

NEET GRAVITATION — UNIVERSAL LAW OF GRAVITATION — PYQS

Max. Marks: 16

Questions: 4

Section A (MCQ) — 4 questions

Q.1 Match **List - I** with **List - II**

List - I		List - II	
a.	Gravitational constant (G)	i.	$[L^2T^{-2}]$
b.	Gravitational potential energy	ii.	$[M^{-1}L^3T^{-2}]$
c.	Gravitational potential	iii.	$[LT^{-2}]$
d.	Gravitational intensity	iv.	$[ML^2T^{-2}]$

Choose the correct answer from the options given below [NEET (UG) 2022]

- (1) (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)
 (2) (a)-(ii), (b)-(iv), (c)-(i), (d)-(iii)
 (3) (a)-(ii), (b)-(iv), (c)-(iii), (d)-(i)
 (4) (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)

Scan or tap for the full solution



Q.2 Two astronauts are floating in gravitational free space after having lost contact with their spaceship. The two will [NEET 2017]

- (1) move towards each other.
 (2) move away from each other.
 (3) will become stationary.
 (4) keep floating at the same distance between them.

Scan or tap for the full solution



Q.3 Two spherical bodies of mass M and $5M$ and radii R and $2R$ are released in free space with initial separation between their centres equal to $12R$. If they attract each other due to gravitational force only, then the distance covered by the smaller body before collision is : [AIPMT 2015 (Cancelled)]

- (1) $7.5R$ (2) $1.5R$ (3) $2.5R$ (4) $4.5R$

Scan or tap for the full solution



Q.4 Two spheres of masses m and M are situated in air and the gravitational force between them is F . The space around the masses is now filled with a liquid of specific gravity 3. The gravitational force will now be [AIPMT 2003]

- (1) $3F$ (2) F (3) $F/3$ (4) $F/9$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4							
Ans.	2	1	1	2							