

N.K. PUBLIC SCHOOL RAJAWAS
HOLIDAY HOMEWORK
CLASS – XII
SUBJECT - BUSINESS STUDIES



Project Title: Principle of Management
(Big Bazaar / McDonald / Domino's)

1. Introduction

- 1.1. About the project
- 1.2. Objective of the Project
- 1.3. Research Methodology
- 1.4. Prepare a questionnaire of about 10 to 15 questions, to asked to various members of the orgainsation

2. About the company of your study

- 24.1.1. History & Growth
- 24.1.2. Business Interest
- 24.1.3. Product offered
- 24.1.4. Give picture and figure etc with above

3. Various principle of Henry Fayol

- 3.1. About Henry Fayol
- 3.2. Explain all principles of management one by one
 - 3.2.1. Meaning
 - 3.2.2. Positive Effect
 - 3.2.3. Adverse effects of Violation
 - 3.2.4. Applicability of this principle
- 3.3. **Finally make a table to show your observation**

Sl. No.	Name of Principle	Applicable	Not-Applicable

4. conclusion

5. References

- 5.1. Websites (List all websites you have visited)
- 5.2. Books

N.K. PUBLIC SCHOOL RAJAWAS
HOLIDAY HOME WORK



CLASS – XII

SUBJECT – BIOLOGY

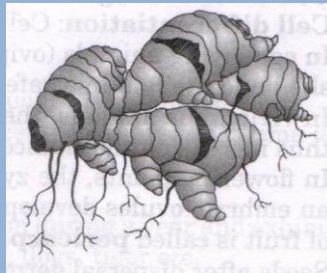
ASSIGNMENT – 1

Chapter – 1: Reproduction in Organism

1 Mark Questions

1. Write the name of the organism that is referred to as the 'Terror of Bengal'.
2. Why is *Eichhornia crassipes* nicknamed as Terror of Bengal?
3. Name the vegetative propagules in the following:
(a) Agave (b) Bryophyllum
4. Mention the unique flowering phenomenon exhibited by *Strobilanthus kunthiana* (Neelakuranji).
5. State the difference between meiocytes and gamete with respect to chromosome number.
6. Mention the unique feature with respect to flowering and fruiting in bamboo species.
7. Name the type of cell division that takes place in the zygote of an organism exhibiting haplontic life cycle.
8. Name two animals that exhibit oestrous cycle.
9. Mention the site where syngamy occurs in amphibians and reptiles, respectively.
10. Name the phenomenon and the cell responsible for the development of a new individual without fertilization as is seen in honeybees.
11. Name the common phenomenon with reference to reproduction in rotifers, honeybees and turkey.
12. Cucurbits and papaya plants bear staminate and pistillate flowers. Mention the categories they are put under separately on the basis of the type of flower they bear.
13. Angiosperms bearing unisexual flowers are said to be either monoecious or dioecious. Explain with the help of one example each.
14. Explain the significance of meiocytes in diploid organisms.

15. What is the major difference you observe in the offsprings produced by asexual reproduction and in the progeny produced by sexual reproduction?
16. Why do algae and fungi shift to the sexual mode of reproduction just before the onset of adverse conditions?
17. The coconut palm is monoecious, while date palm is dioecious. Why are they called so?
18. A moss plant is unable to complete its life-cycle in a dry environment. State two reasons.
19. Explain the importance of syngamy and meiosis in the sexual life cycle of an organism.
20. Single pea plant in your kitchen garden produces pods with viable seeds, but the individual papaya plant does not Explain.
21. (a) State the difference between meiocyte and gamete with respect to chromosome number.
(b) Why is a whiptail lizard referred to as parthenogenetic.
22. Name any two organisms and the phenomenon involved where the female gamete undergoes development to form new organisms without fertilization.
23. Name an organism where cell division is itself a mode of reproduction.
24. Identify the picture and mention the vegetative part that helps it to propagate.

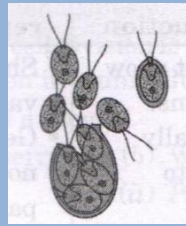


25. Name an alga that reproduces asexually through zoospores. Why are these reproductive units so called?
26. Which one of the following statements is true for yeast?
 - (i) The cell divides by binary fission. One of them develops into a bud.
 - (ii) The cell divides unequally. The smaller cell develops into a bud.
 - (iii) The cell produces conidia which develop into a bud.
27. Which of the following statements is true for Hydra?

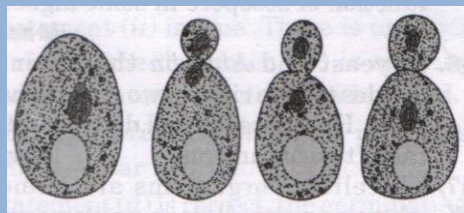
- (i) It produces asexual gemmules.
- (ii) It produces unicellular bud.
- (iii) It produces multicellular bud.

28. How does *Penicillium* reproduce asexually?

29. Identify this reproductive structure and name the organism they are being released from.



30. Name the organism and the mode of reproduction represented in the diagram given below.



31. Cut-pieces of a *Bryophyllum* leaf when put into wet soil produce new plants. How?

32. Meiosis is an essential event in the sexual life cycle of any organism. Give two reasons.

33. Write the two pre-fertilisation events from the list given below: Syngamy, Gametogenesis, Embryogenesis, Pollination

34. Name the mode of reproduction that ensures the creation of new variants.

35. Name the phase all organisms have to pass through before they can reproduce sexually.

36. Write the difference between staminate and pistillate flower.

37. Offspring derived by asexual reproduction are called clones. Justify giving two reasons.

2 Mark Questions.

38. Mention the characteristic feature and a function of zoospore in some algae.

39. In yeast and Amoeba the parent cell divides to give rise to two new individual cells. How does the cell division differ in these two organisms?
40. Unicellular organisms are immortal, whereas multicellular organisms are not. Justify.
41. (a) Name the organisms that reproduce through the following reproductive structures. (i) Conidia (ii) Zoospores
(b) Mention similarity and one difference between these two reproductive units.
42. The cell division involved in gamete formation is not of the same type in different organisms. Justify.

3 Mark Questions

43. Differentiate between Parthenocarpy and Parthenogenesis. Give one example of each.

ASSIGNMENT – 2

Chapter – 2: Sexual Reproduction on flowering plants

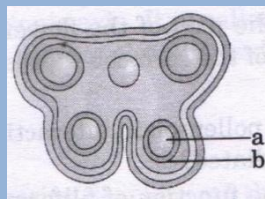
1 Mark Questions

1. An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give any one reason.
2. How do the pollen grains of Vallisneria protect themselves?
3. Write the function of coleoptiles.
4. Write the function of scutellum.
5. Normally one embryo develops in one seed but when an orange seed is squeezed many embryos of different shapes and sizes are seen. Mention how it has happened?
6. Name the part of the flower which the tassels of the corn cob represent.
7. What is pollen-pistil interaction and how is it mediated?
8. State the function of filiform apparatus found in mature embryo sac of an angiosperm.
9. Differentiate between xenogamy and geitonogamy.

10. A bilobed, dithecal anther has 100 micro-spore mother cells per micro-sporangium. How many male gametophytes can this anther produce?
11. Why do the pollen grains of *Vallisneria* have a mucilaginous covering?
12. Give an example of a plant which came into India as a contaminant and is a cause of pollen allergy.
13. Write the function of tapetum in anthers.
14. Explain the function of germ pores.
15. Write the characteristic features of anemophilous flowers.
16. The reason why anthers of angiosperm flowers are described as dithecal.
17. Mention any one application of a pollen bank.
18. All papaya plants bear flowers but fruits are seen in some. Explain.
19. Write the characteristic features of anther, pollen and stigma of wind pollinated flowers.
20. The microscopic pollen grains of the past are obtained as fossils. Mention the characteristic of the pollen grains that makes it happen.
21. Name the type of flower which favours cross pollination.
22. Why is bagging of the emasculated flowers essential during hybridisation experiment?
23. How can pollen grains of wheat and rice which tend to lose viability within 30 minutes of their release be made available months later for breeding programmes?
24. Mention one application of pollen bank. How are pollens stored in a bank?
25. Strawberry is sweet and eaten raw just like any other fruit. Why do botanists call it a false fruit?
26. Hybrid seeds have to be produced year after year. Give reason.
27. What is apomixis? What is its importance?
28. Mention the pollinating agent of an inflorescence of small dull-coloured flowers with well-exposed stamens and large feathery stigma. Give any one characteristic of pollen grains produced by such flowers.
29. Mention advantage of apomictic seeds to farmers.
30. Name the type of pollination as a result of which genetically different types of pollen grains of the same species land on the stigma.

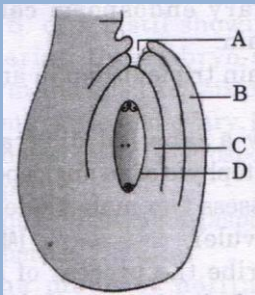
2 Marks Questions

31. Name the organic materials of which the exine and intine of an angiosperm pollen grains are made up of. Explain the role of exine.
32. Draw a diagram of a matured microspore of an angiosperm. Label its cellular components only.
33. Name all the haploid cells present in an unfertilised mature embryo-sac of a flowering plant. Write the total number of cells in it.
34. Differentiate between the two cells enclosed in a mature male gametophyte of an angiosperm.
35. Draw labelled diagram of a mature ovule and embryo sac with its contents.
36. In the T. S. of a mature anther given below, identify 'a' and 'b' and mention their functions.

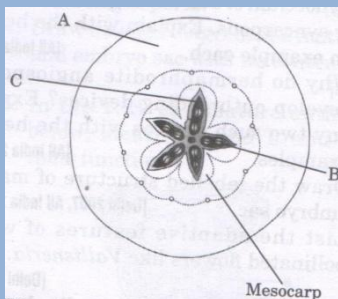


37. Geitonogamous flowering plants are genetically autogamous but functionally cross-pollinated. Justify.
38. Suggest two advantages to a farmer for using apomictic seeds of hybrid varieties.
39. Differentiate between albuminous and non-albuminous seeds, giving one example of each.
40. Flower of brinjal is referred to as chasmo-gamous while that of beans is cleistogamous. How are they different from each other?
41. Name the cell from which the endosperm of coconut develops. Give the characteristics of endosperm of coconut.
42. List the different types of pollination depending upon the source of pollen grain.
43. Gynoecium of a flower may be apocarpous or syncarpous. Explain with the help of an example each.
44. Why do hermaphrodite angiosperms develop outbreeding devices? Explain any two such devices with the help of examples.
45. List the adaptive features of water pollinated flowers like Vallisneria.

46. State one advantage and one disadvantage of cleistogamy.
47. How does the study of different parts of a flower help in identifying wind as its pollinating agent?
48. Trace pollen grain development from sporogenous tissue in the anther.
49. What is the role of endothecium and tapetum in an anther?
50. Differentiate between autogamy, geitonogamy and xenogamy.
51. Why does a breeder need to emasculate a bisexual flower? Mention a condition in a flower where emasculation is not necessary.
52. Explain the process of artificial hybridisation to get improved crop variety in:
 - (a) Plants bearing bisexual flowers
 - (b) Female parent producing unisexual flowers.
53. Draw a diagram of a fertilised embryo sac of a dicot flower. Label all its cellular components.
54. Identify and label the parts in the given anatropous ovule.



55. (a) Given below is a T. S. of an apple. Identify A, B and C.

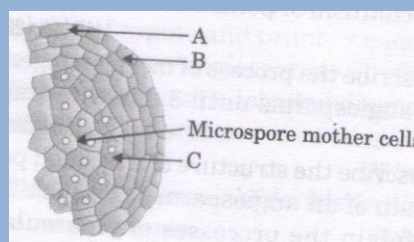


- (b) Why is an apple categorised as a false fruit?
56. Draw a vertical section of a maize grain and label (a) pericarp, (b) scutellum, (c) coleoptile and (d) radicle.
57. Why are some seeds of Citrus referred to as polyembryonic? How are they formed?

58. Fertilisation is essential for production of seed, but in some angiosperms, seeds develop without fertilisation. (a) Give an example of an angiosperm that produces seeds without fertilisation. Name the process. (b) Explain the two ways by which seeds develop without fertilisation.
59. A pollen grain in angiosperm at the time of dehiscence from an anther could be 2-celled or 3-celled. Explain. How are the cells placed within the pollen grain when shed at a 2-celled stage?

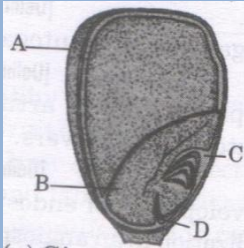
3 Marks Questions

60. Draw a diagram of a male gametophyte of an angiosperm. Label any four parts. Why is sporopollenin considered the most resistant organic material?
61. Explain the steps involved in artificial pollination of autogamous flowers.
62. Describe the development of endosperm after double fertilization in an angiosperm. Why does endosperm development precedes that of zygote?
63. Explain any three advantages the seeds offer to angiosperms.
64. A non biology person is quite shocked to know that apple is a false fruit, mango is a true fruit and banana is a seedless fruit. As a biology student how would you satisfy this person?
65. (a) Name the organic material exine of the pollen grain is made up of. How is this material advantageous to pollen grain?
(b) Still it is observed that it does not form a continuous layer around the pollen grain. Give reason.
(c) How are 'pollen banks' useful?
66. Given below is an enlarged view of one microsporangium of a mature anther.

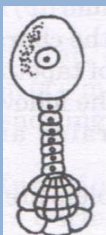


- (a) Name 'A', 'B' and 'C' wall layers.
- (b) Mention the characteristics and function of the cells forming wall layer 'C'.
67. State the significance of pollination. List any four differences between wind-pollinated and animal-pollinated flowers.

68. Enumerate any six adaptive floral characteristics of a wind pollinated plant.
69. Draw a neat labelled sketch of L. S. of an endospermous monocot seed.
70. L. S. of a maize grain is given below. Label the parts A, B, C and D in it.



71. (a) Give one example each of albuminous and non albuminous seeds.
 (b) Name the parts of the ovule and the embryo sac of an angiosperm that develop into:
 (i) Perisperm, (ii) seed coats, (iii) endosperm, (iv) embryonal axis.
72. Differentiate between the following giving one example of each: (a) Parthenogenesis and Parthenocarpy (b) Perisperm and Pericarp
73. (a) Draw a labelled sectional view of an albuminous seed. (b) How are seeds advantageous to flowering plants?
- 74.



- (a) Identify the figure. (b) Name the initial cell from which this structure has developed. (c) Draw the next mature stage and label the parts.

5 Marks Questions

75. Draw a diagrammatic sectional view of a mature anatropous ovule and label the following parts in it:
- that develops into seed coat.
 - that develops into an embryo after fertilization.
 - that develops into an endosperm in an albuminous seed.
 - through which the pollen tube gains entry into the embryo sac.
 - that attaches the ovule to the placenta.

- 76.** Why is fertilization in angiosperm referred to as double fertilization? Mention the ploidy of the cells involved. Draw a neat labelled sketch of L. S. of an endosperms monocot seed.

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HOLIDAY HOMEWORK

CLASS – XII

SUBJECT – ECONOMICS



1. Are the following MICRO or MACRO issues.

5

- a. The amount of savings per person _____
- b. The firms hire factors of production _____
- c. Problem of price rise (inflation) _____
- d. Government decides the overall allocation of resources _____
- e. Study of fiscal policy _____

2. Distinguish the following into consumption & capital goods. Give reasons.

5

- a. Inventory goods.

- b. Building used by a factory.

- c. Furniture used by a company.

d. Bed used in the hospital.

e. Service rendered by a tutor.

3. Distinguish between intermediate and final goods with two example each. 5

4. State whether the following are stock or flow. 5

a. Wealth of a nation _____

b. Interest on capital _____

c. Labour force _____

d. Money supply in circulation _____

e. Bank deposits _____

f. Speed of a car _____

g. Capital _____

h. Capital formation _____

i. Money in your wallet _____

j. Production of steel _____

Unit VI National Income & Related Aggregates

Topic – Circular Flow of Income

Assignment VI-B

M. M. 20

1. What are the three phase of a circular flow? 1 ½
 - a.
 - b.
 - c.
2. How are the income generated? 2

.....

.....
3. Why is the flow of income & product called ‘circular flow’? 2

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.....
4. Name the producing units 1 ½
 - a.
 - b.
 - c.
5. Mentions the two producers in the 2 sector model. 1
 - a.
 - b.
6. Distinguish between Real and Money Flow. 3

Real flow	Money flow

7. State whether the following are true or false:

2*4=8

- a. Capital formation is a flow.
- b. Breads is always a consumer good.
- c. Savings are a stock.
- d. Butter is only a final product.

Unit VI National Income & Related Aggregates

Topic – Domestic & National Income

Assignment VI-C

M. M. 20

- 1. Compensation of employee to the residents of Japan working in Indian Embassy in Japan.**

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- 2. Profit earned by a branch of a foreign bank in India.**

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- 3. Rent received by an Indian resident from Russian Embassy in India.**

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- 4. Profits earned by a branch of State Bank of India in England.**

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- 5. Salary received by Indian residents working in American Embassy in India.**

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6. Local people earning from the office of UNDP.

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7. Foreign students undergoing military training in India.

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8. Indian workers employed in power plants in Nepal and cross into Indian territory every week.

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9. Foreigners working in World Bank office in India.

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10. Australian students studying in JawaharlalNehruUniversity.

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11. The Canadian High Commissioner posted at the Canadian High Commission in New Delhi.

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12. Qatar Embassy in New Delhi.

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13. Indians who have gone to England for medical treatment.

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14. Passenger planes operated by Air France between India and Paris.

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15. Donations received from abroad.

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Unit VI National Income & Related Aggregates

Topic – GDP

Assignment VI-D

M. M. 20

1. Define GDP. 1

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2. What is capital Consumption allowance? 1

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3. Who are included in the Domestic or Economic territory? 2

- a.
- b.
- c.
- d.
- e.

4. Mention the components of factor income received by normal residents of a country. ½

- a.
- b.
- c.

5. Find out the difference between ½

Intermediate goods	Final goods

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6. Fill in the blanks

3

- a. GDP at MP + NFIA =
- b. NNP at MP - = NNP at FC
- c. GNP at FC = GDP at FC
- d. NDP at MP + Depreciation =
- e. + NIT = GNP at MP
- f. – NFIA = NDP at FC

7. When are the following equal?

2

- a. GNP at FC = GDP at FC
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- b. NNP at FC = GNP at FC
.....
.....
- c. NDP at MP = NDP at FC
.....
.....
- d. Net Investment = Gross Investment
.....
.....

8. Define National Income.

1

9. What are subsidies? What are its effects on Price? 1

10. What is Indirect Tax? What is its effect on price? 1

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Format

Gross, if converted into Net, then DEPRECIATION has to be subtracted:

$$\text{Gross} - \text{Depreciation} / \text{CFC} = \text{Net}$$

Domestic, if converted into Nation, then NFIA has to be added:

$$\text{Domestic} - \text{NFIA (factor in received} - \text{factor income paid to aboard)} = \text{National}$$

Market Price, if converted into Factor Cost, then NIT (Indirect Tax – Subsidies) has to be subtracted.

$$\text{MP} - \text{NIT} = \text{FC}$$

$$\text{Therefore, Gross domestic product} - \text{CFC} = \text{Net domestic product}$$

$$\text{Net Domestic product} + \text{NFIA} = \text{Net National product}$$

$$\text{Net National product at mp} + \text{NIT} = \text{Net National product at fc.}$$

And the reverse will take place if converted from NNP at FC into GDP at MP.

$$\text{Net National Product at FC} + \text{CFC} = \text{Gross National Product at FC}$$

$$\text{Gross National Product at FC} - \text{NFIA} = \text{Gross Domestic Product at FC}$$

$$\text{Gross National Product at FC} - \text{NIT} = \text{Gross National Product at MP}$$

Unit VI National Income & Related Aggregates

Topic – Conversion of GDP into NNP

Assignment VI-E

M. M. 20

1. Convert GDP at MP into NNP at FC from the following data:

Items	(Rs. in crores)
a. Gross Domestic Product at MP	20,000
b. Depreciation	3,000
c. Net Factor Income from Abroad	-200
d. Net Indirect Tax	1,500

2. Convert GNP at FC into NNP at FC:

Items	(Rs. in crores)
Gross National Product at FC	45,500
Consumption of fixed capita	5,250
Factor income paid to non-residence abroad	550
Factor income received by residence from abroad	450
Subsidies	400
Indirect Tax	3,000

3. Convert NNP at FC into GDP at MP from the following:

Items	(Rs in crores)
Net National Product at MP	35,555
Consumption of fixed capital	575
Net factor income paid abroad	2,000
Net Indirect Tax	1,500

4. **Convert NNP at MP into GDP from the following:**

Items	(Rs in crores)
Net National Product at MP	40,860
Depreciation	1,300
Subsidies	350
Net factor income received from abroad	575
Transfer Payment	2,300

5. **Convert GDP into NNP from the following:**

Items	(Rs in crores)
Gross Domestic Product	55,555
Depreciation	555
Subsidies	55
Factor income received from abroad	155
Factor income paid to residence abroad	255
Net indirect tax	355

6. **Convert GDP at MP into NDP from the following:**

Items	(Rs in crores)
Gross Domestic Product at MP	65,775
Consumption of fixed Asset	1,005
Subsidies	260
Net factor income paid abroad	-500
Sales Tax	175

7. **Calculate the National Income from the following data:**

Items	(Rs in crores)
Gross Domestic Product at MP	25,000
NIT	1,500
NFIA	-755
CFC	1,500

8. Calculate GNP, NNP, NDP, at FC and MP from the following data;

Items	(Rs in crores)
Group Domestic Product at FC	35,555
Subsidies	560
Sales Tax	460
Entertainment Tax	580
Factor income received from abroad	1,200
Depreciation	500
Transfer Payment	200

Unit VI National Income & Related Aggregates

Topic – National Income by Production Method

Assignment VI-F

M. M. 20

1. A sells output worth Rs 20 to B, Rs 30 to C, Rs. 20 to final consumption and worth Rs 30 remains unsold with the producer. B sells his output worth Rs 40 to C, Rs 60 to D and Rs 50 to final consumption. C sells his output worth Rs 100 to D, Rs 100 to final consumption and exports output worth Rs 100. D sells his output worth Rs 300 to final consumption and Rs 100 to government.

(Ans. Rs 700)

2. A sells raw materials worth Rs 200 to B. B sells the processed goods worth Rs 300 to C. C sells final goods worth Rs 400 to consumer households.

(Ans. Rs 400)

3. A sells intermediate inputs worth Rs 400 to B. B sells the manufactured goods worth Rs 400 to C, and worth Rs 200 to D. C sells his goods to D for Rs 500. D sells the final goods to consumer households for Rs 850.

(Ans. Rs 850)

4. A sells his semi-finished products to B for Rs 600 and to C for Rs 400. B sells the finished commodities to C for Rs 300 and to consumer households for Rs 500. C sells for Rs 800 his commodities to consumer households.

(Ans. Rs 1300)

5. A sells his goods to B for Rs 800 and for private final consumption for Rs 400. B sells the goods for Rs 1000 to C. C sells his goods to private final consumption for Rs 1150.

(Ans. Rs 1550)

6. A imports goods worth Rs 50 and exports goods worth Rs 20 and sells goods to B worth Rs 40. B sells goods to consumer households worth Rs 60. C sells goods worth Rs 40 to D and goods worth Rs 10 to private final consumption. D exports goods worth Rs 50 and sells goods to government worth Rs 20. [Hint: imports are intermediate consumption and exports are final sales]

(Ans. Rs. 110)

7. A sells to B for Rs 50 and to C for Rs 30. B sells to private final consumption for Rs 40 and exports goods worth Rs 30. C sells goods worth Rs 25 to consumer households and experiences an increase in the stock worth Rs 25. [Hint: increase in stock is a part of value added]

(Ans. Rs 120)

8. A sells output worth Rs 20 to B, Rs 30 to C, Rs 20 to final consumption and worth Rs 30 remains unsold with the producer. B sells his output worth Rs 40 to C, Rs 60 to D and Rs 50 to final consumption. C sells his output worth Rs 100 to D, Rs 100 to D, Rs 100 to final consumption and exports output worth Rs 100. D sells his output worth Rs 300 to final consumption and Rs 100 to government.

(Ans. Rs 700)

9. Calculate the contribution made by producing unit to NNP at MP and national income of the economy.

	Rs
Sales	5,550

Decrease in stock of finished goods	500
Raw material bought from other firms	700
Indirect taxes paid	100
Subsidies received	80
Depreciation	40

(Ans: 4240)

1. Calculate (a) Net value added at FC and (b) Value of output at MP from the following data.

	(Rscore)
Subsidies	40
Intermediate cost	200
Compensation of employees	400
Consumption of fixed capital	50
Royalty	5
Interest	25
Indirect taxes	100
Rent	10
Profits	60
Net change in stock	20

(Ans: 810 crore)

2. An economy has only two firms A and B. On the basis of following information about the firms, find out: a) Value added by firm A and B, b) GDP at MP.

	(Rs lakh)
Exports by firm A	20

Imports by firm A	50
Sales to households by firm A	90
Sales to firm B by firm A	40
Sales to firm A by firm B	30
Sales to households by firm B	60

(Ans b) 120 lakh)

3. On the basis of following data about an economy which constitutes only two firms, find out:

Value added by A and B.

GDP at FC	(Rs lakh)
Sales by firm A	100
Purchases from firm B by firm A	40
Purchases from firm A by firm B	60
Sales by fir B	200
Closing stock of firm A	20
Closing stock of firm B	35
Opening stock of firm A	25
Opening stock of firm B	45
Indirect taxes paid by both the firms	30

(Ans:b) 155 lakh)

4. On the basis of the following data, calculate value added by industry C.

	(Rs thousand)
Sale by industry A to industry B	20
Value added by industry B	40
Value added by industry D	30

Sales by industry C to industry B	70
Final sales	130

(Ans. 40 thousand)

5. From the following data calculate value added by firm X and Y.

	(Rs lakh)
Closing stock of firm X	20
Closing stock of firm Y	15
Opening stock of firm Y	10
Opening stock of firm X	5
Sales by firm X	300
Purchases by firm X from firm Y	100
Purchases by firm Y from firm X	80
Sales by firm Y	250
Import of raw material by firm X	50
Export by firm Y	30

(Ans. 205 lakh)

6. Calculate value added by firm A and B from the following data:

	(Rs lakh)
Sales by firm B to general government	100
Sales by firm A	500
Purchases by households from firm B	300
Exports by firm B	50
Change in stock of firm A	20
Change in stock of firm B	10

Imports by firm A	70
Sales by firm C to firm A	250
Purchases by firm B from firm A	200

(Ans. 260 lakh)

7. Calculate net value added at FC (from set I), NVA at Mp (Set II) and Gross value added at MP (from set III):

	(Rs lakh)		
	Set I	Set II	Set III
Sales tax	25	10	
Consumption of fixed capital	5	5	30
Closing stock	10	10	40
Corporate tax	15	5	10
Opening stock	20	10	50
Sales	540	100	800
Purchase of raw materials	140	55	390
Subsidy			20

Ans. (Set I) NVA at FC = $540 - 140 + 10 - 20 - 5 - 25$ (indirect tax) = 360 lakh

(Set II) NVA at MP = $100 - 55 + 10 - 10 - 5$ = 40 lakh

(Set III) GVA at MP = $800 - 390 + 40 - 50$ = 400 lakh

8. From the following data about a firm 'X' for the year 1998-99, calculate gross value added at FC during the year.

	(Rs lakh)
Sales	70
Intermediate consumption	40
Opening stock	15

Closing stock	10
Subsidies	5
Purchase of raw material	25
Depreciation	15
Wages and Salaries	10

9. Calculate the value added by firm X and firm Y from the following data:

	(Rs lakh)
Sales by firm X	100
Sales by firm Y	500
Purchases by households from firm Y	300
Export by firm Y	50
Change in stock of firm X	20
Change in stock of firm Y	10
Imports by firm X	70
Sales by firm Z to firm Y	250
Purchases by firm Y from firm X	200

Unit VI National Income & Related Aggregates

Topic – Calculate NI by Income Method

Assignment VI-G

M. M. 20

1. Calculate National Income:

Items	(Rs. in Cr.)
i. Indirect Taxes	9,000
ii. Subsidies	1,800
iii. Consumption of fixed capital	1,700
iv. Mixed Income of self employed	28,000
v. Operating surplus	10,000
vi. Net factor income from abroad	(-)300
vii. Compensation of employees	24,000

(Ans. Rs. 61,700)

2. Calculate National and Domestic Income:

Items	(Rs in Cr.)
i. Wages	10,000
ii. Interest	5,000
iii. Rent	400
iv. Dividend	3,000
v. Mixed income	400
vi. Undistributed profits	200
vii. Social security contribution	400
viii. Corporation tax	400
ix. Net factor income from abroad	1,000

(Ans. Rs. 20,800)

3. Calculate NI and operating surplus and comp. of employee from the following data:

Items	(Rs in Cr.)
i. Rent	30
ii. Indirect taxes	60
iii. Interest	10
iv. Royalty	5
v. Consumption of fixed capital	50
vi. Gross Domestic Product at MP	450
vii. Profit	45
viii. Net factor income from abroad	(-) 10

(Ans. Rs 250 – COE)

4. Calculate NI:

Items	(Rs. in Cr.)
i. Operating surplus	200
ii. Wages & salaries	700
iii. Net factor income from abroad	(-) 10
iv. Contribution to SSS by employees	100
v. Rent and royalty	50

(Ans. Rs. 280 Cr.)

5. Calculate National Income:

Items	(Rs. in Cr)
i. Wages	10,000
ii. Rent	5,000

iii.	Interest	400
iv.	Dividend	3,000
v.	Mixed income of the self employed	400
vi.	Undistributed profit	200
vii.	Social security contribution	400
viii.	Corporate profit tax	400
ix.	Personal tax	300
x.	Transfer payment	300
xi.	Net factor income from abroad	1,000

(Ans. Rs. 24,400 Cr.)

6. Calculate NI by Income method:

Items	(Rs. in Cr)
Rent	80
Interest	100
Profit	210
Tax on profit	30
Employees contribution to SS	25
Mixed income of self employed	250
Net indirect tax	60
Employers' contribution to SS	50
Compensation of employees	500
Net factor income from abroad	(-) 20

(Ans. NNP_{FC} = Rs. 1120 Cr.)

7. Calculate NI:

Items	(Rs. in Cr.)
Mixed income	200
Old age pension	20
Dividend	100
Operating surplus	900
Wages and salaries	500
Profit	400
Employers' contribution to SS	50
NFIA	(-) 10
Consumption of fixed capital	50
Net indirect tax	50

(Ans. NNP_{FC} = Rs 1640 Cr.)

8. Calculate GNP_{FC} :

Items	(Rs. in Cr.)
i. Gross capital formation	120
ii. Net capital formation	110
iii. Mixed income	200
iv. NFIA	(-) 10
v. Compensation of employees	250
vi. Operating surplus	400
vii. Net indirect taxes	50

(Ans. GNP_{FC} = Rs. 850 Cr.)

9. Calculate (a) NI (b) COE:

Items	(Rs. in Cr.)
-------	--------------

i.	NFIA	5
ii.	Depreciation	60
iii.	Bonus	40
iv.	Subsidies	5
v.	Wages & salaries	400
vi.	NDP at MP	700
vii.	Indirect taxes	50
viii.	Contribution to PF by employers	20

(Ans. COE = Rs. 460 Cr.)

10. Find out whether Domestic Product is equal to value added.

Items	(Rs. in Cr.)
i. Purchase of intermediate inputs	200
ii. Consumption of fixed capital	50
iii. Indirect taxes	75
iv. Subsidy	25
v. Wages & salaries	400
vi. Rent	60
vii. Interest	40
viii. Profits	100
ix. Sales	800
x. Change in stock	100

(Ans. Rs. 600 Cr.)

Test - Macro Economics

Topic – Concept of NI & Related Aggregate

M. M. 15

1. Define Macro Economics. 1

2. Capital goods are classified as: 1

a. _____

b. _____

3. Complete it: 2

Gross investment - _____ = Net Investment.

Indirect tax – Subsidies = _____

_____ + NFIA = National Product

Operating surplus = Rent + _____ + _____.

4. Which of the following are final and intermediate products and give reasons: 3

A machine purchased in installation in a factory.

He paid to the lawyer by a producer.

Milk purchased by a hotel

5. Are the following normal residents of Indian economy? 2

a. Indian employed in WHO located in India.

b. An American tourist staying in India.

6. Mention the component of factor income paid to resident of a country. 1 ½

a. _____

b. _____

c. _____

7. Distinguish between a Stock & a Flow. 1 ½

Stock

Flow

i. _____

ii. _____

iii. _____

8. Explain the circular flow of National Income. 3

Test - Macro Economics

Topic – Concept of NI & Related Aggregate

M. M. 15

1. Define Micro Economics. 1

2. Classify consumption products. 1

- a.

- b.

- c.

- d.

3. Complete it: 2

- a. Sales + _____ = Value of output.
- b. Factor income received - _____ = NFIA
- c. _____ - opening stock = _____

4. Are the following normal residents of Indian economy? 2

- a. Indian workers employed in the power projects of Nepal on daily wages & crossing into Indian territory every week.

- b. Indian working in the USA embassy in India.

5. Which of the following are final and intermediate products and give reasons: 2

- a. Service of a taxi by a household.

- b. Mangoes purchased by a juice seller.

6. State whether the following are stock or flow:

2

- a. Inventory investment

- b. Expenditure

- c. Wealth of a nation

- d. Asset of politician

7. What is investment? Explain it with the help of a numerical example.

2

8. Explain the 'Income distribution' phase of flow of income.

2

Test - Macro Economics

Topic – Concept of NI & Related Aggregate

M. M. 15

1. Define National Income. 1

2. Mention any two example of intermediate product: 1

a. _____

b. _____

3. Distinguish between investment and inventory investment: 1 ½

Investment : _____

Inventory Investment : _____

4. Classify the following into consumption good and capital good: 2

a. A car purchased by a family _____

b. Furniture in an office _____

c. Electricity used in a Mall _____

d. Purchase of cloth by household _____

5. Are the following normal resident of Indian economy. 1 ½

a. The office of WHO _____

b. A foreign who is doing research in JNU _____

c. An investor who invests in foreign country _____

6. When can market price be greater than factor cost: 2
-
-
7. Distinguish between depreciation and depreciation reserve fund. 2
-
-
8. Are the following stocks or flows? Give reason. 1 ½
- a. Investment _____
- b. Monetary expenditure _____
- c. Production of cement _____
9. Explain the two section model of the circular flow of money. 2 ½

Test - Macro Economics

Topic – Concept of NI & Related Aggregate

M. M. 15

1. Define GDP. 1
-
-

2. **How are consumer product classified:** **1**

- a. _____
- b. _____
- c. _____
- d. _____

3. **Which of the following are included in the MICRO and MACRO Economics?** **2**

- a. International trade _____
- b. Consumers' behaviour _____
- c. Level of unemployment _____
- d. Savings per person _____

4. **What is meant by end use of a good? Explain with example.** **2**

5. **Distinguish between Intermediate Good & Final Good.** **3**

Intermediate Good	Final Good
1	
2	
3	

--	--

6. **What is investment?** **1**

7. **State whether the following are considered flow or stock.** **2**

- a. Demand of an individual _____
- b. Value of fixed asset _____
- c. Capital _____
- d. Quantity of money _____

8. **Explain the circular flow of National Income.** **2**

Unit VI National Income & Related Aggregates

Topic – Calculation of NI by Expenditure Method

M. M. 20

Assignment VI-H

1. On the basis of information given below, calculate GDP.

	Rs.
i. Personal consumption expenditure	45,000
ii. Government consumption expenditure	5,000
iii. Gross domestic fixed investment	5,000
iv. Increase in inventories	1,000
v. Export of goods and services	6,000
vi. Import of goods and services	7,000
vii. Net indirect taxes	3,500
viii. Depreciation	4,500

(Ans. GDP = 55,000)

2. From the following transactions find out NNP.

	Rs.
i. Household expenditure on consumption	1,00,000
ii. Government expenditure on consumption	12,500
iii. Gross capital formation	25,000
iv. Depreciation	6,000
v. Exports	6,000
vi. Imports	9,000
vii. Net earned income from abroad	750

(Ans. NNP = 1,29,250)

3. Given the following values, find out GNP.

	Rs. Crore
i. Gross domestic fixed investment	150
ii. Increase in inventories	25
iii. Government consumption expenditure	125
iv. Export of goods and services	85
v. Import of goods and services	105
vi. Personal disposal income	1,150
vii. Personal saving	155

(Ans. GNP = 1,275)

4. From the following data find out GNP_{MP} .

	Rs. Crore
i. Private consumption expenditure	50,000
ii. Government consumption expenditure	15,000
iii. Gross fixed capital formation	10,000
iv. Increase in stock	2,000
v. Export of goods and services	5,000
vi. Import of goods and services	7,000
vii. Consumption of fixed capital	6,500
viii. Net indirect taxes	5,000

(Ans. GNP_{MP} = 75,000)

5. On the basis of information given below, estimate (i) GDP_{MP} , (ii) GNP_{MP} .

	Rs. Lakh
--	----------

i.	Personal final consumption expenditure	50,000
ii.	Government final consumption expenditure	5,000
iii.	Gross domestic fixed capital formation	4,500
iv.	Increase in inventories	500
v.	Export of goods and services	800
vi.	Import of goods and services	600
vii.	Depreciation	600
viii.	Net indirect taxes	2,000
ix.	Net factor income from rest of the world	500

(Ans. 60,7000)

6. From the following information calculate: (i) GDP_{MP} (ii) GNP_{MP}

	Rs. Crore
i. Private consumption expenditure	55,000
ii. Government consumption expenditure	6,000
iii. Gross domestic fixed capital formation	5,000
iv. Import of goods and services	1,000
v. Net factor income from abroad	(-) 500
vi. Economic subsidy	500
vii. Decrease in stock	600
viii. Export of goods and services	900
ix. Depreciation	2,000
x. Indirect taxes	2,000

(Ans. $GDP_{MP} = 65,300$ / $GNP_{MP} = 64,800$)

7. On the basis of given information, calculate NNP_{FC} .

	Rs. Crore
i. Consumption of fixed capital	2,217
ii. Indirect taxes less subsidies	3,527
iii. Imports	1,816
iv. Exports	1,771
v. Change in stocks	1,039
vi. Gross fixed capital formation	6,305
vii. Government final consumption expenditure	29,163
viii. Private final consumption expenditure	3,801
ix. Net factor income from abroad	(-) 284

(Ans. = 34,235 Cr.)

8. Calculate GDP_{MP} and national income from the following data.

	Rs. Crore
i. Net exports	(-) 30
ii. Private final consumption expenditure	400
iii. Subsidies	5
iv. Net domestic fixed capital formation	50
v. Government final consumption expenditure	100
vi. Net factor income from abroad	(-) 10
vii. Closing stock	10
viii. Consumption of fixed capital	40
ix. Indirect taxes	55
x. Opening stock	20

(Ans. = 450 Cr.)

9. Calculate national income (NNP_{FC}) from the following data:

	Rs. Crore
i. Opening stock	50
ii. Closing stock	60
iii. Consumption of fixed capital	10
iv. Private final consumption expenditure	500
v. Net exports	(-) 5
vi. Net factor income from abroad	(-) 10
vii. Compensation of employees paid by Gen. Govt.	100
viii. Direct purchase of non-durables from abroad by Gen. Govt.	10
ix. Net purchase of goods and services by Gen. Govt. in domestic market	100
x. Net capital formation	60
xi. Net indirect taxes	50

(Ans. = 705 Cr.)

10. Find NDPFC from the following data:

	Rs.
i. Gross domestic fixed investment	10,000
ii. Inventory investment	5,000
iii. Depreciation	2,000
iv. Indirect taxes	1,000
v. Subsidies	2,000
vi. Consumption expenditure	20,000
vii. Residential construction investment	6,000

(Ans. 34,000)

Unit VI National Income & Related Aggregates

Topic – GDP and Welfare

M. M. 15

Assignment VI-J

1. **Mention the component of GDP at real and nominal.** **1**

Real GDP =

Nominal GDP =

2. **Distinguish between:** **2**

GDP at Current Price

GDP at Constant Price

- a. _____
-
- b. _____
-

3. **How do we get the value of GNP deflator?** **1**

GNP deflator = _____ x 100

4. **How is nominal NI converted into Real NI.** **1**

NI at Constant Price = _____ x

5. **Write any two significance of real GDP.** **2**

- a. _____
-
- b. _____
-

6. Define welfare. 1

7. What is an externality? 1

8. Mention how 'inequalities in income' is a limitation of the GDP as an index of welfare. 2

9. Is per capita real GDP an accurate indicator of economic welfare. Give reason: 4

N.K. PUBLIC SCHOOL RAJAWAS
HOLIDAY HOME WORK
CLASS –XII
SUBJECT – ENGLISH



1. Draft the following advertisements :
 - a) You are Aditya Kumar, The General Manager of The Gulmohar Tree hotel, in Sector 55 Gurgaon. You need a front office assistant with good spoken English skills and knowledge of computers. Draft a classified advertisement for the local newspaper.
 - b) You have a travel and tours company called All India Tours, MG Road Bangalore. Draft an advertisement for summer tours to places within India.
2. Write the following letters:
 - a) You wish to place an order for air conditioners, water coolers, air purifiers for your office in Hauz Khas from Croma C-10, Gurudwara Rd, Nanak Pura, Rajouri Garden, New Delhi-110027 You are Sudipta Roy/ Srishti Rai the Manager of „The Crafters,” 21, Hauz Khas Market, New Delhi.
 - b) Write a letter cancelling the above order. Give suitable reasons.
3. Answer the following questions briefly in 30-40 words each:
 - a. The poem „My Mother at Sixty- Six’ has many references to ageing and death. Mention any two.
 - b. What does Stephen Spender want for the children of the slum?
4. Answer the following questions in 30-40 words each:
 - a. Explain how politicians exploit the poverty of the rag pickers of Seemapuri.
 - b. “This is your last French lesson.” How does Franz react to this statement by his teacher?
 - c. What is Mukesh’s dream? Why is it difficult for children of bangle makers to

dream of doing something other than bangle making?

5. Answer the following question in 120-150 Words:

- a) Describe the quality of life of the children in the slums of Seemapuri and that of the bangle makers of Ferozabad?
- b) M Hamel's role as a teacher changes in the story, „ The Last Lesson' Discuss

N.K. PUBLIC SCHOOL RAJAWAS

HOLIDAY HOME WORK CLASS – XII SUBJECT – PHYSICS



Assignment I Section A

1. If Coulomb's Law involved $1/r^3$ dependence (instead of $1/r^2$), would Gauss law be still true? Why? 1
2. Plot a graph showing the variation of resistance of a conducting wire as a function of its length, keeping the radius of the wire and its temperature as constant. 1
3. How will you obtain a resistance of $(11/5) \Omega$ from the resistances of 1Ω , 2Ω and 3Ω ? 1
4. A narrow beam of protons and alpha particle, each having the same momentum, enters a region of uniform magnetic field directed perpendicular to their direction of momentum. What would be the ratio of the radii of circular paths described by them? 1

Section B

5. Eight identical point charges $1\mu\text{C}$ each are placed at the corners of a cube of each side 0.1 m . Calculate the electric field at the centre if one of the corner charge is removed. 2
6. How does electric field and electric potential due to a point charge vary with the distance from the point charge? Draw a single graph to show the relationship. 2
7. A wire of 15Ω resistance is gradually stretched to double its original length. It is then cut into two equal parts. These parts are then connected in series across a 3 volt battery. Find the current drawn from the battery. 2

Section C

8. Using Gauss's law obtain the expression for the electric field due to an infinite thin sheet of charge. Draw a graph showing the variation of electric field. 3
9. Three identical capacitors C_1 , C_2 and C_3 of capacitance $6 \mu\text{F}$ each are connected to a 12 V battery as shown. 3

Find:

- (i) charge on each capacitor
- (ii) equivalent capacitance of the network
- (iii) energy stored in the network of capacitors

10. (a) State the principle of potentiometer. Explain how it is used to find the internal resistance of a cell. 5
- (b) AB is 1 metre long uniform wire of $10\ \Omega$ resistances. Other data are as shown in figure. Calculate length when galvanometer shows no deflection.

Assignment II

Based on unit 1-electrostatics

1. An electrostatic field line is a continuous curve. That is, a field line cannot have sudden breaks. Why not?
2. Describe schematically equipotential surfaces corresponding to
 - (a) A constant electric field in z- direction.
 - (b) A field that uniformly increases in magnitude but remains in a constant (say z-) direction.
 - (c) A single positive charge at the origin.
3. Vehicles carrying inflammable materials usually have metallic ropes touching the ground during motion. Why?
4. A bird perches on a bare high power line and nothing happens to the bird. A man standing on the ground touches the same line and gets a fatal shock. Why?

5. The graph shown here shows the variation of total energy (E) stored in a capacitor against the value of the capacitance (C) itself. Which of the two: the charge on capacitor or the potential used to charge it is kept constant for this graph?

6. Two small identical electrical dipoles AB and CD, each of dipole moment 'p' are kept at an angle of 120° as shown in the figure. What is the resultant dipole moment of this combination? If this system is subjected to electric field ($\vec{E}$) directed along + X direction, what will be the magnitude and direction of the torque acting on this?

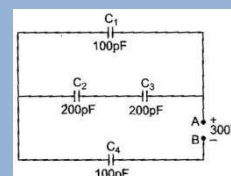
7. A charge 8 mC is located at the origin. Calculate the work done in taking a small charge of -2×10^{-9} C from a point A (0, 0, 3 cm) to a point B (0, 4 cm, 0) via point C (0, 6 cm, 9 cm).

8. An electrical technician requires a capacitance of $2 \mu\text{F}$ in a circuit across a potential difference of 1 kV. A large number of $1 \mu\text{F}$ capacitors are available to him, each of which can withstand a potential difference of not more than 400 V. Suggest an arrangement that requires a minimum number of capacitors.

(IT'S COMPULSORY TO ATTEMPT ALL QUESTION ANSWER)

which can withstand a potential difference of not more than 400 V. Suggest an arrangement that requires a minimum number of capacitors.

9. (a) Obtain the equivalent capacitance of the following network of capacitors.



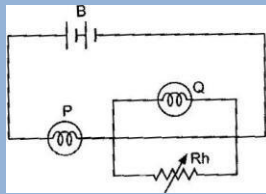
- (b) For a 300 V supply, determine the charge and voltage across each capacitor.

10. A test charge 'q' is moved without acceleration from A to C along the path from A to B and then from B to C in electric field E as shown in the figure. (i) Calculate the potential difference between A and C. (ii) At which point (of the two) is the electric potential more and why?

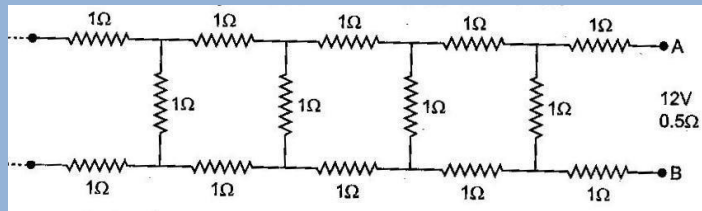
ASSIGNMENT III

Based on unit 2- current electricity

- The electron drift speed in a metallic conductor is only a few mm s^{-1} for currents in the range of the few amperes. How then is the current established almost at the instant the circuit is closed?
- When electrons drift in a metal from lower to higher potential, does it mean that the free electrons of the metal are moving in the same direction?
- Two conducting wires X and Y of same diameter but different materials are joined in series across a battery. If the number density of electrons in X is twice that in Y, find the ratio of drift velocity of electrons in the two wires.
- Two wires one of manganin and the other of copper have equal length and equal resistance. Which one of these wires will be thicker?
- Two 120 V light bulbs, one of 25 W and the other of 200 W were connected in series across a 240 V line. One bulb burnt out almost instantaneously. Which one was burnt and why?
- A cell of emf E and internal resistance r is connected across an external resistance R. Plot a graph showing the variation of P.D. across R, versus R.
- Draw the graphs showing the variation of resistivity with temperature for (i) nichrome and (ii) silicon.
- The circuit shown in the diagram contains a battery 'B', a rheostat 'Rh' and identical lamps P and Q. What will happen to the brightness of the lamps, if the resistance through the rheostat is increased? Give reasons.



9. Determine the current drawn from a 12 V supply with internal resistance $0.5\ \Omega$ by the infinite network shown in fig. Each resistor has $1\ \Omega$ resistance.



10. In a meter bridge, the null point is found at a distance of 40 cm from A. If a resistance of $12\ \Omega$ is connected in parallel with S, the null point occurs at 50.0 cm from A. Determine the values of R and S.

