PHYSICS FORM TWO NECTA 1987

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
D	A	A	A	C	A	C	A	B	D	B	D	B	A	B

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
D	C	A	C	A	B	C	B	C	A	D	B	D	D	B

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
A	A	B	C	C	F	H	A	E	B	B	C	D	F	E

46. (a)Archimedes principle states that “when the body is partially or totally immersed in fluid it experience an upthrust which is equal to its total weight”

(b)Given, volume of liquid = 85 cm^3

-displaced mass = 9 g

Relative density = 1.8

Then, density of liquid = relative density x density of water

= 1.8 x 1 g/cm^3

Density of liquid = 1.8 g/cm^3

Then, displaced volume = mass/density

= 9g/1.8g/cm^3

Displaced volume = 5 cm^3

Then, new volume = 85 cm^3 + 5 cm^3

= 90 cm^3

47. (a)Newtons second law of motion states that “the rate of changing momentum of the body is proportional to the applied force.”

(b)Given, u = 10 m/s, v= 0 m/s, a = -2 m/s^2

From, $v^2 = u^2 + 2as$

$0^2 = 10^2 – 2 \times 2 \times s$

Distance, s = 25 m

48.Brownian motion experiment and conclusion

49. (a)B y placing the plane mirrors in different angles.

(b)Principle of operation of periscope.

50. (a)(i)parmanent magnet

(ii)temporary magnet

(iii)electrophorus

(b)(i)shield a watch from external magnetic fields

(ii)make a metal sphere with net negative electric charge.