

# Adabistan-e-Soophia

Code: 1072

Test No.: 3

Paper: Physics

Name: \_\_\_\_\_

Class: IX Sec: \_\_\_\_\_

Syllabus: Ch. 5, 6

Question Numbers	1	2	3			Total	Grade	%age
Maximum Marks	09	22	09			40		
Marks Obtained								

Remarks: \_\_\_\_\_

\_\_\_\_\_

Time Allowed: 15 mins

(Objective Type)

Max. Marks: 09

	A	B	C	D	Write Correct option		A	B	C	D	Write Correct option		A	B	C	D	Write Correct option
1	A	B	C	D		7	A	B	C	D		13	A	B	C	D	
2	A	B	C	D		8	A	B	C	D		14	A	B	C	D	
3	A	B	C	D		9	A	B	C	D		15	A	B	C	D	
4	A	B	C	D		10	A	B	C	D		16	A	B	C	D	
5	A	B	C	D		11	A	B	C	D		17	A	B	C	D	
6	A	B	C	D		12	A	B	C	D		18	A	B	C	D	

**Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more times result in zero mark in that question.**

Q.1	Questions	(A)	(B)	(C)	(D)
1.	Earth's gravitational force of attraction vanishes at:	6400 km	Infinity	42300 km	1000 km
2.	Value of $g$ increases with the:	increase in mass of body	increase in altitude	decrease in altitude	none of these
3.	The value of $g$ on moon surface is $1.6 \text{ ms}^{-2}$ . What will be the weight of 100 kg body on the surface of moon?	100 N	160 N	1000 N	1600 N

Q.1	Questions	(A)	(B)	(C)	(D)
4.	If the direction of motion of force is perpendicular to the direction of motion of body then work done will be:	maximum	minimum	zero	none of these
5.	The velocity of body becomes double, then its kinetic energy will be:	remain same	becomes double	becomes four times	none of these
6.	The K.E of a body mass 2 kg is 25 J. Its speed is:	$5 \text{ ms}^{-1}$	$12.5 \text{ ms}^{-1}$	$25 \text{ ms}^{-1}$	$50 \text{ ms}^{-1}$
7.	When a body is lifted through height "h" the work done appears on it:	kinetic energy	potential energy	elastic P.E	geothermal energy
8.	The energy stored in a dam is:	electric energy	potential energy	kinetic energy	thermal energy
9.	The Newton's law of gravitation is:	$F = G \frac{m_1 m_2}{d}$	$F = \frac{md}{M}$	$F = \frac{Gm_1 m_2}{d^2}$	$F = G \frac{m_1 m_2}{r^2}$
10.	The value of mass of earth is:	$6 \times 10^{23} \text{ kg}$	$6 \times 10^{24} \text{ kg}$	$6 \times 10^{22} \text{ kg}$	none of these
11.	An object that revolves around a planet is:	satellite	astroide	moon	none of these
12.	A satellite revolving around very close to the earth has speed:	$8 \text{ kms}^{-1}$	$29000 \text{ kmh}^{-1}$	Both (A) and (B)	none of these
13.	Mass of earth can be determined $M_e =$ :	$\frac{R^2 g}{G}$	$\frac{gR}{G}$	$\frac{gM}{R}$	none of these
14.	A body of mass 50 kg is raised to height of 3 m. What is its potential energy?	1400 J	1500 J	2000 J	none of these
15.	Rate of doing work:	power	work	energy	none of these
16.	1 horse power = 1 hp =	742 w	746 w	726 w	none of these
17.	The kinetic energy of body having mass $m$ is:	$\frac{1}{2} m v^2$	$mgh$	$\frac{w}{t}$	none of these
18.	Communication satellite takes _____ hours to complete its revolution.	22	23.4	24	none of these

## (Section - I)

2. Write short answers to the following questions.

(11×2=22)

- i. What is meant by force of gravitation?
- ii. Why is the law of gravitation important to us?
- iii. How can the efficiency of system you find?
- iv. On what factors the orbital speed of satellite depends?
- v. Define energy. Give two types of energy.
- vi. Differentiate between K.E and P.E.
- vii. Define watt.
- viii. What is meant by term power?
- ix. What is meant by the efficiency of system?
- x. What are the geostationary satellites?
- xi. How the law of gravitation is consistent with Newton's 3<sup>rd</sup> law of motion?

## (Section - II)

Note: Give detailed answers of the following questions.

(4+5=09)

3. a) How can a mass of earth can be determined? Calculate.

(4)

b) A 500 g store is thrown up with a velocity of  $15 \text{ ms}^{-1}$ .

(5)

Find its:

- i. P.E at its maximum height.
- ii. K.E when it hits the ground.