

Class – XII

English

Q 1 Your nephew, a child of 7, has got lost .Giving necessary details of the child , draft an advertisement in not more than 50 words for classified column of a National Daily.

Q 2 You are Rajat Kumar, a resident of 79, R.K Puram , New Delhi. You are interested in joining the course in communication skills advertised by the Elite School of Language, South Extension Delhi. Write a letter of enquiry for the same.

Q 3. You are Prem/ Parul of 16, TT Nagar Bhopal. You would like to apply for the post of marketing manager in a reputed firm in Mumbai. Write a letter to the Public Relation Officer , Chantac Enterprises , Mumbai applying for the job. Write the letter in 125-150 words giving your Bio-Data.

Q 4 You are a student volunteer of Digital India Mission wing of your school, involved in the computer literacy campaign, “Each One Teach One” . Write out a speech, you will deliver on importance of computer literacy campaign.

Q 5 The government has banned the use of animals in the laboratories for the purpose of dissection. Write a debate in 150-200 words either for or against the decision.

Q 6 What does the writer mean by the title LOST SPRING.

Q 7 “food is more important for survival than an identity”. Give your comment on ragpickers of seemapuri.

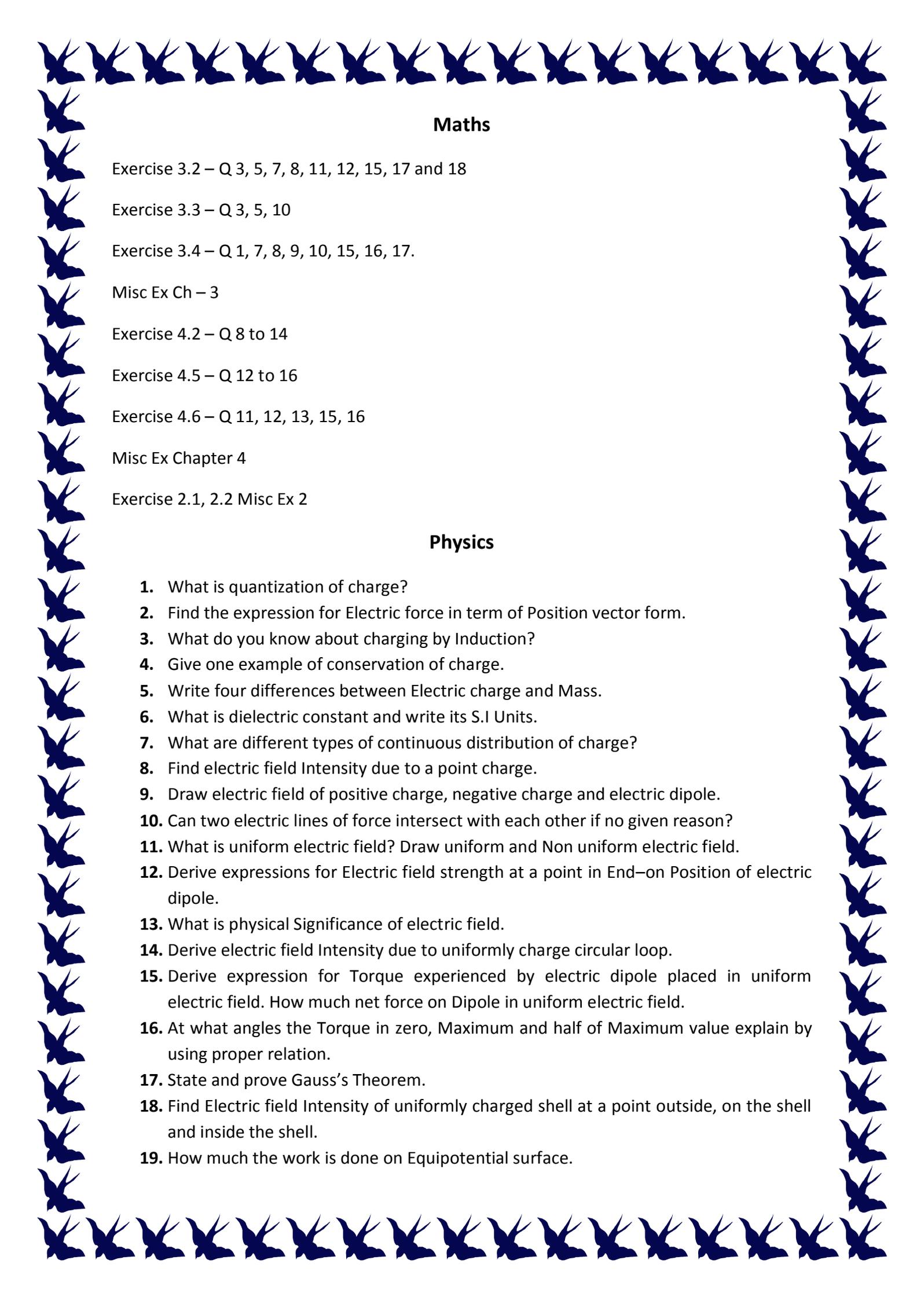
Q 8 What does Douglas learn out of drowning incident ?

Q 9 How does Douglas challenge fear of water ?

Q 10 Read first 14 chapters of the novel The Invisible Man and prepare a summary.

Hindi

- ग्रीष्म ऋतु का विकास गृहकार्य कक्षा 12वीं (हिन्दी)
- i) लेख लेखन हेतु - बेटी बचाओ - बेटी पढ़ाओ, मेरे सपनों का भारत, इंटरनेट : संचार का शक्तिशाली माध्यम
 - ii) फीचर लेखन हेतु - एकल परिवारों में बुजुर्गों की स्थिति, पढ़ाई-लिखाई से वंचित बचपन, महिलाओं के विरुद्ध बढ़ते अपराध ।
 - iii) 'गोदान' उपन्यास की समीक्षा लेखन हेतु ।
 - iv) आलेख - युवाओं में बढ़ती नशे की प्रवृत्ति, विज्ञापनों की लुभावनी दुनिया, मोबाइल बिना लगे सब सुना ।
 - v) क) टीवी सीरियलों के माध्यम से अंधविश्वासों और सहियों के प्रचार-प्रसार पर चिंता व्यक्त करते हुए किसी समाचार पत्र के संपादक को पत्र लिखिए और इसके समाधान के दो उपाय भी बताइए ।



Maths

Exercise 3.2 – Q 3, 5, 7, 8, 11, 12, 15, 17 and 18

Exercise 3.3 – Q 3, 5, 10

Exercise 3.4 – Q 1, 7, 8, 9, 10, 15, 16, 17.

Misc Ex Ch – 3

Exercise 4.2 – Q 8 to 14

Exercise 4.5 – Q 12 to 16

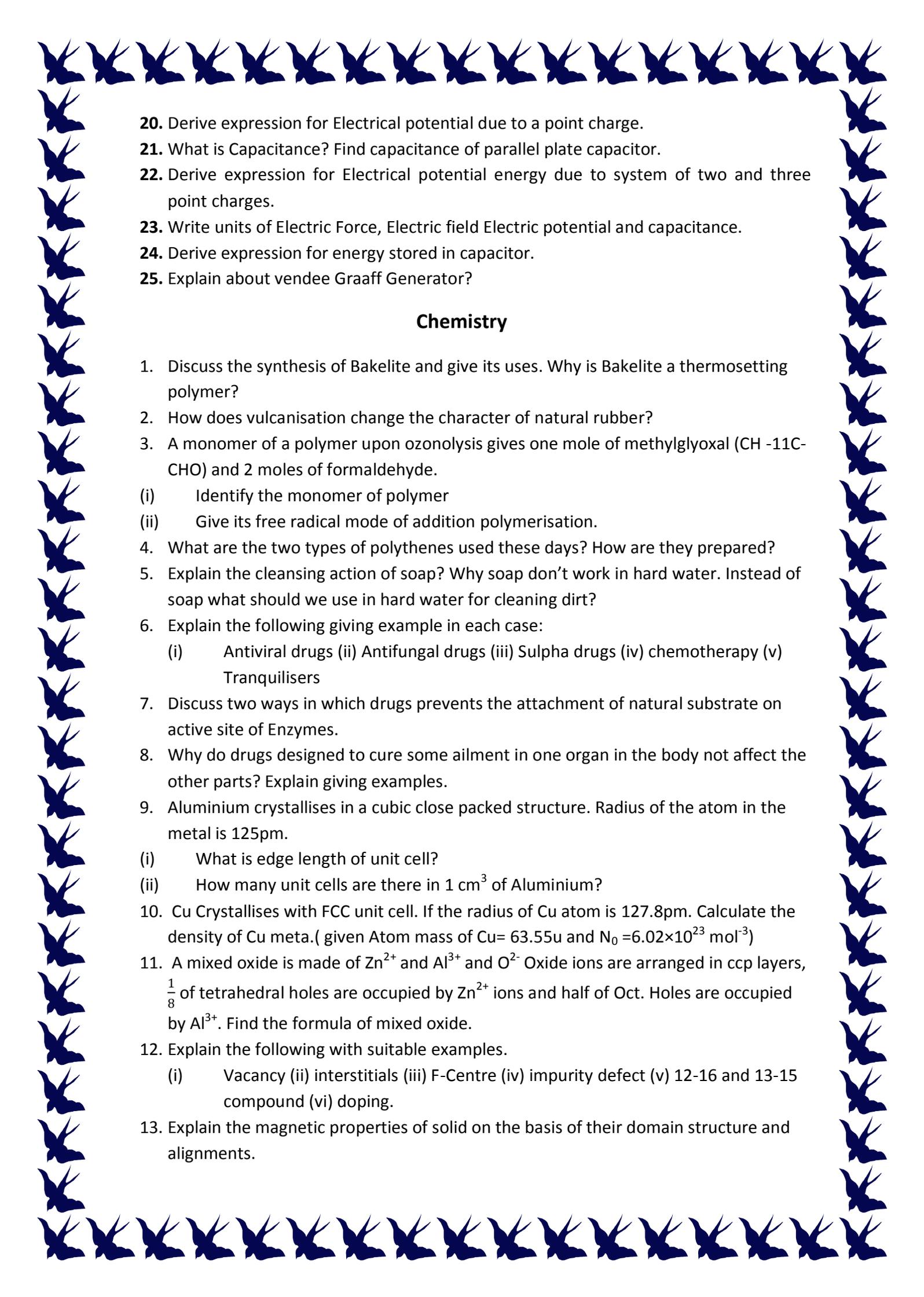
Exercise 4.6 – Q 11, 12, 13, 15, 16

Misc Ex Chapter 4

Exercise 2.1, 2.2 Misc Ex 2

Physics

1. What is quantization of charge?
2. Find the expression for Electric force in term of Position vector form.
3. What do you know about charging by Induction?
4. Give one example of conservation of charge.
5. Write four differences between Electric charge and Mass.
6. What is dielectric constant and write its S.I Units.
7. What are different types of continuous distribution of charge?
8. Find electric field Intensity due to a point charge.
9. Draw electric field of positive charge, negative charge and electric dipole.
10. Can two electric lines of force intersect with each other if no given reason?
11. What is uniform electric field? Draw uniform and Non uniform electric field.
12. Derive expressions for Electric field strength at a point in End-on Position of electric dipole.
13. What is physical Significance of electric field.
14. Derive electric field Intensity due to uniformly charge circular loop.
15. Derive expression for Torque experienced by electric dipole placed in uniform electric field. How much net force on Dipole in uniform electric field.
16. At what angles the Torque in zero, Maximum and half of Maximum value explain by using proper relation.
17. State and prove Gauss's Theorem.
18. Find Electric field Intensity of uniformly charged shell at a point outside, on the shell and inside the shell.
19. How much the work is done on Equipotential surface.

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20. Derive expression for Electrical potential due to a point charge.
 21. What is Capacitance? Find capacitance of parallel plate capacitor.
 22. Derive expression for Electrical potential energy due to system of two and three point charges.
 23. Write units of Electric Force, Electric field Electric potential and capacitance.
 24. Derive expression for energy stored in capacitor.
 25. Explain about vendee Graaff Generator?

Chemistry

1. Discuss the synthesis of Bakelite and give its uses. Why is Bakelite a thermosetting polymer?
2. How does vulcanisation change the character of natural rubber?
3. A monomer of a polymer upon ozonolysis gives one mole of methylglyoxal (CH_3COCHO) and 2 moles of formaldehyde.
 - (i) Identify the monomer of polymer
 - (ii) Give its free radical mode of addition polymerisation.
4. What are the two types of polythenes used these days? How are they prepared?
5. Explain the cleansing action of soap? Why soap don't work in hard water. Instead of soap what should we use in hard water for cleaning dirt?
6. Explain the following giving example in each case:
 - (i) Antiviral drugs (ii) Antifungal drugs (iii) Sulpha drugs (iv) chemotherapy (v) Tranquilisers
7. Discuss two ways in which drugs prevents the attachment of natural substrate on active site of Enzymes.
8. Why do drugs designed to cure some ailment in one organ in the body not affect the other parts? Explain giving examples.
9. Aluminium crystallises in a cubic close packed structure. Radius of the atom in the metal is 125pm.
 - (i) What is edge length of unit cell?
 - (ii) How many unit cells are there in 1 cm^3 of Aluminium?
10. Cu Crystallises with FCC unit cell. If the radius of Cu atom is 127.8pm. Calculate the density of Cu meta. (given Atom mass of Cu= 63.55u and $N_0 = 6.02 \times 10^{23}\text{ mol}^{-3}$)
11. A mixed oxide is made of Zn^{2+} and Al^{3+} and O^{2-} Oxide ions are arranged in ccp layers, $\frac{1}{8}$ of tetrahedral holes are occupied by Zn^{2+} ions and half of Oct. Holes are occupied by Al^{3+} . Find the formula of mixed oxide.
12. Explain the following with suitable examples.
 - (i) Vacancy (ii) interstitials (iii) F-Centre (iv) impurity defect (v) 12-16 and 13-15 compound (vi) doping.
13. Explain the magnetic properties of solid on the basis of their domain structure and alignments.

14. Explain molecular and covalent solids in detail giving examples.
15. What are the defects stoichiometric and non stoichiometric. Differentiate them giving their types with example.

16. Which colligative property is most suitable for the determination of molecular masses of polymers or macromolecules?

17. What will happen, when outer shell of an egg dissolved in hydrochloric acid and then placed in concentrated NaCl solution?

Computer Science

1. Define a class CARRENTAL in C++ with following description:

Private Members:

- ☐ CarId of type integer
- ☐ AboutCar of type string
- ☐ CarType of type string
- ☐ Rent of type float
- ☐ A Function Assign_Rent() to calculate Rent of Car as per the following rules:

CarType	Rent
Small	1000
Van	800
SUV	2500

Public Members:

- ☐ A function GetCar() to allow user to enter values for CarId, AboutCar, CarType, and call function Assign_Rent () to calculate the Car Rent.
- ☐ A function ShowCar() to allow user to view the content of all the data members.

2. Define a class Flight in C++ with the following specification:

Private Members:

- A Data Member FlightNumber of type integer
- A Data Member Destination of type String
- A Data Member Distance of float type
- A Data Member Fuel of type float

A Member Function CalFuel() to calculate the value of fuel as per the following criteria:

Distance	Fuel
<=1000	500
More than 1000 and <= 2000	1100
More than 2000	2200

Public Members:

- A function Feed_info() to allow user to enter values for FlightNumber, Destination. Distance & Call Function CalcFuel() to calculate the quantity of fuel.
- A function Show_fuel() to allow user to view the content of all the data members.

3.

Prove algebraically :

- 1) $xy + x'z + yz = xy + x'z$
- 2) $(A'+B'')(A+B)$
- 3) $A + A'B' = Z(X+Y+Z)$
- 4) $XY + YZ + YZ' = Y$
- 5) $A(B+BC + BC') = A$
- 6) $(X+Y+Z) (X+Y+Z) = Y+Z$

Program related to

Long questions: Q 7

Short questions: Q 15, Q 13, Q 14 , Q 17, Q 16

Unsolved questions: Q 2

Output questions revise of Chapter - 1

Biology

Q1 – What is law of dominance ?

Q2 – Why Mendel selected Pea plant for his experiment ? Give scientific name of the Plant and any four reasons.

Q3 – Name two plants which show incomplete dominance. Also explain this type of Inheritance.

Q4 – A colour blind child is born to normal couple. Is it possible ? If yes, explain.

Q5 – Give possible genotype and phenotype of blood groups in human beings.

Q6 – Write the genotype of :-

- (a) Down's syndrome
- (b) Klinefelter syndrome
- (c) Super female
- (d) Turner syndrome

Q7 - Draw polypeptide chain of DNA with five nucleotides

Q8 – Differentiate complete and incomplete linkage.

Q9 – Why DNA is considered a good genetic material ?

Q10 – Write short note on sickle cell anaemia.

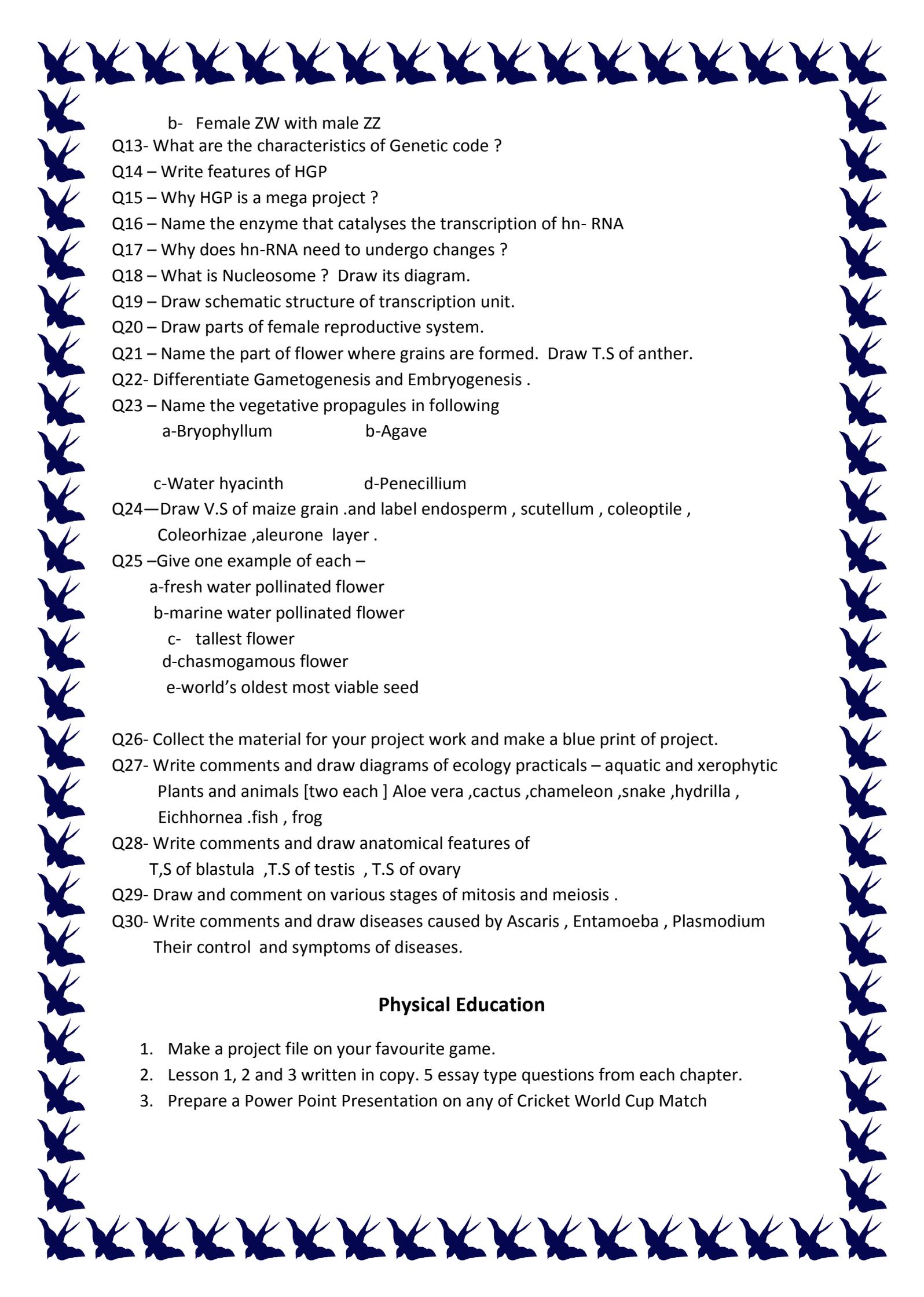
Q11 – Find out the m-RNA strand transcribed on the following –

5'—TAC GGG AAC GAC CCA GCA TAG GCA —3'

Q12—Write the sex determination mechanism in following crosses . Give one example

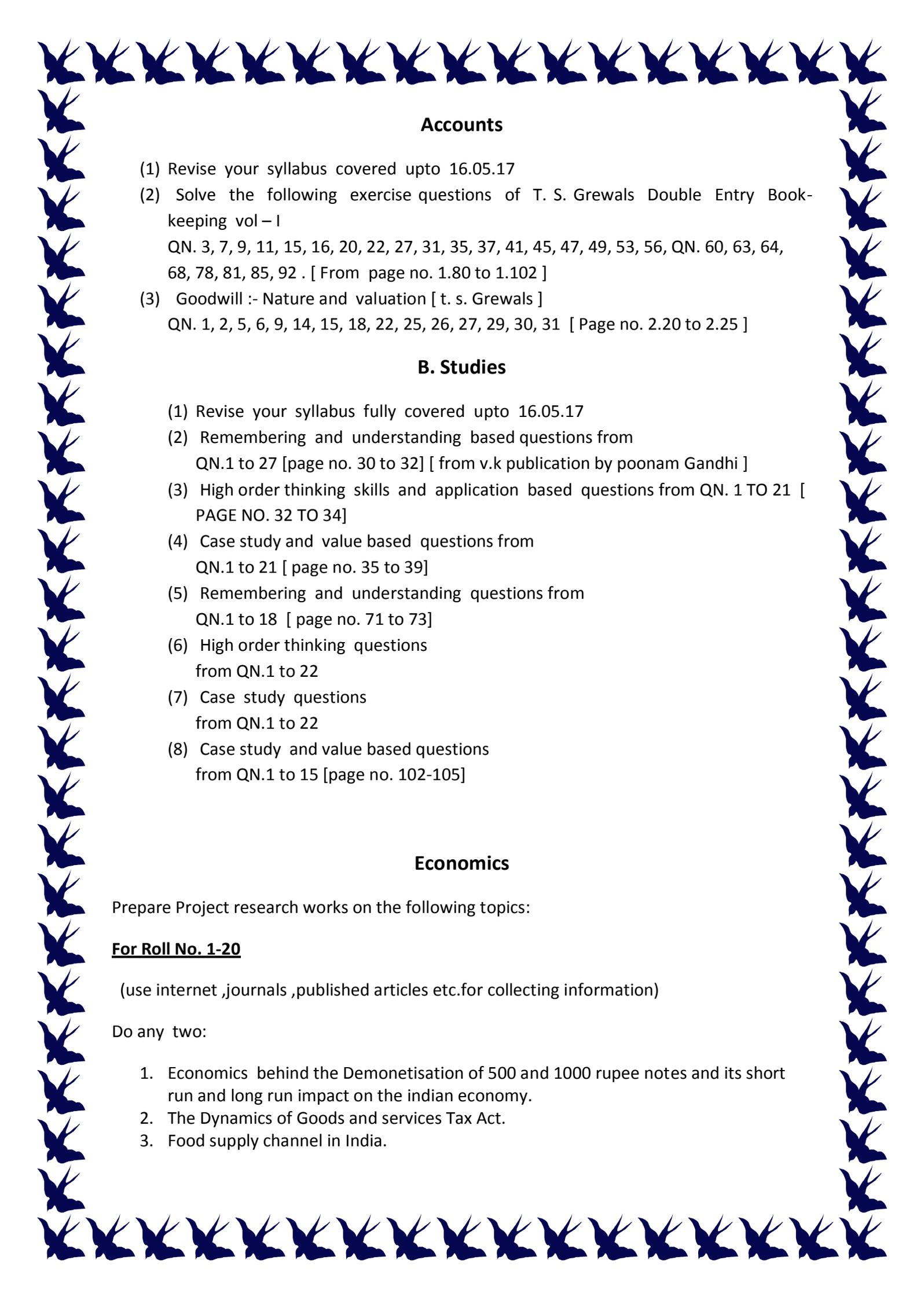
Of each -

- a- Female XX with male XO

- 
- b- Female ZW with male ZZ
- Q13- What are the characteristics of Genetic code ?
- Q14 – Write features of HGP
- Q15 – Why HGP is a mega project ?
- Q16 – Name the enzyme that catalyses the transcription of hn- RNA
- Q17 – Why does hn-RNA need to undergo changes ?
- Q18 – What is Nucleosome ? Draw its diagram.
- Q19 – Draw schematic structure of transcription unit.
- Q20 – Draw parts of female reproductive system.
- Q21 – Name the part of flower where grains are formed. Draw T.S of anther.
- Q22- Differentiate Gametogenesis and Embryogenesis .
- Q23 – Name the vegetative propagules in following
- a-Bryophyllum b-Agave
- c-Water hyacinth d-Penicillium
- Q24—Draw V.S of maize grain .and label endosperm , scutellum , coleoptile , Coleorhizae ,aleurone layer .
- Q25 –Give one example of each –
- a-fresh water pollinated flower
- b-marine water pollinated flower
- c- tallest flower
- d-chasmogamous flower
- e-world’s oldest most viable seed
- Q26- Collect the material for your project work and make a blue print of project.
- Q27- Write comments and draw diagrams of ecology practicals – aquatic and xerophytic Plants and animals [two each] Aloe vera ,cactus ,chameleon ,snake ,hydrilla , Eichhornea .fish , frog
- Q28- Write comments and draw anatomical features of T,S of blastula ,T.S of testis , T.S of ovary
- Q29- Draw and comment on various stages of mitosis and meiosis .
- Q30- Write comments and draw diseases caused by Ascaris , Entamoeba , Plasmodium Their control and symptoms of diseases.

Physical Education

1. Make a project file on your favourite game.
2. Lesson 1, 2 and 3 written in copy. 5 essay type questions from each chapter.
3. Prepare a Power Point Presentation on any of Cricket World Cup Match



Accounts

- (1) Revise your syllabus covered upto 16.05.17
- (2) Solve the following exercise questions of T. S. Grewals Double Entry Book-keeping vol – I
QN. 3, 7, 9, 11, 15, 16, 20, 22, 27, 31, 35, 37, 41, 45, 47, 49, 53, 56, QN. 60, 63, 64, 68, 78, 81, 85, 92 . [From page no. 1.80 to 1.102]
- (3) Goodwill :- Nature and valuation [t. s. Grewals]
QN. 1, 2, 5, 6, 9, 14, 15, 18, 22, 25, 26, 27, 29, 30, 31 [Page no. 2.20 to 2.25]

B. Studies

- (1) Revise your syllabus fully covered upto 16.05.17
- (2) Remembering and understanding based questions from
QN.1 to 27 [page no. 30 to 32] [from v.k publication by poonam Gandhi]
- (3) High order thinking skills and application based questions from QN. 1 TO 21 [PAGE NO. 32 TO 34]
- (4) Case study and value based questions from
QN.1 to 21 [page no. 35 to 39]
- (5) Remembering and understanding questions from
QN.1 to 18 [page no. 71 to 73]
- (6) High order thinking questions
from QN.1 to 22
- (7) Case study questions
from QN.1 to 22
- (8) Case study and value based questions
from QN.1 to 15 [page no. 102-105]

Economics

Prepare Project research works on the following topics:

For Roll No. 1-20

(use internet ,journals ,published articles etc.for collecting information)

Do any two:

1. Economics behind the Demonetisation of 500 and 1000 rupee notes and its short run and long run impact on the indian economy.
2. The Dynamics of Goods and services Tax Act.
3. Food supply channel in India.

For Roll No, 21-40

(use internet ,journals ,published articles etc.for collecting information)

Do any two:

- 1.Inclusive Growth Strategy with current reforms.
- 2.Central bank and its Functions.
- 3.The Impact of BREXIT from European Union .

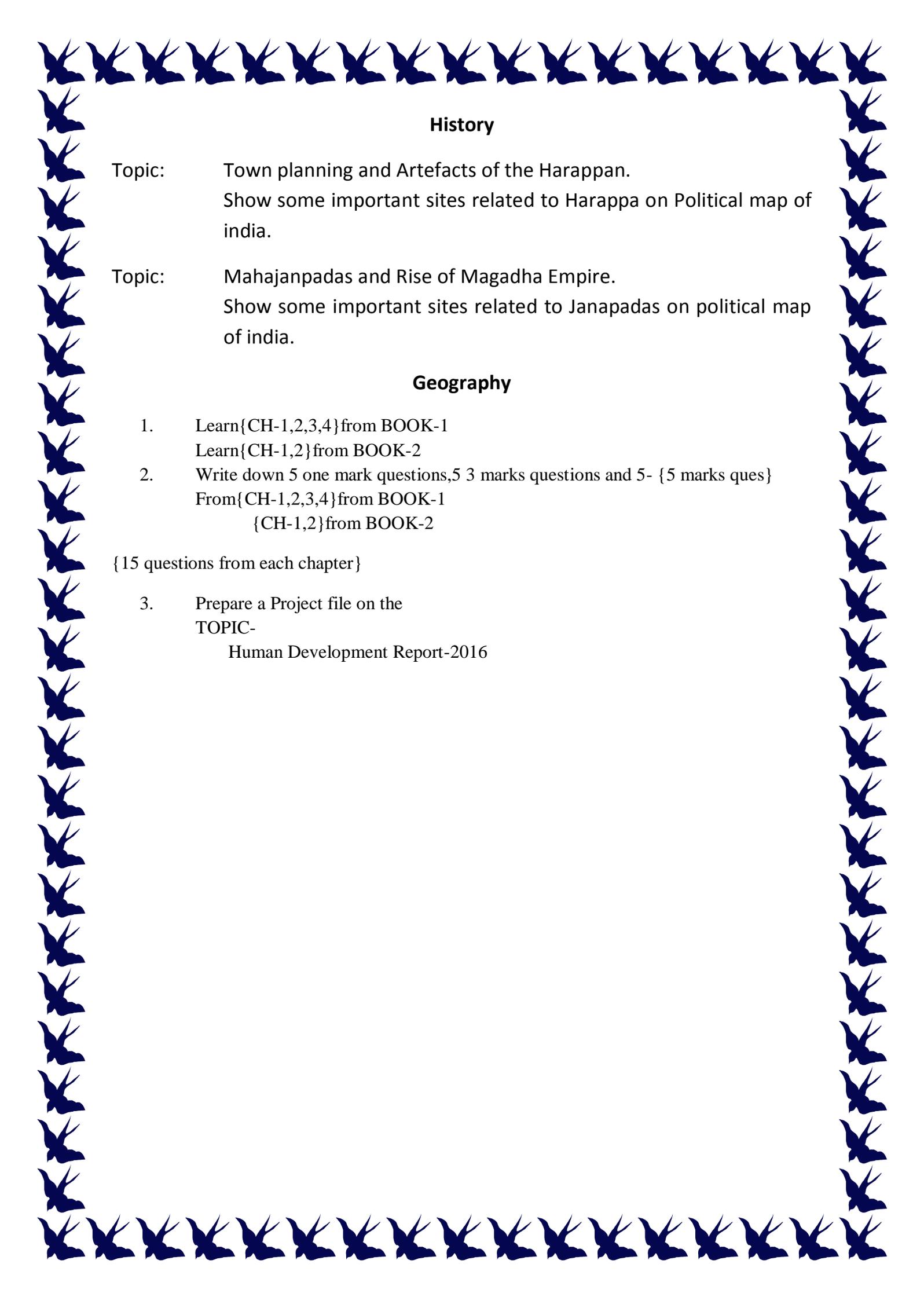
***** Student may work upon the following guidelines*****

Index, Acknowledgement:

- I. INTRODUCTION
 - II. DETAILS OF THE TOPIC
 - III. PROS AND CONS OF THE EVENT/HAPPENING
 - IV. MAJOR CRITICISM OF THE TOPIC IF ANY
 - V. STUDENTS OWN VIEWS/PERCEPTION/OPINION AND LEARNING FROM THE WORK.
 - VI. BIBLIOGRAPHY
-

write the answers of the following questions in a separate homework copy

- 1.Explain the concept of Production Possibility Curve with the help of a hypothetical example and diagram.
 2. Explain the conditions of Consumer's Equilibrium under utility Analysis Approach.
 - 3.Consumer's equilibrium under indifference analysis approach.
 - 4.State the Law of Demand with the Illustration and Diagram.
 - 5.Write the factors affecting affecting the demand of the product.
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History

Topic: Town planning and Artefacts of the Harappan.
Show some important sites related to Harappa on Political map of india.

Topic: Mahajanpadas and Rise of Magadha Empire.
Show some important sites related to Janapadas on political map of india.

Geography

1. Learn{CH-1,2,3,4}from BOOK-1
Learn{CH-1,2}from BOOK-2
2. Write down 5 one mark questions,5 3 marks questions and 5- {5 marks ques}
From{CH-1,2,3,4}from BOOK-1
{CH-1,2}from BOOK-2

{15 questions from each chapter}

3. Prepare a Project file on the
TOPIC-
Human Development Report-2016