

## Assignment 11<sup>th</sup> Commerce

Do all the assignments on sheets

### 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**

$$(2-4)^2 + (3-r)^2 = r^2 \quad 4 + (r^2 - 6r + 9) = r^2$$

---

**Step 3: Simplify**

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

---

**Step 4: Centre and radius**

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

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

---

**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:

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

◆ 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.propoofs.com/quiz-school/ugc/story.php?title=ndu2mtq4mwxoee>

B, STUDIES

Q.1 Ravi lives in a small town in Rajasthan. Due to lack of employment opportunities, many people migrate to cities. Ravi started a small-scale manufacturing unit for handmade candles with the help of local artisans. The unit employs 20 workers, including women and semi-skilled laborers. Over time, the business grew and started supplying candles to nearby cities. This helped reduce unemployment and improved the standard of living in the area.

Questions:

1. Identify the type of business started by Ravi.
2. State any two roles of small business highlighted in the case.
3. How do small businesses help in balanced regional development?

Q.2 Meena runs a small food processing unit. Initially, she faced problems like lack of finance and marketing support. Later, she came to know about government schemes such as PMEGP and MSME loans. She received financial assistance at a low interest rate and also got training support. Her business expanded and started exporting pickles.

Questions:

1. Which problems of small business are mentioned in the case?
2. Name any two government measures to support small businesses.
3. How do such schemes encourage entrepreneurship?

**JANUARY 8, 2026**

**ACCOUNTANCY**

**+1**

**Issue of Debentures**

Dear students

Read all the key details of chapter carefully and at the end there is quiz related to topic. It is mandatory to solve all quiz questions.

## **FINANCIAL STATEMENTS**

### **1. Meaning**

Final accounts of a business

Prepared at the end of the accounting period

Show financial performance & position

### **2. Objectives**

- Ascertain profit or loss
- Know financial position
- Help in decision-making
- Provide information to users

### **3. Components of Financial Statements**

#### **A. Trading Account**

**Purpose:** Calculate Gross Profit / Gross Loss

**Items:**

- Opening Stock
- Purchases
- Direct Expenses (wages, carriage inward)
- Sales
- Closing Stock

#### **B. Profit & Loss Account**

**Purpose:** Calculate Net Profit / Net Loss

**Items:**

- Indirect Expenses (rent, salary, depreciation)
- Indirect Incomes (commission, interest received)

#### **C. Balance Sheet**

Shows financial position on a particular date

##### **Assets**

- Fixed Assets
- Current Assets
- Intangible Assets

##### **Liabilities**

- Capital
- Long-term Liabilities
- Current Liabilities

### **4. Users of Financial Statements**

- Owners
- Management
- Creditors
- Investors
- Government
- Employees

### **5. Limitations**

- Based on historical cost
- Ignores inflation

- Possibility of window dressing
- No qualitative information

## 6. Importance

- Basis for taxation
- Helps in planning & control
- Useful for comparison
- Determines creditworthiness

Now use the following link to attempt the quiz:

[https://docs.google.com/forms/d/1hkyVGpC6QGfkykF4alTao\\_ndJORq4Orq8KgEY1MF86s/edit](https://docs.google.com/forms/d/1hkyVGpC6QGfkykF4alTao_ndJORq4Orq8KgEY1MF86s/edit)

**JANUARY 8, 2026**

**ECONOMICS**

**+1**

Dear students

Read all the key details of chapter carefully and solve the following questions

A. Karl Pearson's Coefficient of Correlation

Q1. Calculate Karl Pearson's coefficient of correlation from the following data:

X	10	12	14	16	18
Y	20	24	28	32	36

Q2. Find the coefficient of correlation between X and Y:

X	5	7	9	11	13
Y	8	12	14	18	20

Q3. From the following data, calculate Karl Pearson's coefficient of correlation:

X	2	4	6	8	10
Y	9	8	7	6	5

Q4. Calculate the coefficient of correlation using the assumed mean method:

X	15	20	25	30	35
Y	10	14	18	22	26

Q5. Calculate Spearman's rank correlation coefficient:

Student	A	B	C	D	E
Marks in Maths	78	85	62	90	70
Marks in Economics	80	88	60	92	72

Q6. (With Repeated Ranks)

Find Spearman's rank correlation coefficient:

X	30	40	40	50	60
Y	35	45	50	55	65

Q7. If Karl Pearson's coefficient of correlation between two variables is  $-0.85$ , what does it indicate?

State the nature and degree of correlation.

Q8. The value of coefficient of correlation is  $+1$ .

What type of correlation is it? Give one example.

Q9. The coefficient of correlation between X and Y is  $0.90$ . If all the values of X are doubled, what will be the new coefficient of correlation?

Q10. Can the coefficient of correlation ever be greater than  $+1$  or less than  $-1$ ? Give reasons.

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 ਬਰਾਬਰ)।

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 of physical presence and spiritual essence found in his grandmother. The short, fat and slightly bent grandmother with 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 constant prayer 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 had seen her for the past twenty years had become the only reality for him. So, it was even unimaginable for the child to think of his grandmother as a pretty young girl, though he had heard people saying that. As per the author 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 religious prayers and scriptures as was taught in the village school. When she came to know that the city schools taught modern science, English and music she was disturbed. Her inability to assist him learn Western Science and English 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. Her silence 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 humanity and the world around him. How do you think Khuswant Singh's grandmother helped him to love all creatures?

Answer: Khuswant Singh's grandmother demonstrated immense love for nature and living creatures. All her actions like feeding the stray dogs and later on befriending the sparrows shows a kind hearted generous soul. She carried stale chapatis every day to feed the stray dogs while returning with her grandson from the village school. The lesson states that her happiest time of the day was when she would feed the sparrows during the afternoon. Her frivolous rebukes 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 of his 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.