

Adabistan-e-Soophia

Code: 1071

Test No.: 2

Paper: Physics

Name: _____

Class: IX Sec: _____

Syllabus: Ch. 3, 4

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

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%;">A</th> <th style="width: 10%;">B</th> <th style="width: 10%;">C</th> <th style="width: 10%;">D</th> <th style="width: 15%;">Write Correct option</th> </tr> </thead> <tbody> <tr><td>1</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>2</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>3</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>4</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>5</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>6</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> </tbody> </table>		A	B	C	D	Write Correct option	1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%;">A</th> <th style="width: 10%;">B</th> <th style="width: 10%;">C</th> <th style="width: 10%;">D</th> <th style="width: 15%;">Write Correct option</th> </tr> </thead> <tbody> <tr><td>7</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>8</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>9</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>10</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>11</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>12</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> </tbody> </table>		A	B	C	D	Write Correct option	7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%;">A</th> <th style="width: 10%;">B</th> <th style="width: 10%;">C</th> <th style="width: 10%;">D</th> <th style="width: 15%;">Write Correct option</th> </tr> </thead> <tbody> <tr><td>13</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>14</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>15</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>16</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>17</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> <tr><td>18</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td></td></tr> </tbody> </table>		A	B	C	D	Write Correct option	13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	A	B	C	D	Write Correct option																																																																																																																											
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
	A	B	C	D	Write Correct option																																																																																																																											
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
	A	B	C	D	Write Correct option																																																																																																																											
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												
18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																																																																																																												

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.	The unit of momentum is:	Nm	$Kgms^2$	Ns^{-1}	Ns
2.	Weight is equal to:	$w = mg$	$w = \frac{m}{g}$	$w = \frac{g}{m}$	$w = \frac{1}{mg}$
3.	Centripetal force always act _____ to the motion of body.	opposite	parallel	perpendicular	upward

4.	Inertia depends upon:	Force	Net force	Mass	Velocity
5.	The S.I unit of force is:	Kilogram	Pascal	Watt	Newton
6.	When horse pulls a cart, the action is on the:	cart	earth	horse	earth & cart
7.	The number of forces that can be added by head to tail rule are:	2	3	4	Any number
8.	The moment arm is represented by a sign:	T	L	F	N
9.	Torque depend upon:	Force & Mass	Mass & Velocity	Force & Moment arm	Force & Velocity
10.	Complete the equation $\frac{Fy}{Fx} =$	$\tan \theta$	$\sin \theta$	$\cos \theta$	$\operatorname{cosec} \theta$
11.	The centre of gravity of irregular shaped body can be found with help of:	Gravity	Meter rod	Plumb line	Screw gauge
12.	If force of 10 N is making an angle of 30° with horizontal. Its horizontal component will be:	4 N	5 N	7 N	8.7 N
13.	A force of 20 N moves a body with an acceleration of 2ms^{-2} , its mass is:	100 kg	100 N	10 Kg	10 N
14.	The turning effect of a force is called:	Momentum	Torque	Pressure	Work
15.	S.I Unit of torque is:	Nm	Nm^{-1}	Nm^2	Ns
16.	In isolated system, the momentum after collision of the bodies is:	Increase	Constant	Decrease	Zero
17.	In a right-angled triangle length of base is 4 cm and its perpendicular is 3 cm. $\tan \theta$ is:	0.85	0.75	1.85	1.75
18.	Newton's first law of motion is also known as:	Law of energy	Law of inertia	Law of momentum	None of these

(Section - I)

2. Write short answers to the following questions.

(11×2=22)

- i. State Newton's third law of motion.
- ii. What is meant by coefficient of friction?
- iii. How much force is needed to prevent a body of mass 10 kg from falling?
- iv. When a gun is fired, it recoils why?
- v. What is inertia?
- vi. State the principle of moments.
- vii. Define moment arm of force.
- viii. Find the magnitude of a force, if its x-component is 12 N and y-component is 5 N.
- ix. When a body is said to be in equilibrium?
- x. What are the centres of gravity of uniform square and uniform triangular sheet?
- xi. Define second condition for equilibrium.

(Section - II)

Note: Give detailed answers to the following questions.

(4+5=09)

3. a) Prove that rate of change of momentum of a body is equal to the force applied on it.

(4)

b) The steering of a car has a radius 16 cm. Find the torque produced by a couple of 50 N.

(5)