCHOOL

PHYSICS FORM TWO   
 END OF TERM EXAM

ANSWER ALL QUESTIONS

1.When drops of water are sprinkled on a greasy glass plate they form spherical shapes.

Explain. ( 1 mark )

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2. The height of mercury column in a barometer is found to be 67cm at a certain place. What

would be the height on a water barometer in the same place. (Density of water is

1000kg/m3 and density of mercury is 13600kg/m3). ( 3 marks )

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3.Convert the following measurements to m3 (4marks)

i)20 mm3

ii)0.015cm3

iii)200ml

iv)3840litres

4.Give the difference between density and relative density (2marks)

5.Distingiush between solids and liquids in terms of intermolecular forces (2marks)

6. The total weight of a car with passengers is 25,000N .The area of contact of each of the four tyres with the ground is 0.025m2 .Determine the car pressure (3marks)

7. In the Brownian motion experiment .smoke particles are observed to move randomly

.Explain how this motion is caused (2mks)

8. State the three methods of heat transfer (3mks)

9. In the figure below a ray of light falls on a regular shiny surface

(i) Show the normal ray on the diagram (1mk)

(ii)What is the size of the angle of incidence (2mks)

10. A student placed two plane mirrors at an angle and found that 17 images were formed. At what angle were the two mirrors placed (2mks)

11. (a State two defects in a simple cell (2mks)

12. Define (3mks)

(a)Lagging

(b)Rectilinear propagation of light

(c)Anomalous expansion of water

13. Convert to c (3mks)

(i) 3450 k

(ii) 167 k

(iii) 283 k

14(a) Explain why a cracking sound is heard when a nylon cloth is taken off the body (1mk)

(b) Give the two types of charges (2mks)

(ii) State the Si unit of charge (1mk)

(c) State two ways of charging an electroscope (2mks)

15.. (a) With the aid of diagrams show the three types of light beams (3mks)

(b) A pinhole camera forms an image of a flag post which is 30 m in front of the pinhole camera .If the height of the image is 10 cm and the screen is 20cm behind the pinhole ,determine the height of the flag post (3mks)

16. Explain why

(a) Two blankets are warmer than a single thick one (1mk)

(b)Flames go upwards (1mk)

(c) The solar heaters are painted black in the inside (1mk)

17. The diagram below shows a bimetallic strip made of brass and iron

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Draw diagrams to show its shape on (2mks)

(a) Heating

(b) Cooling

18 .A strip stretches by 8 mm when supporting a load of 2 N

(a) By how much would it stretch when supporting a load of 5 N (2mks)

(b)What load would make the spring extend by 2.5cm ? (2marks)

19. Define the term length (1mark)

ALL THE BEST AND ***Have a nice midterm break***

***MR.NYAGAH***