KATHMANDU

DON BOSCO COLLEGE

Pre-board Examination - 2059

Class: XII **Subject: Physics (II)** **F.M: 75**
Time: 3 Hrs **P.M: 27**

(Answers to the numerical problems should be in SI system)

1. *Attempt all questions*: [2×8 = 16]
   a) Two air bubbles, one large and one small, are rising in a liquid. Which one would rise quicker and why?
   b) A wet piece of cloth gets colder than the atmosphere when it goes on losing water by evaporation. It means it loses heat to the atmosphere which is hotter than itself. How is it possible? Explain on the basis of Second Law of Thermodynamics.
   c) It is said that alternating electric current can be transferred even without electric contact, how is it possible?
   d) How can large drums give louder sound than smaller drums though they have been hit with the same force?
   e) Give the truth table for an AND gate and explain one of the results.
   f) How is the mass defect of a nucleus related to the binding energy? Give the relationship between them.
   g) Why does lightning occur only at higher altitudes and not at the lower ones?
   h) When moving electrons of a beam are accelerated they start to converge, how and why?

2. *Attempt any four questions*: [2×4 = 8]
   a) Steel rods are embedded in concrete to construct housing structures, why?
   b) Is it possible that heat has been given to a system but still the temperature decreases? Explain.
   c) When light travels from one medium to another, its velocity changes. Does it change the energy?
   d) An electron and a proton have been given the same kinetic energy. Provided that they are acting as matter waves, which one of them will have longer wavelength?
   e) Which one among the "**β**" and "**γ**" rays would be more harmful to living bodies?
   f) How do you know that the universe is expanding?
   g) What do you mean by lattice structure?
   h) What is green house effect?

3. a) Derive an expression for the energy stored in a string that has been stretched. [4]

   Or

   Describe an experiment to measure the surface tension of water. [4]

   b) Two spherical rain drops of equal size are falling vertically through air with a terminal velocity of 0.1 m/sec. What would be the terminal velocity if these two drops combine to form a single drop? [3]

4. a) Derive an expression for the work done during an adiabatic change of one mole of a gas. [4]

   Or

   Explain the structure and function of a Carnot engine (derivation of efficiency is not required). [4]

   b) Gas in a cylinder, at a temperature of 17^0C and pressure of 1.01×10^5 N/m^2, is to be compressed to one eighth of its original volume. What would be the difference between the final pressure if the compressions were done once isothermally and once adiabatically? [3]

5. a) Describe, with the aid of a diagram, Young's two slit experiment to determine the wavelength of monochromatic light. [4]

   Or

Prove the laws of refraction of light according to wave theory of light. [4]

b) A certain person can see objects clearly at distances between 20 cm and 200 cm from his eye. What type of spectacles will be required to enable him to see distant objects clearly? What will be his least distance of distinct vision when he is wearing them? [3]

6. a) Derive an expression for the velocity of a transverse wave along a string. [4]

Or

Determine the conditions for the maximum amplitude of beats produced from two sound waves represented by the following equations:

$y_1 = a\sin 2\pi f_1 t$, and

$y_2 = a\sin 2\pi f_2 t$, where the symbols bear their usual meanings. [4]

b) A detonator is exploded on a railway line. An observer standing on the rail 2 km away hears two reports. What is the time interval between these two reports? (Y for steel = 2×10^{11} N/m^2, Density of steel = 8×10^3 kg/m^3, Density of air = 1.4 kg/m^3, γ for air = 1.40, Atmospheric pressure = 10^5 N/m^2) [4]

7. a) Obtain an expression for the magnetic field at a point due to a very long straight wire using Biot Savart law. [4]

Or

Derive an expression for the EMF across the series combination of an inductor and a resistor. Also give the concept of impedance from the derived relationships. [4]

b) A horizontal rod of mass 10 gm and length 0.10 m is placed on a smooth plane inclined at 60^0 to the horizontal. A uniform magnetic field of value 'B' is applied on the rod. Calculate 'B' if the rod becomes stationary on the plane when a current of 1.73 A is allowed through the rod. [3]

8. a) Describe the structure and function of a Geiger Muller Counter. [4]

Or

Discuss how X-rays are obtained from Coolidge X-ray tube. [4]

b) When light of frequency 5.4×10^{14} Hz is incident on a metal surface, the maximum energy of the electrons emitted is 1.2×10^{-19} J. If the same surface is illuminated with light of frequency 6.6×10^{14} Hz, the maximum energy comes out to be 2×10^{-19} J. Find the value of the Planck Constant. [3]

9. Describe Thompson's experiment of determining the value of Specific charge of electron. [4]

Or

Discuss the action of Vacuum Tube as a full wave rectifier. [4]

10. What is an ozone hole? Describe the causes and effects of the depletion of ozone hole. [4]

Or

Discuss the energy scenario of our country. [4]

"Failure does not mean that God has abandoned you, it means he is working the other way round for you."

KATHMANDU

DON BOSCO COLLEGE (10+2)

Pre-Board Exam -2059

Stream: Science **F. M. : 100**
Class: XII **P. M. : 40**
Subject: Mathematics **Time : 3 hrs.**

[Group- A]

Attempt all the questions: **[6x3x2=36]**

1. (a) Sum to infinity : $1 + 3x + 5x^2 + 7x^3 \ldots\ldots\ldots\ldots$ $(-1<x<1)$
   (b) Write the middle terms in the expansion of $(a + x)^n$ when n is odd.
   (c) Find the value of k so that the length of the tangent from (5, 4) to the circle $x^2 + y^2 + 2ky = 0$ is 1.

2. (a) A committee is to be chosen from 12 men and 8 women and is to consist of 3 men and 2 women. How many such committee can be formed?
   (b) Show that $\lim_{x \to 0} \frac{\log(1+x)}{x} = 1$
   (c) Find the focus and directrix of the parabola $y^2 - 4y - 8x - 20=0$.

3. (a) Prove: $\int Co\sec x \, dx = \log\left|\tan\frac{x}{2}\right| + c$.
   (b) Show that the vectors $2\vec{i} + 3\vec{j} - 8\vec{k}$ and $2\vec{i} + 4\vec{j} + 2\vec{k}$ are orthogonal.
   (c) Prove that the algebraic sum of the deviations of the items taken from their arithmetic mean is zero.

4. (a) A B C D E F is a regular hexagon. Express $\vec{AC}$ and $\vec{AD}$ in terms of $\vec{AB}$ and $\vec{BC}$
   (b) Calculate g_{xy} if $\sum x^2 = 114;\ \sum y^2 = 442;\ \sum xy = 174;$
   (c) A card is drawn at random from a well shuffled deck of 52 cards. Find the probability of being it
   (i) a red card (ii) a heart.

5. (a) Write the expression for the magnitude and the direction of the resultant of two forces acting at a given angle.
   (b) Calculate the power of a pump which can lift 300 kgs of waters through a vertical height of 4 m in 10 secs. [g =10m s^{-2}]
   (c) Find the slope and inclination with X-axis of the tangent of the curve $2y=2-x^2$ at x=1.

6. (a) Define a couple and the moment of a couple. Express the moment of a couple mathematically.
   (b) Replace a force of magnitude 50 kg wt by two like parallel forces one at a distance of 2 m and other at 8 m from the given force.
   (c) Solve: $\frac{dy}{dx} = \frac{x^2 + x + 1}{y^2 + y + 1}$

[Group – B]

Attempt all the questions **[8x2x4=64]**

7. (a) If a, b, c are in H.P. prove that a(b + c), b(c-+ a), c(a + b) are in A. P.
   (b) In how many ways can the letters of the word ARRANGE be arranged so that no two R's come together.

8. (a) Show that: $\frac{\frac{1}{2!} + \frac{1}{4!} + \frac{1}{6!} + \ldots\ldots\ldots}{\frac{1}{1!} + \frac{1}{3!} + \frac{1}{5!} + \ldots\ldots\ldots} = \frac{e-1}{e+1}$
   (b) State and prove the "Theorem of Total probability"

Or

A dice is thrown 3 times. Getting a '5' or '6' is numbered a success. Find the probability of getting
(a) 3 successes and (b) exactly 2 successes.

9. (a) Obtain the condition for the straight line y = mx + c to be a tangent to the circle $x^2+y^2=a^2$.

(b) Find the equation of the parabola in the standard from $y^2 = 4ax$.

Or

Find the eccentricity, length of the latus rectum and coordinates of the foci of the ellipse $\frac{x^2}{16}+\frac{y^2}{4}=1$

10. (a) If the position vector of M and N are $3\vec{i}+\vec{j}-3\vec{k}$ and $4\vec{i}-2\vec{j}+\vec{k}$ respectively find $\overrightarrow{MN}$ and determine its direction cosines.

(b) Find the derivative of $\left(Sinh\frac{x}{a}+Cosh\frac{x}{a}\right)^{nx}$

Or

A point is moving along the curve $y=2x^3-3x^2$ in such a way that its x-coordinate is increasing at the rate of 4 ft/sec. Find the rate at which the distance of the point from the origin is increasing when the point is at (2,4)

11.(a) Prove by vector method: $Cos(A-B)=CosACosB+SinASinB$

(b) Integrate : $\int\frac{dx}{a+b\cos x}$ when a>b.

Or

Solve: $\tan x\frac{dy}{dx}+y=\sec x.$

12. (a) Amend the following table and locate the median from the amended data:

Size	**Frequency**	**Size**	**Frequency**
10-16	10	30-35	28
16-17.5	15	35-40	30
17.5-20	17	40-onwards	40
20-30	25		

(b). Prove that in a discrete distribution the standard deviation is not less than the mean deviation from mean.

Or

Prove that the correlation coefficient between two variables lies in between –1 to +1.

13. (a) State and prove "Lami's Theorem".

Or

The resultant of two forces P and Q acting at an angle α is (2m + 1) $\sqrt{P^2+Q^2}$ when they act an angle (90^0 - α) the resultant is (2m-1) $\sqrt{P^2+Q^2}$ .Prove that $\tan\alpha=\frac{m-1}{m+1}$.

(b) If a, b, c be the space described by a particle during the p^{th} , q^{th} and r^{th} seconds of its motion respectively, prove that a(q - r) + b(r - p) + c (p - q) = 0.

14. (a) Prove that the algebraic sum of the moments of any two forces, meeting at a point, about any point in their plane is equal to the moment of their resultant about the same point.

(b) If R be the horizontal range of a projectile and h is greatest height, prove that its initial velocity is $\sqrt{2g\left[h+\frac{R^2}{16h}\right]}$

Or

Define work, power and energy. Prove that the sum of the kinetic and potential energies of a freely falling body remains constant throughout the motion.

Best of Luck

KATHMANDU

DON BOSCO COLLEGE

Pre-Board Exam - 2059

Stream: Science

Class: XII **F. M.: 100**

Subject: C. English **P. M.: 40**

Attempt all the questions.

Students are requested to answer in their own words as far as practicable. They are further advised to reduce the occurrence of minor mistakes through thorough revision.

Q.No. 1 Read the passage, comprehend and answer the questions given at the end. ***[10]***

The development of the Space Shuttle has dramatically reduced the cost of sending loads into space. The Shuttle takes off from Earth like a rocket, and lands again like an aircraft. It can transport not only its own crew, but also passengers, and has a huge cargo-hold, which is capable of carrying large satellites or a space laboratory.

Before the Space Shuttle was created, it was necessary to plan trips into space several years in advance. However, for the rest of the century it should be possible to make space flights every week or so. Any scientist or engineer needing to travel into orbit will simply take the next Shuttle flight, stay as long as necessary, and then return at his or her convenience.

It is difficult to imagine the immense opportunities created by the Shuttle. One of the great advantages of having a reusable space vehicle is that it can take one load after another into orbit. Very large space stations could not be launched in their complete form directly, from Earth, but they could be built piece by piece in space. The Space Shuttle is likely, to be used as a general workhouse for the rest of this century, and the building of such stations in orbit should become commonplace.

Once these huge orbiting space stations are completed, they are likely to become the platforms from which hundreds of robot space ships could be launched cheaply and easily to explore the solar system and to start operations on the Moon. The technology needed for this is already developed and available. And because of commercial and military pressures to develop space technology, it is likely that governments will be increasingly willing to start extensive programmes of space engineering, exploration and research.

One future development could be the setting up of completely artificially constructed space colonies. According to a growing number of experts, it is already technically feasible to construct **a** pioneering space colony, powered by solar energy. This colony would be self-sufficient, and would also allow its inhabitants to conduct further space engineering projects and build more colonies, as they were needed.

An American scientist, Dr Gerard O'Neill of Princeton University, has predicted that a space colony, capable of supporting 10,000 humans could be set up well before the turn of the century. The materials for such a colony would have to be shipped up from Earth. According to Dr O'Neill, further space colonies, which could house perhaps ten million people each, could be constructed during the early part of the twenty-first century. These would not be made from earth materials, but would get their raw materials from the Moon. **(Adapted from *Future World)***

1. How is the Space Shuttle different from earlier space vehicles? .
2. What are the main advantages of the Space Shuttle?
3. What is its main use likely to be over the next 20 years?
4. Why couldn't a complete space station be launched directly from the earth-?
5. Do you think the developments predicted in the passage are really likely to happen? Why/Why not?

Q.No. 2 Answer any five of these following questions: [5x3=15]

a. About what loss is the old pensioner lamenting? Discuss theme of the poem as well.
b. Who helped Hansel and Gretel after they were deserted by their parents? Did they help each other? How?
c. In what ways was the ship ghostly? Did it symbolize some fact in boy's character or in his achievement? Discuss.
d. How is the Poem " The Grandmother" experiential? Illustrate the poem to support your answer.
e. Why did the young man confess his crime to officers after he had been successful in concealing the old man's dead body? (The Tell-Tale Heart)
f. Describe the achievement of Elizabeth Arden and Annie Turnbo-Malone as successful entrepreneurs. (Women' s Business)
g. Justify the title 'The Children Who Wait" referring to a couple of children still waiting for being adopted.

Q.No. 3 Answer any one of the following questions in length. [10x1=10]

i) What are basic differences between advanced technocratic and primitive societies about the concern of pregnancy and child bearing? What suggestion does Greer pass unto women at last.
ii) What are the chief attributes of King's speech 'I Have a Dream"? What is its historical significance?

Or

Critically examine the story " The Boarding House" through the analysis of chief characters Mrs. Mooney, Polly and Mr. Doran.

Q.No.4 Complete these following sentences with appropriate structures or words. [6x1=6]

i) She is used to ...a bath everybody.
ii) Bhaktapur is about. ...Kathmandu.
iii) No sooner had the plane taken off...
iv) The police had only just arrested the criminal...
v) If the officer had accepted the bribe...
vi) The fact that trusted me...

Q.No.5 Compare the prices of things below in two different structures. [6]

i) Cotton sheets: £ 14 Silk sheets: £ 150
ii) Olive oil: £ 2 Corn Sheet: £ 99 Pence
iii) Color T.V.: £ 310 Black –and-White: £ 60

Q.No 6 a) Rewrite these sentences using <u>either</u> as soon as + Past <u>or</u> as soon as + <u>Past Perfect.</u> [3]

i) He left the house straight after the breakfast.
ii) I told him about my problem and he instantly offered to help.
iii) He got the exam result and immediately rang his parents.

b) Change these sentences using <u>ought to or ought not to</u>. [3]

i) Let's not sell it – its not worth anything.
ii) Why don't you take a pullover – it might turn cold.
iii) Don't ask him, he doesn't speak English.

Q.No7 Answer these questions using <u>supposed to opportunity, I hear, I'm told</u>.

i) Do you know if Alsatians make good pets?
ii) What does it feel like to be hypnotized?
iii) I'm thinking of going to see (name of film). Do you know what its like?
iv) What do you think (Famous person) is like as a person?
v) Do you know anything about life in Ancient China?
vi) I wonder what its like to live in Hollywood?

Q.No.8 Write essays on any two of these topics. [10x2=20]

i) Pop-Music, Fashion & Youth culture.
ii) Education and Entertainment
iii) Corruption is in the root of violence, Discuss.

Q.No.9 Report the remarks below using the words given in brackets. [6]

Admit	Explain	Assure
Deny	Point out	Insist
Accuse	Claims	Warn

i) " I did not break the drill"
- Mr. Lock …

ii) "The drill reached you in perfect condition"
- The Managing Director…

iii) "If you do not pay the balance within 7 days, we'll have to take legal action"
- The Managing Director…

iv) "You're interfering in a private matter"
- The Sales Manager…

Q.No 10 Select any three of the following situations and develop them into paragraphs. [15]

a) Write a joke you've heard.
b) Advantages & disadvantages of watching T.V.
c) A couple of whishes that you've developed about your life.
d) An experience you cannot forget.
e) The way a pistol works.

Best of Luck

KATHMANDU

DON BOSCO COLLEGE

Pre-Board Exam - 2059

Stream: Science
Class: XII **F. M.: 75**
Subject: Chemistry **P. M.: 30**
Time: 3hrs.

Attempt all questions: ***[2x15=30]***

Group 'A'

1) Why NH_3 has pyramidal shape, whereas it give SP^3 hybridization.
2) Give two differences between bonding and antibonding molecular orbitals.
3) For a reaction both ΔH and ΔS are positive under what condition will the reaction occur spontaneously.
4) Can a solution of 1M $CuSO_4$ be stored in a vessel made of nickel.

Given: $\frac{E^0 Ni^{2+}}{Ni} = -0.25v$

$\frac{E^0 Cu^{2+}}{Cu} = -0.34v$

Also calculate E^0 cell by constructing a galvanic cell by given data.

5) Is there any reaction for which reaction rate does not decrease with time?
6) What is the use of NH_4Cl in group III A analysis along with NH_4OH?
7) Why an aqueous solution of CH_3COONH_4 is almost neutral?
8) Both ethanoic and butanol have molecular mass 60. Ethanoic acid has b. pt 118^0c whereas butanol has 97^0c. Why?
9) Complete the following reaction:

$$C_2H_5Cl \xrightarrow{NaCN} B \xrightarrow[\text{reduction}]{LiAlH_4} C \xrightarrow{HONO} D$$

Give formula of B, C & D.

10) What is condensation polymer? Give the structure of Nylon-66.
11) What is coupling reaction?
12) Why --NH_2 group is an o-p directing group?
13) What is fermentation?
14) Differentiate between DNA and RNA.
15) What are carbohydrates? Classify them on the basis of hydrolysis.
16) Give the name and structure of a drug which is used as an analgesic as well as antipyretic.
17) Give one chemical test to distinguish between diethyl ether and ethanol.
18) Show that Williamson's synthesis is nucleophellic substitution reaction.
19) What happens when benzaldehyde reacts with alcoholic KCN.
20) Calculate the pH of 0.001M $Ba(oH)_2$ assuming it to be completely ionized.

Group 'B'

Attempt the questions: ***[5x5=25]***

21) a) Give difference between rate of reaction and rate constant.

b) Calculate the unit of zero order, first order and second order reaction.

22) How many hours does it take to reduce 3 mol of Fe^{3+} to Fe^{2+} with 2 ampere current (F = 96500c).

23) Give two important ores of Zn. How zinc is extracted from its ore?

24) How is anhydrous formic acid is prepared in lab?

25) Convert: a) formaldehyde to acetaldehyde
b) aniline to benzene

26) Explain following with one suitable example: a) clemmenson reduction
b) Aldol condensation

27) Define solubility product. The solubility product of PbI_2 is $1.4x10^{-3}$. Calculate the solubility in a) moles/litre b) gm/litre atomic mass of Pb =82 atomic mass of iodine =53.

Group 'C'

Attempt two questions: ***[2x10=20]***

28) Give lab method for preparation of pure aniline in the lab. How it is converted into p-nitro aniline.

29) a) How would you separate 1^0, 2^0, 3^0 alcohol by Victor Mayer's method.
b) An alkene A on ozonolysis yields acetone and an aldehyde. The aldehyde is easily oxidized to an acid B. When B is treated with Br_2/P to yield a compound C, which on hydrolysis give a hydroxy acid D. This acid can also be obtained from acetone by the reaction with HcN followed by hydrolysis. Identify compound A,B,C & D.

30) How steel is manufactured by open hearth process. What happen when a) red hot iron is treated with steam b) iron reacts with ConC. HNO_3.

31) Write short notes (any two):
a) Separation of 1^0, 2^0,3^0 amine by Hoffmann's method.
b) Gibbs –Helmhotz equation c) Nuclephillic substitution reaction in carbonyl compound.

Best of Luck

KATHMANDU

DON BOSCO COLLEGE (10+2)

Pre-Board Exam -2059

Stream : Science **F. M. : 75**
Class: XII **P. M. : 30**
Subject: Biology **Time : 3 hrs.**

Attempt all questions:

Q.No 1.Answer the following questions: [1.0x15=15]

a) Name the bundle of nerve fibre that connect cerebral hemispheres.
b) What are the enzymes secreted in stomach & name the hormone which stimulate to secrete enzymes.
c) Name the casual organism of tuberculosis & the toxin release in the body.
d) What is addiction?
e) What is specificity of cardiac muscle?
f) Name the photoreceptor cells found in retina.
g) Which step in the urine formation is most important & why?
h) Why is yeast important in fermentation?
i) Define the term emasculation.
j) Name any two plants which are used as green manures.
k) What are Phytohormones?
l) Name any one plant with scattered vascular bundles in stem.
m) Define operon concept.
n) Give any one example of co-dominance.
o) What is the function of xylem?

Q.2 Answer the following questions: [3x10=30]

a) Explain the disease caused by the incompatibility of Rh. factor.
b) Describe the structure of renal capsule in short.
c) What is nerve impulse? Write in brief about it.
d) Write the mode of infection & symptoms of disease Ascariasis & AIDS.
e) What is cancer? Mention types of cancer & their symptoms.
f) Write down about genetic code.
g) Differentiate between genotype & phenotype.
h) Write the application of genetic engineering.
i) Differentiate between self & cross-pollination.
j) Explain the experiment to prove that rate of transpiration is unequal in a dorsi-ventral leaf.

Q.3 Describe the structure of Pituitary gland in brief. List the hormones secreted by anterior lobe of pituitary gland & their functions. [8]

Or

Describe the structure of human brain with well labelled diagram.

Q.4 Describe the development of frog in reference of the formation of germinal layers. [7]

Q.5 Define gene & explain DNA as the hereditary material. [8]

Q.6 Define aerobic respiration? Describe the Kreb's cycle.

Or

What is secondary growth? Describe the activity of cambium in the process of secondary growth in dicot stem.

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O{ lji0f'cdl/sf -----------------------------hf, c1ft kIf_

p_ gkfnLx¿sf]al4 --------------------------;k| OR5fy{

**3_ jfSo–ljZnIf0f ug{f] **

/ft lat] laxfg eO{;o{pbfpgf;fy sdnx¿ km"n] k[jLnfO{;f}bo{n] rDsfO5 .

**8=_ x]\ vh\ lht\ x', / /dfp wf'taf6 ;fdfGo e'tsflns lspfkb lgdf0f{u/L elnan vh]sf] j0f{g ug{f] **

**r_ cwf]]vfl Ît kbsf sf/s / ljelSt 5§of0{ltgLx¿sf]gfd;d] n]gXf] **

cfh gfahb|v xg]eg]sf]sfo§|dnf0{;f/] P3f/ ah]k/'bf0P5 . dnf0{of]s/fn]lgs}em]§ rnfof]/ d]h]cfofhsx¿nfO{ gdhf;Ffufnl klg u/]+ t/ oxfFsf dflg;nfO{hlt cfnf]rgf u/]klg pgLx¿sf]al4 7Ufgdf cfpg]xf]g .

^_ **tn lbOPsf]cgR5|b k9L ;f]wPsf k[gx¿sf];lªlf|t pQ/ n]gXf] ** -!)_

sljtfnfO{s;h]lglZrt kl/efifleq afFg ;s]sf]5g . g sg}sljn]sljtf oxL xf]eg] 7f§'jf u/L n]v]sf]5 g sg} kf7sn]g}sljtf oxL xf]eg] lrgfPsf]5 . sljtfnfO{;ah]cf–cf^g}wf/0ffcg';f/ aem]sf 5g\. sljn]cf^g}wf/0ffdf /x]sf]:j¿knfO{aem] sljtf n]v]sf]5 / efjsn]klg cf^g}wf/0ffdf /x]sf]sljtfsf]:j¿knfO{lrgfPsf]5 . ;ah]cf–cf^g}k]sf/n]a‰g]xgfn]sljtf klg ;a]sf nflu ;a}k]sf/sf]ePsf]5 . sljtf clt k[rLg sfnb]v ;jf{ws lkp 5 . ;flxTo klxn]sljtfs}¿kdf hGd]sf] xg;S5 / sfnfGt/df dfq c¿ ljwfx¿sf]hGd ePsf]xg;S5 . o:tf]ctLj ;Gb/, clt ;Td, clt snfTds, clt uDeL/, ;Jf{kp, cd/ / ;flxlTos ¿k sljtf klg slxn]sfxL+eg];Í6df k/h:tf]b]vG5 . klZrddf k[rLg sfnd}kn6fh] ;flxTok|t cfIfk nufPsf lyP . pgs}lzio Pl/:6f6nn] lj/rg l;4fGtdfkm{ To;sf] lrQa‰bf]hjfkm klg lbPs}xg\. To:t}kghf{u/0fkl5 lj1fgsf]a9bf]rxsdxssf cufl8 km]/ ;flxTonfO{dWooUlg nflN6g elgof]/ cfO= P= l/r8{\h:tf ljåfgh]dNo l;4fGtU åf/f To;sf]klg k|tjfb u/]cfh kl]/ PSsfO;f]+ztfAbLdf lj1fgsf] r/d ljsf;n] ;flxTonfO{dlng agf0lbPem]+nfU5 / sljtfn]kg sg}To:tf 7'hf k|tefnfO{klv{h:tf]nfU5, h;n] sljtfsf]dXf/df kgl rds NofObcf];\.

**k[gx¿ **

s_ sljtfnfO{dflg;x¿n]s;/L aem]sf 5g\<

v_ jt{dfg ;dodf sljtfsf]l:ylt s:tf]5 <

u_ sljtf s:tf]xG5 <

3_ o; cgR5|bsf nflu pkoQm zLif{§ s]xg ;Snf <

ª_ cwf]]vfl Ît kb–kbfjnLsf]tfTko{s]xf]<

&_ **tn lbOPsf]cgR5|bsf];ªlf|Ls/0f ug{f] ** -%_

xfdLn]lrlgofF/fHozlSt;F zq'tf ;fFg]sg}klg cGt{fli6«o zlStsf]b|jf k[fs'tfjfbL TfŒjnfO{g|kfnL elddf 3';k] ug{lbg' jf rnvh ug{lbg'lrlgofF jfy§f lj¿4dfq g/x] To:tf]ultljlwn]g|kfnL /fli6«otf / cv08tfnfO{;d]t b3{gfdf kfg{;S5 . t;y{ o; b[i6sf]fn]xg][xf]eg];/lffsf ;Gbe{df lgoltn]g}xfdLnfO{;femf b[i6sf]fdf afFwlbPsf]5 . xfDfL olt efUodfgL 5f}+s xfDfL cf^gf]cfly§ / k[ljlws ljsf;sf]lgIDt rLg ;/sf/af6 h]–hlt ;xofu kfpFf}To;sf]km:j¿k xfdLn]lrgnfO{s]xL lbgkbg, kmut cf^gf]/fli6«otf . e"–cv08tfk|t ;r]t /xF}b]zdf /fhgLlts l:y/tf / zflGt sfod /fVbf xG5, hf]:jo+g|kfnLsf nflu cfjZos 5 . xfdL t cfkm}+kmf6L kmf6L csfF{nfO{bf]f nufP/ cfkm", ;dfh / /fi6«ljsf; ug{g;s]sf]d]hf]kvfNg]u5f]+. xfDfL cf^gf af6fx¿ eTsfpFf}, hghLjg tx;gx; kf5f]+clg cf^gf]ljsf; gePsfdf bf];f]jf t];f]zlStnfO{wfg{xft nufP/ ;/f{5f}. o;}n] xfdL ;H}nof]+eg]xfdf]kl/l:Yfltnf0{s;h]wldNofpg ;Sbg, xfdL wldlnof]+eg]km]/ s;h];H}nofpg ;Sbg .

*_ cf^gf]ljBfnodf kGw|lbgk5fl8 xg];flxlTos uf]7Ldf ;flxTosf/x¿nfO{cfdGqO0f ug{n]vg]lgdGq0ff kqsf]gdgf tof/ kfg{f];\ . -%_

(_ **sg}Ps zLif{§df #)) zAb g36f0{lgaGw n]gXf] ** -!)_

s_ ;do / dflg; -Vf_ wfld{§ ;lxi0f'tf -u_ PsLs[t >dzlSt

cyjf

\+ s_ hgzlSt knfogU zLif{§df !%) zAb g36f0{Pp6f l6Kk0fL n]gXf];\.

v_ o; jif{§f]dxflzj/flqU zLif{§df Pp6f k|tj]pg n]gXf];\.

!)_ **gfnfkfgLdfU PsfÎLn]dVl/t u/]§f dxŒjkO{{ljifox¿ s]xg\, ;dLlff ug{f] \.** -!)_

cyjf

a;f0Fpkgof; n]vgsf]k[7el'dsf ;DaGwdf rrf{ub{o;sf]zLif{§Lo ;fy§tf b]vfpgXf];\.

!!_ **sg}b0{k[gsf pQ/ n]gXf] ** -%×@ Ö !)_

s_ d]f]b]zU sljtfn]g|kfnsf]k[s[ts ;f}bo{/ /fi6«kdnfO{s;/L Pp6};'dfdf pg]sf]5 <

v_ æcf0df0{;fyLÆ lgaGwn]s:tf ;fdflhs lspfsnfkk|t cfs[z kf]v]sf]5 <

u_ /ftel/ x'/L rNof] syfn]lbg];fdflhs ;Gbz s]xf]<

;dfKt