Assignment 11th Science

Do all the assignments on sheets

Class 11th (PHYSICS) Home Work 8 JAN 2026

Dear students please read carefully all the key details of chapter and at the end there is quiz related to topic . it is must to solve all quiz questions .

Topic : Rotational Motion

Introduction

Rotational motion is the motion in which a body rotates about a fixed axis.
Examples: rotating wheel, ceiling fan, Earth's rotation.

Basic Terms

Quantity	Symbol	Relation
Angular displacement	θ	Measured in radian
Angular velocity	ω	ω = dθ/dt
Angular acceleration	α	α = dω/dt

Relation with linear quantities:

$v = r\omega$

$a_t = r\alpha$

$a_r = v^2/r = r\omega^2$

Equations of Rotational Motion

(For constant angular acceleration)

$\omega = \omega_o + \alpha t$

$\theta = \omega_o t + \frac{1}{2}\alpha t^2$

$\omega^2 = \omega_o^2 + 2\alpha\theta$

Moment of Inertia (I)

Rotational analogue of mass.
Depends on mass distribution and axis of rotation.

$$I = \sum mr^2$$

Some standard results:

Body =	Moment of Inertia
Ring (about center) =	MR^2
Disc (about center) =	$\frac{1}{2}MR^2$
Rod (about center) =	$\frac{1}{12}ML^2$
Rod (about one end) =	$\frac{1}{3}ML^2$

Torque (τ)

Turning effect of force.

$$\tau = r \times F = I\alpha$$

Angular Momentum (L)

$$L = I\omega$$

Conserved when external torque = 0
Law of conservation of angular momentum:

$$I_1\omega_1 = I_2\omega_2$$

Rotational Kinetic Energy

$$K = \frac{1}{2}I\omega^2$$

Instructions

Students you have to use following link to start the quiz. After completion of quiz you will get the certificate of participation and grade marks .you have to save it for further assessment in future .

Link of quiz- https://www.proprofs.com/quiz-school/ugc/story.php?title=ndu2mtqxmg753t

Maths

NCERT Chapter 11 | Exercise 11.1

✦ Hints:

- **Use general form $x^2 + y^2 + 2gx + 2fy + c = 0$.**
- **Complete the square properly.**

Find the equation of the circle passing through (2, 3) and touching the x-axis at (4, 0).

Solution:

Since the circle touches the x-axis at (4, 0),
the centre of the circle must lie vertically above this point.

Let the centre be C (4, r)
⇒ Radius = r

Step 1: Use the given point on the circle

The circle passes through (2, 3).

Distance from centre = radius

$$\sqrt{(2-4)^2 + (3-r)^2} = r$$

Step 2: Square both sides

$$(2-4)^2 + (3-r)^2 = r^2 \; 4 + \left(r^2 - 6r + 9\right) = r^2$$

Step 3: Simplify

$$4 + 9 - 6r = 0\ 13 - 6r = 0\ r = \frac{13}{6}$$

Step 4: Centre and radius

Centre = $\left(4, \frac{13}{6}\right)$

Radius = $\frac{13}{6}$

Step 5: Write the equation of the circle

$$(x-4)^2 + \left(y - \frac{13}{6}\right)^2 = \left(\frac{13}{6}\right)^2$$

✅ **Final Answer:**

$$\boxed{(x-4)^2 + \left(y - \frac{13}{6}\right)^2 = \frac{169}{36}}$$

✦ **NCERT Hard Questions (Equation Form):**

1. **Find the equation of the circle passing through (2, 3) and (4, 5) with centre on the line x − y = 4.**
2. **Find the equation of the circle passing through (1, 2) and touching the x-axis at (3, 0).**
3. **Find the equation of the circle with centre on y-axis passing through (2, 3) and (−2, 3).**
4. **Find the equation of the circle passing through (1, 1), (2, 4), (5, 3).**
5. **Find the equation of the circle with centre (2, −1) and radius = distance between (1, 2) and (4, 6).**

Quiz https://www.proprofs.com/quiz-school/ugc/story.php?title=ndu2mtq4mwxooe

11th chemistry

Instructions

1. Solve all the questions on sheets.

2. Write answers according to marks mentioned against the question .

Questions

1.At a certain temperature and total pressure of 105 Pa, iodine vapour contains 40% by volume of I atoms

$I_2(g) \rightleftharpoons 2I(g)$ Calculate Kp for the equilibrium.(3)

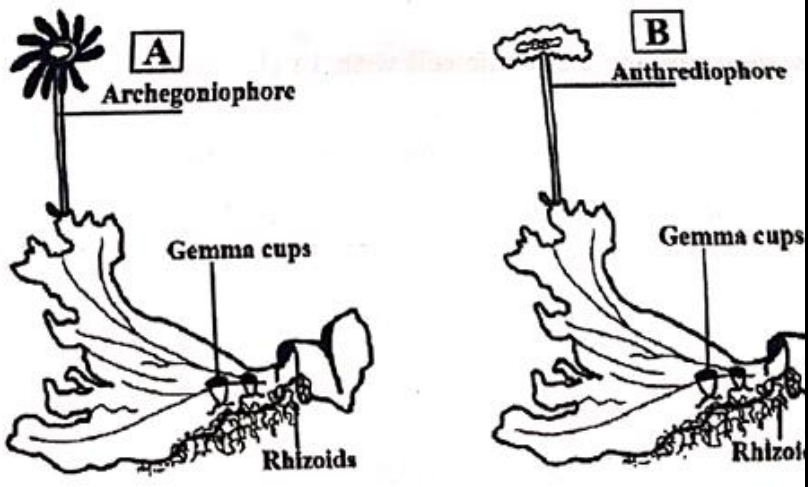
2.Explain why solids and pure liquids can be ignored while writing the equilibrium constant expression.(3)

3.A sample of HI(g) is placed in a flask at a pressure of 0.2 atm. At equilibrium, the partial pressure of HI(g) is 0.04 atm. What is Kp for the given equilibrium?

$2HI(g) \rightleftharpoons H_2(g)+I_2(g)$. (3)

Dear Students
I am giving you the questions of previous years examination (Ch-3).You are instructed to do it in your fair note book.

	CHAPTER : 3. PLANT KINGDOM	
		YEAR
	MULTIPLE CHOICE QUESTIONS (1 MARK)	
1	Filamentous blue green algae Anabaena generally is grown in stagnant water in paddy fields. Why?	2020-21
2	A plant shows a thallus level of organisation. It shows rhizoids and is haploid. It needs water to complete its life cycle because the male gametes are motile. Identify the group to which it belongs a. Pteridophytes b. gymnosperms c. angiosperms d. bryophytes	2022-23
	ASSERTION - REASON QUESTIONS (1 MARK)	
1	Assertion: Bryophytes are called amphibians of plant Kingdom Reason: These plants can live in soil but are depended on water for sexual reproduction	2020-21
2		
3		
	SHORT ANSWER QUESTIONS (TWO MARKS)	
1	Both angiosperms and gymnosperms beer seeds then why are they classified separately? Give reasons for such a classification.	2016-17
2	Agar is a commercial product which has wide applications. Give two sources and two uses of agar.	2017-18
3	"Heterospory in some pteridophytes as Salvinia has an evolutionary significance." Explain.	2018-19
4	State one important use of the following a. penicilium b. neurospora c. Gelidium d. chlorella	
	LONG ANSWER QUESTIONS- I (THREE MARKS)	
1	a. Where reduction division does takes place in the life cycle of a firn and a gymnosperm? What is the fate of a sports formed in both. b. Give one difference between homosporous and heterosporous pteridophytes.	2015-16

2	Complete the given life cycle patterns of bryophytes by writing suitable answers in (a) to (e) blanks: i. Dominant, independent, photosynthetic, thalloid or erect phase is represented by (a) ____ It alternate with the short lived, multicellular (b) _____ which is totally or partially depended on the (c)_____ D for its(d)_____and (e) _____ ii. What is the above mention life cycle pattern known as?	2019-20
3	Write a brief note on protonema stage of mosses	2020-21
4	Mention the ploidy of the following a. Protonemal cell of a moss b. Leaf of a Pinus c. Prothakkus cell of a fern d. Gemma cell in Marchantia e. Ovum of a liverwort f. Zygote of an Algae	2022-23
5	The gymnosperms have undergone evolutionary development to produce seeds from ovules. Describe the structure and development of an ovule bearing egg in the gymnosperms.	2023-24
6	Mention two predominant life cycle stages of Funaria. How do the stages differ from each other?	2024-25
	SOURCE-BASED/ CASE-BASED/ PASSAGE-BASED/ INTEGRATED ASSESSMENT QUESTIONS. (FOUR MARKS)	
1	Observe the picture given below and answer the questions that follws a. Out of A and B which one will develop sporophyte on it and why? b. What is the significance of Gemma cup? c. Morphologically compare three plants with mosses. Or d. What will be the ploidy of gemma cups and sporophytes developed by these plants? 	

2		
	LONG ANSWER QUESTIONS- II (FIVE MARKS)	
1		
2		
3		

Punjabi

ਜਮਾਤ ਗਿਆਰਵੀਂ

ਅਖਾਣ - 15. ਮਨ ਜੀਤੈ ਜਗਜੀਤ (ਜੇ ਮਨ ਜਿੱਤ ਲੈ ਜਾਵੇ ਤਾਂ ਸਾਰਾ ਸੰਸਾਰ ਜਿੱਤ ਲਿਆ ਜਾਂਦਾ ਹੈ) ਅਧਿਆਪਕ ਨੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸਮਝਾਉਂਦੇ ਕਿਹਾ ਜੇਕਰ ਮਨ ਤੇ ਕਾਬੂ ਪਾ ਲਿਆ ਜਾਵੇ ਅਥਵਾ ਇਸ ਨੂੰ ਜਿੱਤ ਲਿਆ ਜਾਵੇ ਤਾਂ ਅਸੀਂ ਸਭ ਬੁਰਾਈਆਂ ਜਿੱਤ ਪ੍ਰਾਪਤ ਕਰ ਸਕਦੇ ਹਾਂ। ਮਨ ਨਾਲ ਦਾ ਸਾਰਾ ਜੱਗ ਹੀ ਜਿੱਤਿਆ ਜਾਂਦਾ ਹੈ। ਇਸੇ ਲਈ ਤਾਂ ਕਹਿੰਦੇ ਹਨ ਮਨ ਦੀ ਜਗਜੀਤ । 16. ਮਹਾਂ ਮੋਠਾਂ ਵਿੱਚ ਕੋਈ ਵੱਡਾ ਛੋਟਾ ਨਹੀਂ ਹੁੰਦਾ (ਇਸ ਅਖੌਤ ਦੀ ਵਰਤੋਂ ਇਹ ਦੱਸਣ ਲਈ ਹੁੰਦੀ ਹੈ ਕਿ ਸਭ ਬਰ

11th Sub: English 8th Jan,2026 **UNSOLVED QUESTIONS:**

1. For several hours she thumped the sagging skins of the dilapidated drum and sang of the home-coming of

warriors. We had to persuade her to stop to avoid overstraining.

a. The grandmother who was against all types of songs other than prayer, enjoyed singing together that

day to ----------

i) Express her regret for having trusted only prayer songs throughout life.

ii) Express her pleasure for the boy's arrival after 5 years

iii) to please her grandson with whom she rarely talked, after he had embraced music lessons.

iv) tell others that she has changed her attitude towards music.

b. What was so unusual about the grandmother that evening.

i) She never rejoiced so much ii) She did not care to pray that evening.

iii) She loved thumping the drum iv) She was calm

c. What happened to her next morning on account of overstraining?

2. When we had both finished, we would walk back together. This time the village dogs would meet us at the

temple door. They followed us to our home growling and fighting with each other for the chapattis we threw

to them

a. What is evident about the grandmother who feeds street dogs?

(i) Kind hearted and loves all creatures (ii) animals are fed to avoid wastage of food

(iii) pretends to be kind before others (iv) Street dogs are fed to amuse the grandson

b. Why did the dogs wait for them at the temple door?

(i)They would come after prayer (ii) They would come along the temple road from school

(iii)The school was attached to temple (iv) None of the above

SHORT ANSWER TYPE QUESTIONS OF 3 MARKS (40-50 WORDS)

SOLVED QUESTIONS:

1. How has Khushwant Singh employed several poetic words to describe the physical and spiritual beauty of his grandmother in the chapter?

Answer- Author has skillfully employed several images to describe his grandmother. He leaves an imprint ofphysical presence and spiritual essence found in his grandmother. The short, fat and slightly bent grandmotherwith criss-cross wrinkles running from everywhere to everywhere provides a visual image of the grandmother.Her comparison to the winter landscape in the mountains, an expanse of pure white serenity breathing peace and contentment reflects the spiritual calmness she possessed. Her white clothes, rosary beads and constantprayer conveys her spiritual beauty shaped by faith and serenity.

2. Why was it hard for the author to believe that his grandmother was once young and pretty?

Answer-The author had always seen his grandmother as an old lady, since his birth. Therefore, the way he hadseen her for the past twenty years had become the only reality for him. So, it was even unimaginable for thechild to think of his grandmother as a pretty young girl, though he had heard people saying that. As per theauthor his grandmother had reached the zenith of growing old and she remained the same.

3.Why was the grandmother disturbed when he started going to the city school?

Answer-The grandmother being a religious and conservative woman wanted her grandson to learn religiousprayers and scriptures as was taught in the village school. When she came to know that the city schools taughtmodern science, English and music she was disturbed. Her inability to assist him learn Western Science andEnglish made her unhappy. She was further disturbed as he didn't have any religious or scripture learning.Music was not meant for gentle folk but for beggars and prostitutes. She did not protest but remained silent. Hersilence was her expression of strong disagreement.

UNSOLVED QUESTIONS:

1. How did the grandmother spend her day before her death?

2. What was the turning point in the friendship between grandmother and grandson?

3. Describe 'the happiest half-hour of the day' for the grandmother?

4. What are the differences between the village school education and the urban school education as mentioned in

the chapter?

5. Do you think that the writer's attitude towards his grandmother changes as he grows up?

6. What does the behaviour of the sparrows assure about 'man and animal' love relationship?

LONG ANSWER TYPE QUESTIONS OF 6 MARKS IN 120-150 WORDS

1. A child should grow up with a knowledge to accommodate all living creatures and nature. He should learn to live harmoniously at a very young age so that he grows up into an adult with a heart to serve humanityand the world around him. How do you think Khuswant Singh's grandmother helped him to love allcreatures?

Answer: Khuswant Singh's grandmother demonstrated immense love for nature and living creatures. All her actionslike feeding the stray dogs and later on befriending the sparrows shows a kind hearted generous soul. She carriedstale chapatis every day to feed the stray dogs while returning with her grandson from the village school. The lessonstates that her happiest time of the day was when she would feed the sparrows during the afternoon. Her frivolousrebukes while feeding the sparrows displays her deep and loving bond with them. The sparrows bid her a silent

farewell on her demise and reciprocated her love.The narrator having spent his formative years (childhood days) with her must have been affected by this nature ofhis grandmother. His portrait of grandmother is a tribute to her loving and affectionate nature.

2. Do you believe that Khushwant Singh's grandmother represents the inner strength of a woman? Find

instances from the chapter to support this view point and elaborate upon it.