Roll. No. [   ]   Code No. 11/English/NLCS/110

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 100**

General Instruction :-
SECTION – A   READING   20
SECTION – B   WRITING & GRAMMAR   30
SECTION – C   LITERATURE & LONG READING   30
SECITON – D   LISTENING SKILL &   SPEAKING SKILL   20

SECTION – A (READING)

Q.1   Read the passage given below and answer the questions that follow :

(i)   High altitude climbing is still a very dangerous task in spite of the availability of oxygen masks and other protective equipment which modern climbers take with them. These, of course, are indispensable accessories of climbing, but more important than these is the stamina of the climber which ultimately determines the success of his attempt.

(ii)   Throughout his journey, death is his constant companion which he can keep at a distance only with his superb presence of mind. He has the tread every inch of the ground with the utmost care, for a false step may not only strike him a fatal blow but also bring disaster to the whole expedition.

(iii)   That is why all expeditions invariably take with them local guides who are experienced climbers and who have a thorough knowledge of the nature of the terrain. A huge amount of capital is needed for financing these expeditions and this is generally provided by governments or rich private organizations.

(iv)   The primary object of a mountaineering expedition is to get to the top of a high mountain which in the past has withstood all attempts to conquer it. But it should not be presumed that the expedition is a complete failure if it does not reach its destination because of bad weather, loss of equipment etc.

(v)   Every big expedition takes with it men who are interested in botany, biology, geology carrying with them equipment for recording their observations. Other scientists and explorers utilize the fruits of their observations.

(vi)   To ordinary people mountaineering need not be a fearful journey in the land of snowstorms where the brave adventurer is always face to face with death. In the company of friends they can enjoy an outing near a waterfall or into the next valley.

Q.1.1   Answer the questions below :-   6 × 1= **6**

(i)   What factors determines the success of climbers?

(ii)   What precautions should the climber take?

(iii)   How expeditions helps to gain knowledge?

(iv)   How guides and organization help an expedition?

(v)   When does an adventure fails?

(vi)   What should be qualities of a climber?

Q.1.2 Choose the correct answer :- $1 \times 6 = 6$

(i) The word 'fatal' in para 2 means :

(i) lively (ii) cruelly (iii) deadly (iv) harshly

(ii) The word 'terrain' in para 3 means :

(i) expedition (ii) climber (iii) people (iv) land

(iii) The word '**indispensable**' in para -1 means:-

(i) trivial (ii) optional (iii) outer (iv) crucial

(iv) The antonym for the word '**superb**' in para – 2

(i) abysmal (ii) splendid (iii) tremendous (iv) terrific

(v) The main aim of mountaineering is:-

(i) to win it (ii) to face death (iii) to enjoy (iv) to gain knowledge

(vi) Basically expeditions requires huge-

(i) strength (ii) capital (iii) knowledge (iv) equipments

Q.2 Read the passage carefully and answer the questions :-

Mornings are slowdown time. Give yourself time to wake up quietly and move your muscles slowly. What we do soon after we wake up sets the tone for the rest of the day. Spend a few minutes in silence, take deep breaths and sip normal water. Mornings are a time when you should keep your mind free from the thoughts that may disturb you. The mind should be at ease and at peace. Wake up, stretching up the muscles to improve productivity throughout the day. Tranquility in the morning time is the most important thing. Try to listen to natural soothing sounds of nature birdcalls, sounds of ocean, chanting of mantras etc.

Another important point is not to skip breakfast and don't drink something acidic. Breakfast keeps the body energized. Walk for half an hour to increase blood circulation throughout your body. This will help deliver oxygen to your muscles. Begin the day with yoga and light exercise, meditation and reading something motivational to give yourself a boost. After all, morning is a declaration for the day you are going to spend. You don't have to immediately solve the world's problem in first hours after you wake up. Your energy should be focused on yourself. Mistakes in the morning have adverse effects on the quality of our day. Quarrels, comments, abuse, noise etc. blocks the positivity and enthusiasm. Social media can also disturb your mood. Morning is a time to be with your soul, body and mind. Ensure to have a cheerful smile to make everyone smile.

Q.2.1 On the basis of your reading of the passage make notice on it using heading, sub heading, title and abbreviations. **5**

Q.2.2 Write a summary of the passage in not more than 80 words using the notes made. **3**

Q.3   You are sports captain of your school. Write a notice in 50 words for the school notice board informing the students about the Inter School Football match to be played.   **4**

<center>OR</center>

You propose to sell your flat as you are going abroad. Draft an advertisement for it to be published in 'The Times of India', Jaipur in the classified column.

Q.4   You are Abhay / Sakshi. A-120 Subhash Nagar, Noida. Write an application for the post of P.G.T. English in Saraswati Vidhya Mandir, New Delhi. Also give your detailed resume for the job.   **6**

<center>OR</center>

Write a letter to the editor of 'The Indian Express' highlighting the problem spreading among people due to inflation. Give some suggestion to check it. You are Vinayak / Aayushi B-51 Gandhi Nagar Lucknow.

Q.5   You visited a career fest in Banglore. You wish to share the information regarding careers with the students of your school. Write a speech to deliver in morning assembly in about 150-200 words. You are Vinuj / Surabhi.   **10**

<center>OR</center>

Write an article on the topic '**The Role of Citizens in National Development**' in about 150-200 words. You are Sourbh/Sunaina of class XI.

Q.6   In the following passage one word has been omitted. Write the word and the word before and after it.   **4**

The most recent ice age almost	(a) --------------
10,000 years ago almost $\frac{1}{3}$	(b) --------------
the earth was ice.	(c) --------------
As earth started warming	(d) --------------
the ice started melting.	(e) --------------
The last ice age left traces it	(f) --------------
was there. It left sheets	(g) -------------
ice covered valleys rivers	(h) -------------

Q.7   Fill the blanks with appropriate words :-   **4**

(a) summer **(b)** fair was held in **(c)** village. **(d)** shops and **(e)** clowns made it exciting. There were **(f)** dishes to taste. **(g)** of my friend enjoyed **(h)** fair.

Q.8   Rearrange the words to make a meaningful sentence :-   **2**

(i)   that / is / of / is / said / it / poverty / evils / often / cause / all / root / the

(ii)   the / sun / disappeared / rise / did / mist / sooner / than / no / the

Q.9   Read the extract and answer the questions :

Dressed us for the beach the sea holiday

Was her past, mine is her laughter.

    (i)   Who are 'us' referred here?   **1**

    (ii)   The words 'Was her past' means.   **1**

    (iii)   What does the word ' laughter' signify?   **1**

Q.10   Answer any three of the questions given below : $3 \times 3 = $ **9**

    (i)   How did the author's grandmother celebrate his home coming?

    (ii)   Who discovered king Tut's tomb and what discoveries did he make?

    (iii)   Describe uncle Khosrove's character.

    (iv)   What were Ranga's views on matrimony?

Q.11   Answer the following question in 120 – 150 words.:-   **6**
What do you understand of Einstein's nature form his conversation with his different subject teachers?
<p align="center">OR</p>

Describe the mental condition of the voyagers on 4 and 5 January?

Q.12   What did Lord Canterville make clear to Mr. Otis. Why Mrs. Umney fainted.   **6**

<p align="center">OR</p>

Describe the third plan of the ghost in the Cantervillve to frighten the Otis family.

Q.13   Describe the meeting between Mr. Otis and the Ghost.   **6**

<p align="center">OR</p>

How did the ghost take his revenge. How did the family react?

SECITON – D   LISTENING SKILL & SPEAKING SKILL   **20**

<p align="center">**ALL THE BEST **</p>

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 100**

General Instruction :-
This Question paper consists of 25 Questions.
- Question No. 1 to 8 carry **One Mark** each. Answer should be in One Word OR One Sentence.
- Question No. 9 to 13 carry **Three Marks** each. Answer should be in about 50-75 words.
- Question No. 14 to 19 carry **Four Marks** each. Answer should be in about 75-100 words.
- Question No. 20 to 22 carry **Five Marks** each. Answer should be in about 75-100 words.
- Question No. 23 to 25 carry **Six Marks** each. Answer should be in about 200 words.

Q.1   Define Business?   **1**

Q.2   Discuss the meaning of Commerce?   **1**

Q.3   Mention any two hindrances removed by commerce?   **1**

Q.4   In the Business, name the system in which both male and female are Co-Parceners in Business?   **1**

Q.5   "**The existence of a company is not affected by death and insolvency of its members**". Which feature of

company is highlighted in the given statement?   **1**

Q.6   What is the main function of BIFR?   **1**

Q.7   Which type of Insurance is not a contract of indemnity?   **1**

Q.8   Which hindrance is removed by ware housing?   **1**

Q.9   What are the ethical concerns involved in out sourcing?   **3**

Q.10   Discuss the three kinds of deposits accepted by commercial banks?   **3**

Q.11   What are different types of organization that come under the public sector?   **3**

Q.12   What do you mean by "Partnership deed"? State its main contents?   **3**

Q.13   "Profit is an essential objective of business due to certain reasons". Comment.   **3**

Q.14   Discuss the meaning of "Genetic" and "Extractive" Industries with the help of examples. $2 + 2 = $ **4**

Q.15   Describe briefly any four types of Co-operative Society?   **4**

Q.16   The business Assets of an organization amount to ì. 50,000 but the debts that remain unpaid are ì. 80,000.

What course of action can the creditors take if :-   **4**

(i)   The organization is a sole proprietorship firm.

(ii)   The organization is a partnership firm with Anthony and Akbar as partners.

Which of the two partners can the creditors approach for repayment of debt? Explain giving

reasons?

Q.17   "Indian Economy may be classified into sectors". Discuss the two sectors? $2 + 2 = $ **4**

Q.18   State the various services offered by e-banking?   **4**

Q.19   State any four differences between e-business and traditional business?   **4**

Q.20   What is business Ethics? Mention the basic elements of business Ethics.   **5**

Q.21 "**E-business offers numerous benefits**". Justify your Answer by giving suitable reasons.   **5**

Q.22 Discuss the warehouse which accepts imported goods for storage before customs duty is paid by the important of such good.   **5**

Q.23 Can the Public Sector Companies compete with the private sector in terms of profit and efficiency? Give reason for Your Answer?   **6**

<div align="center">

OR

</div>

Why is it important to choose an appropriate form of organization? Discuss the factors that determine the choice of form of organization?

Q.24 Describe various types of insurance and examine the nature of risks protected by each type of insurance.

<div align="center">

OR   **6**

</div>

Explain the function's of commercial banks with an example of each?

Q.25 Compare business with profession and employment?   **6**

<div align="center">

OR

</div>

Elaborate the steps involved in online trading?

ORAL + PROJECT →   **10**

<div align="center">

**ALL THE BEST **

</div>

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 70**

Part - A

Q.1	Explain the meaning of health.	**1**
Q.2	Give the aim of Physical Education.	**1**
Q.3	Mention the start and end of Ancient Olympic games.	**1**
Q.4	State Olympic Oath.	**1**
Q.5	Define Yoga in your words.	**1**
Q.6	Define blood doping.	**1**
Q.7	List down the common injuries.	**1**
Q.8	State RICE treatment.	**1**
Q.9	What do you mean by WADA?	**2**
Q.10	Mention four Asanas which can cure obesity.	**2**
Q.11	Briefly explain Arjun Award.	**2**
Q.12	Enlist career options in the field of Physical Education.	**2**
Q.13	What do you understand by health indicator?	**2**
Q.14	Explain the principles of integrated Physical education.	**3**
Q.15	In what way Yoga can help a sportsperson? Explain.	**3**
Q.16	Explain the harmful effect of Narcotics.	**3**
Q.17	Explain the First-Aid steps for any two skin injuries.	**3**
Q.18	Explain the ill effects of doping over individual health.	**5**
Q.19	Discuss "**Yoga as heritage of India**".	**5**
Q.20	Highlight the main features of modern Olympic Games.	**5**
Q.21	Discuss the factors which affect Physical fitness and wellness.	**5**

Part - B

Q.22	Write the History of your major game.	**3**
Q.23	Write any three fundamental skills of your game.	**3**
Q.24	Write the latest general rules of your game.	**2**
Q.25	Explain any two warming up exercises of your game.	**2**
Q.26	Draw a neat diagram of the field with measurement of your game.	**5**
Q.27	Write a short note on CBSE Sports in detail.	**5**

**ALL THE BEST **

Roll. No. [ ]　　　　　　　**Code No.** 11/Computer Science /NLCS/36

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.　　　　　　　　　　　　　　　　　　　　　　**M. M. 70**

Q.1　Number system conversion :-　　　　　　　　　　　　　　$12 \times \frac{1}{2} = 6$

　　(i)　　$(37)_{10}$　=　$(?)_2$=　　　$(?)_8$=　　　$(?)_{16}$

　　(ii)　$(1101010)_2$=　$(?)_{10}$=　　$(?)_8$=　　　$(?)_{16}$

　　(iii)　$(175)_8$　=　$(?)_2$=　　　$(?)_{10}$=　　$(?)_{16}$

　　(iv)　$(FB)_{16}$　=　$(?)_{10}$=　　$(?)_2$=　　　$(?)_8$

Q.2　Define computer and explain block diagram of it.　　　　　$1 + 3 = 4$

Q.3　Give differences :-

　　(i)　　Entry control loop　　v/s　　Exit control loop　　　　　**4**

　　(ii)　switch statement　　v/s　　if condition　　　　　　　**4**

　　(iii)　I/ P Unit　　　　　v/s　　O/P Unit　　　　　　　**1**

　　(iv)　Source Code　　　v/s　　Object Code　　　　　　**2**

Q.4　Write full forms of the following :　　　　　　　　　　　$5 \times 1 = 5$

　　(i)　BCD　　　(ii)　EBCDIC　　(iv)　1GL　　　(v)　OS

Q.5　Write 1's and 2's complement of the followings :-　　　　　$2 \times 2 = 4$

　　(i)　1100101　　(ii)　1010101100

Q.6　Calculate :　　　　　　　　　　　　　　　　　　　　$1+1+2 = 4$

　　$(77)_8$　　+ $(27)_8$　　　=　　$(?)_8$

　　$(FBC)_{16}$ + $(IF)_{16}$　　=　　$(?)_{16}$

　　11011　– 101　　　=　　$(?)_2$　(with 1's &2's Complement)

Q.7　WAP for the following :-

　　(i)　　To calculate the area of rectangle.　　　　　　　　　**2**

　　(ii)　To calculate average of three no.'s.　　　　　　　　**2**

　　(iii)　To find largest number from three no.'s　　　　　　**3**

　　(iv)　1　　　　　　　　　　　　　　　　　　　　　**4**

　　　　1　　2

　　　　1　　2　　3

　　　　1　　2　　3　　4

　　(v)　1,　4,　9,　16,　25, …… up to n where 'n' is external by user?　**3**

　　(vi)　Write a program to check whether the given number is prime OR not.　**4**

　　(vii)　　　　　*　　　　　　　　　+　　　　　　　　　**4**

　　　　　*　　*　　　**OR**　　+　+　+

　　　*　　*　　*　　　　+ + + + +

Q.8 Find outputs of the followings :-   **2**

    (i)   int a,   b,= 3;

            cin>>a;

            if (a)   if a will by <u>6</u>

                      b=a++ – 1;

                      cont<<"a="<<a<<endl;

                      cont<<"b="<<b<<endl;

    (ii)   If the input is (i) a (ii) c (iii) d (iv) h (v) b what will be the output of the following code / cin>>ch;

                                                            $5 \times 1 = $ **5**

                    switch(ch);

            {   case 'a' : cout << "it is a/n";

                    case 'b' : cout << "it is b/n";

                    case 'c' : cout << "it is c/n";

                            break;

                    case 'd' : cout << "it is d /n";

                            break;

                    default   : cout << "Not a,b,c,d"; }

    (iii)   For (i=10; i<50; i+=10)   **2**

                    J=i/2;

                    cout << J << " " ;

    (iv)   int f = 1, i = 2;   **2**

                    while (++i<5)

                    f *=i;

                    cout<<f;

    (v)   int f = 1, i = 2;   **2**

                    do (f* = i)

                    while (++i<5);

                    cout<<f

**ALL THE BEST **

Roll. No.

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   M. M. 100

General instructions:
1. All questions in both the sections are compulsory. Marks for questions are indicated against each.
2. Questions 1 -6 and 17-22 are very short answer questions carrying **1 mark**. They are to be answered in one sentence each.
3. Questions 7-11 and 23-27 are short answer questions carrying **3 marks** each. Answers to them should not normally exceed 60 words each.
4. Questions 12-14 and 28-30 are also short answer questions of **4 marks** each. Answers to them should not normally exceed 70 words each.
5. Questions 15- 16 and 31-32 are long answer questions of **6 marks** each. Answers to them should not normally exceed 100 words each.

SECTION – A (INDIAN ECONOMICS)

General Instruction :-

Q.1   What was the main reason for the stagnation in the agricultural sector under the British rule?   1

Q.2   What was the affect of the decline of the handicraft industry in India?   1

Q.3   Why should plans have goals?   1

Q.4   What is meant by sectoral composition of an economy?   1

Q.5   What do you understand by devaluation of rupee?   1

Q.6   State an example each of self employment in rural and urban areas?   1

Q.7   Is there any relationship between unemployment and poverty explain?   3

Q.8   Mention the major functions of WTO?   3

Q.9   "Green Revolution experienced the success in two phases". Comment.   3

Q.10   Mention two important features of India's occupational structure during British period?   3

Q.11   Discuss the adverse effects of partition of the country on the agriculture sector.   3

Q.12   Why was public sector given a leading role in industrial development during the planning period?   4

Q.13   India has certain advantage which makes it a favorite outsourcing destination. What are these advantages.   4

Q.14   Suppose you are a resident of a village, suggest a few measures to tackle the problem of poverty.   4

Q.15   Discuss the various causes of poverty?   6

Q.16   What do you mean by Globalization? Mention any four change made by globalization of the Indian Economy.   6

SECTION – B (STATISTICS)

Q.17   What do you mean by statistics in pural sense?   1

Q.18   What is investment?   1

Q.19   Name the Agencies which collect statistical data at national level.   1

Q.20 What type of data involves less time and less expenses? **1**

Q.21 Suppose there are ten students in your class. You want to select out of them. How many samples are possible? **1**

Q.22 What is meant by classification? **1**

Q.23 What are the objectives of classification merits of classification? **3**

Q.24 What is meant by sample method? Under what circumstances this method is more suitable? **3**

Q.25 Define the terms : **3**

(i) Investigator   (ii) enumerator   (iii) respondent

Q.26 What are the Characteristics of Statistics **3**

Q.27 What is the difference between census and sampling method? **3**

Q.28 In an examination 25 students secured the following marks. **4**

23, 28, 30, 32, 35, 35, 36, 40, 41, 43, 44, 45, 45, 48, 49, 52, 53, 54, 56, 56, 58, 61, 62, 65, 68.

(i)   Arrange these data in the form of frequency distribution using the following class interval.
20 – 29, 30 – 39, 40 – 49, 50 – 59, 60 – 69.

(ii)   Arrange the data with cumulative frequencies, tally bars.

Q.29 Mention the merits and demerits of purposive sampling. **4**

Q.30 What are important types of data as published in causes of India and '**Reports and publications of NSSO**'? **4**

Q.31 "**Statistical methods are dangerous weapons in the hands of an unqualified person**". Explain. **6**

Q.32 Define systematic sampling. Differentiate between sampling and non-sampling errors? **6**

ORAL   → **10**

**ALL THE BEST **

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 100**

General Instruction :-

    (i)   All Questions are compulsory.

    (ii)   The Questions paper divided into 3 Sections A, B & C.

    (iii)   Section – A   Question No. 1 to 10 carry **Two Mark** each.

               Section – B   Question No. 11 to 18 carry **Four Marks** each.

               Section – C   Question No. 19 to 26 carry **Six Marks** each.

Section – A

Q.1   Draw the Venn diagram of the following:-

    (i) $A' \cap (B \cup C)$ (ii) $A' \cap (C - B)$

Q.2   Let A and B be sets. If $A \cap X = B \cap X = \phi$ and $A \cup X = B \cup X$ for some set X , show that $A = B$.

Q.3   Find the domain and the range of the function $f(x) = \sqrt{16 - x^2}$.

Q.4   Find the general solution for the following equations $\sec^2 2x = 1 - \tan^2 2x$.

Q.5   Prove that $\cos\left(\dfrac{3\pi}{4} + x\right) - \cos\left(\dfrac{3\pi}{4} - x\right) = -\sqrt{2}\sin x$.

Q.6   Prove that $\cos 4x = 1 - 8\sin^2 x \cos^2 x$.

Q.7   if $(x - iy) = \sqrt{\dfrac{a - ib}{c - id}}$, prove that $(x^2 + y^2) = \dfrac{a^2 + b^2}{c^2 + d^2}$

Q.8   If $z = 2 - 3i$ show that $z^2 - 4z + 13 = 0$.

Q.9   The third term of GP is 4. Find the product of its first 5 terms.

Q.10   Is 667 a term of an AP 11, 18, 25 …………..?

Section – B

Q.11   Two finite sets have m and n elements. The number of subsets of the first is 112 more than that of the second set. Find the values of m and n .

Q.12   Find the domain and range of the following real functions :

    (i) $f(x) = -|x|$ (ii) $f(x) = \dfrac{x^2 + 2x + 1}{x^2 - 8x + 12} - -$.

Q.13   Prove that : $\dfrac{\tan 5\theta + \tan 3\theta}{\tan 5\theta - \tan 3\theta} = 4\cos 2\theta \cos 4\theta$.

Q.14   Using the principle of mathematical induction, Prove that : $a + ar + ar^2 + \ldots + ar^{n-1} = \dfrac{a(r^n - 1)}{(r - 1)}$ for

    $r > 1$ & all $n \in N$.

Q.15 Find the modulus and argument of the following complex number & convert then in polar form.

$$\frac{i-1}{\cos\dfrac{\pi}{3}+i\sin\dfrac{\pi}{3}}.$$ **OR** $$\frac{1+2i}{1-3i}$$

Q.16 Solve the following system of inequalities graphically

$$5x+4y\le 40$$
$$x\ge 2$$
$$y\ge 3$$

Q.17 In an A.P. If p^{th} term is $\dfrac{1}{q}$ and q^{th} term $\dfrac{1}{p}$ prove that the sum of first pq term is $\dfrac{1}{2}(pq+1)$, where $p\ne q$.

Q.18 Prove that $\cos\alpha+\cos\beta+\cos r+\cos(\alpha+\beta+r)=4\cos\left(\dfrac{\alpha+\beta}{2}\right)\cos\left(\dfrac{\beta+r}{2}\right)\cos\left(\dfrac{r+\alpha}{2}\right).$

Section – C

Q.19 In a survey of 60 people, it was found that 25 people read newspaper H, 26 read newspaper T, 26 read newspaper Z, 9 read both H & Z , 11 read both H & T, 8 read both T & Z and 3 read all three newspapers. Find :

(i)   The number of people who read at least one of the newspaper.

(ii)   The number of people who read exactly one newspaper.

Q.20 Derive the trigonometric functions : $\cos(A+B)=\cos A\cos B-\sin A\sin B$.

Q.21 Using the PMI. Prove that : $1.2.3+2.3.4+.........+n(n+1)(n+2)=\dfrac{n(n+1)(n+2)(n+3)}{4}$.

OR

$$1^3+2^3+3^3+........n^3=\left[\frac{n(n+1)}{2}\right]^2$$

Q.22 Solve the following quadratic equations by using the general expressions for the roots of a quadratic equations : $2x^2-(3+7i)x+(9i-3)=0$.

Q.23 If $(1+i)(1+2i)(1+3i)............(1+ni)=x+iy$ Show that $2.5.10.............(1+n^2)=x^2+y^2$.

Q.24 If $2\tan\alpha=3\tan\beta$ Prove that $\tan(\alpha-\beta)=\dfrac{\sin 2\beta}{5-\cos 2\beta}$.

OR

$$\cos 6x=32\cos^6 x-48\cos^4 x+18\cos^2 x-1$$

Q.25 The sum of two numbers is 6 times their geometric mean show that numbers are in the ratio $\left(3+2\sqrt{2}\right):\left(3-2\sqrt{2}\right).$

Q.26 Sum of the first p,q and r terms of an A.P. are a,b and c, respectively. Prove that :

$$\frac{a}{p}(q-r)+\frac{b}{q}(r-p)+\frac{c}{r}(p-q)=0.$$

**ALL THE BEST **

Code No. 11/Chemistry/NLCS/45

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 70**

General Instruction :-

Question No. 1 to 5 carry **One Mark** each.   Question No.   6 to 10 carry **Two Marks** each.
Question No. 11 to 22 carry **Three Marks** each.   Question No. 23 carry **Four Marks** each.
Question No. 24 to 26 carry **Five Marks** each.

Q.1   How many significant figures are present in the following :   (i)   .0025   (ii) 500.0   1

Q.2   Give the relation between wavelength and momentum of moving microscopic particle What is the relation

known as?   1

Q.3   If $\eta = 3$ what are the values of quantum no. ℓ & m ?   1

Q.4   Write the atomic no. of the element present in the 3rd period & seventeenth group of periodic table.   1

Q.5   Write the resonance structure of – NO_2 .   1

Q.6   Potassium Carbonate can not be prepared by solvey process why?   2

Q.7   Why Li F almost insoluble in water whereas LiCl soluble not only in water but also in acetone?   2

Q.8   Give the formula of Gypsum & Epsom salt?   2

Q.9   Why the solution of alkali metals becomes blue in liquid ammonia? Give the chemical equation also.   2

Q.10   Give the St. of C_2H_6 by sawhorse projection & Newman projection.   2

Q.11   A compound on analysis was found to contain C=34.6%, H=3.8%, O=61.55%. Calculate the empirical

formula.   3

Q.12   Explain Aufbau principle in brief.   3

Q.13   Factors affecting ionization enthalpy?   3

Q.14   What is octet rule? Give its limitations.   3

Q.15   Give few points for anomalous behavior of Lilthium.   3

Q.16   Draw the structure of – (i) $BeCl_2$ (Vapour)   (ii) $BeCl_2$ (Solid)   3

Q.17   What is Lassaigne's extract?   3

Q.18   What are necessary conditions for Aromatic system?   3

Q.19   Preparation of alkenes by Wurtz - reaction – what is the limitation of the reaction?   3

Q.20   Explain the purification technique – crystallization &Chromatography .   3

Q.21   How is boron obtained from borax? Give chemical equation with reaction condition.   3

Q.22   Explain the structure of diborone & boric acid.   3

Q.23   Describe the hybridization in case of PCl$_5$. Why the axial bonds longer as compared to equatorial

bonds.   4

Q.24   Compare the relative stability of O_2, O_2^+, O_2^-.   5

<div align="center">OR</div>

Draw a resonating structure of Nitrobenzene & Phenol.

Q.25   Write the postulates of bohr's atomic modal. With suitable diagram.   5

<div align="center">OR</div>

Give limitation of Thomson & Rutherford's atomic modal.

Q.26   Explain the following terms :-   5

(i) Ionization enthalpy   (ii) Electro negativity   (iii) Electron gain enthalpy

 (iv) Comparative size of anion & cation   (v) E.A.N. no.

<div align="center">OR</div>

Define Isomerism. Classify it with brief explanation.

<div align="center">**ALL THE BEST **</div>

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 100**

General Instruction :-

Question No.   1 to 5 carry **One Mark** each.   Question No. 6 to 10 carry **Two Marks** each.

Question No. 11 to 22 carry **Three Marks** each.   Question No. 23 carry **Four Marks** each. Question

No. 24 to 26 carry **Five Marks** each.

Q.1   A vehicle moving with a speed of 18 Kmh^{-1} covers _____ min 1 sec.

Q.2   State galileo's law of odd numbers?

Q.3   Which one is greater limiting friction or kinetic friction & why?

Q.4   Is radius of gyration of a body a constant quantity? Explain.

Q.5   Can $\vec{A} + \vec{B} = \vec{A} - \vec{B}$, if yes. Explain.

Q.6   In which condition do the centre of mass and centre of gravity of a body coincide?

Q.7   What is the distance travelled by a freely falling object during the first second of its motion?

Take g=10m/s^2.

Q.8   An astronaut accidentally gets thrown out of his small spaceship. What is the acceleration of the astronaut the instant after he is outside the spaceship? Assune nothing is nearby to exert grivitional forces.?

Q.9   The unit of force, energy and velocity are 100 dync, 400 erg and 10 cm/sec. respectively. Find the unit of length, mass and time?

Q.10   How many directions of projection are possible for the same horizontal range. Explain each direction to draw the graph?

Q.11   Why is a clean hole made when a bullet is fried at a glass window pane, while it is broken into pieces by a stone thrown at it? Explain.

Q.12   A constant retarding force of 50 N is applied to a body of mass 20 kg moving with a initial speed of 15ms^{-1}. How long does the body take to stop?

Q.13   Prove that the rate of change of linear momentum of a rigid body is always equal to the torque acting on it?

Q.14   The cap of a pen can be easily opened with the help of two fingers then with one figure. Why?

Q.15   the length, breadth & thickness of rectangular sheet of metal are 4.234 m, 1.005 m & 2.01 cm respectively. Give the area & volume of sheet to correct significant figures.

Q.16   In an experiment, the following observation were recorded, L=2.890m, M=3.00kg, ℓ=0.087cm, diameter D=0.042cm, taking g=9.81m/s^2. Use $y = \dfrac{MgL}{\pi r^2 \ell}$. Find % error in y=?

Q.17   Find out the magnitude and direction of resultant vector, when two vectors are placed at any angle θ?

Q.18   Draw the position – Time graph for motion with :-
(i) Positive acceleration   (ii) Negative acceleration   (iii) Zero acceleration

Q.19   A monkey of mass 40kg climbs on a rope. Which can stand a maximum tension of 600N. In which of the following cases will the rope break? The monkey (i) climb up with an acceleration 6m/s^2 (ii) climb down with acceleration 4m/s^2 (iii) climb up with a uniform speed of 5 m/s (iv) fall down the rope nearly free of gravity?

Q.20 Show that $\vec{A} = (\hat{i} + 2\hat{j} + 3\hat{k})$ and $\vec{B} = (2\hat{i} - \hat{j})$ are perpendicular to each other.

Q.21 State and prove parallel axis theorem for a Rigid body.

Q.22 Show that the maximum fractional error in division of two physical quantity is equal to the sum of fractional error in their individual quantities.

Q.23 From every day experience, we recognize that motion represents the continuous change in the position of an object. In physics, we are concerned with three type of motion – $\qquad$ $1 + 3 = 4$

(i)   Name three types of motion

(ii)   Give one example of each type

Q.24 Calculate the focal length of a spherical mirror from following calculations :

$u = [50.1 \pm 0.5], v = [20.1 \pm 0.2] cm$, given $\dfrac{1}{f} = \dfrac{1}{v} + \dfrac{1}{u}$.

OR

The following observations were made during an experiment to find the value of g, using simple pendulum

$\ell = 90.0$ cm, time (t) for 20 vibration $= 36.0$ sec. Find percentage error in g. Given $T = 2\pi\sqrt{\dfrac{\ell}{g}}$ and accuracy

in ℓ and time t is 0.1 cm & 0.2sec.

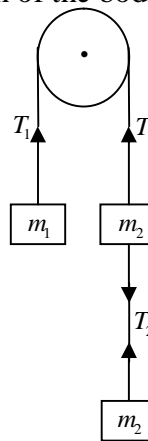Q.25 To find out the moment of inertia of a solid sphere about the diameter of the sphere?

OR

To find out the centre of mass of two partice system placed in a space.

Q.26 Three bodies a ring, a solid cylinder and a solid sphere rolldownthe same inclined plane without slipping they start from rest. The radii of the bodies are identical. Which of the bodies reaches the ground with maximum velocity?

OR

To find out tension between mass m_2 & m_3.

ALL THE BEST

Roll. No.

Quarterly Examination 2014 – 15

Time: 3:00 Hrs.   **M. M. 70**

General Instruction :-

Question No. 1 to 5 carry **One Mark** each. Question No. 6 to 10 carry **Two Marks** each. Question No. 11 to 22 carry **Three Marks** each. Question No. 23 is a value based question and carries **Four Marks**. Question No. 24, 25 and 26 are **Five Marks** question where an internal choice has been provides.

Q.1   What is the function of protein GLUT-4?   1

Q.2   Who observed Ribosome's under electron microscope first? Also mention the year.   1

Q.3   Define plasmogamy.   1

Q.4   To which class does Neurospora belong. What is its economic importance?   1

Q.5   Diagrammatically show Chlamydomonas and Chara.   1

Q.6   What is the function of tight junction and gap junction?   2

Q.7   What is typhlosole and where is it present?   2

Q.8   Give any four differences between xylem tracheids & vessels.   2

Q.9   Differentiate between rough & smooth ER.   2

Q.10   Draw the diagram showing all parts of a leaf.   2

Q.11   Describe the unit membrane model of plasma membrane given by Robertson.   3

Q.12   Explain the three types of epithelium along with their functions.   3

Q.13   Explain the features of the group Dinoflagellates.   3

Q.14   Describe the structure of a dorsiventral leaf.   3

Q.15   Write a note on - (i) Late wood   (ii) Alburnum   3

Q.16   Write brief notes on root modifications for storage of food.   3

Q.17   Diagrammatically show all position of gynoecium.   3

Q.18   Differentiate between Tendons and ligaments.   3

Q.19   Write a note on Mitochondrion.   3

Q.20   Write the structures of - (i) Ribose   (ii) Adenosine   (iii) Alanine   3

Q.21   Write the functions of a herbarium.   3

Q.22   Briefly describe Deuteromycetes.   3

Q.23   A group of students found a fish on the sea beach and carried it to their teacher. The teacher told them that it is a bony fish and not cartilage fish.

(i)   On the basis of which features did the teacher identify it as a bony fish?   1

(ii)   Enlist any two differences between cartilaginous and bony fishes.   2

(i)   **Why a cartilage fish has to swim continuously to stay at a particular depth in water?   1**

Q.24   Draw the well labeled diagram of T.S. of dicot stem. Explain secondary growth in it.   5

OR

Write a note on external features of a cockroach. Also draw its mouth parts.

Q.25   Give a detailed account of phylum Coelentrata. Also draw related diagrams.   5

OR

Give a detailed account of class – Reptilia.

Q.26   Write a detailed note on nucleus of a cell.   5

OR

What are enzymes. Show diagram explaining the concept of activation energy. Explain briefly any three types of enzymes.

**ALL THE BEST **

Quarterly Examination 2014 – 15

Time: 3:00 Hrs   **M.M. 100**

Q1   Write any two differences between Book-keeping and Accounting.   2

Q.2   Find the value of Assets if Liabilities ` 50103 & Capital ` 13743.   2

Q.3   Explain the qualitatiue characteristics of accounting information?   3

Q.4   Write any three difference between Book of Original Entry and Ledger.   3

Q.5   Explain following with one example-(a) Error of Principle   (b) Suspense account   4

Q.6   Identify Nature of account for following account.

(a) cash a/c   (b) goodwill a/c   (c) prepaid expenses a/c   (d) discount a/c   4

Q.7   Pass journal entries from following Cash A/c   4

Date	Particulars	Amount	Date	Particulars	Amount
01.5.14	To capital a/c	250000	07.5.14	By Purchase a/c	75000
10.5.14	To sales A/c	50000	14.5.14	By Commission A/c	25000
			31.5.14	By Balance c/d	200000
		300000			**300000**

Q.8   Define following words-   (a) Trade discount   (b) Fixed Assets   (c) Expenses   (d) Loss   4

Q.9   Explain any three accounting concept.   6

Q.10 Set up Accounting Equation from following information—   6

(a) Introduced ` 8,00,000 as cash and ì 50,000 by stock.

(b) Purchased plant for ` 3,00,000 by paying ` 15000 in cash and balance at a later date.

(c) Deposited ` 6,00,000 into the bank.

(d) Purchased office furniture for ` 1,00,000 and made payment by cheque.

(e) Purchased goods worth ` 80,000 for cash and for ` 35,000 in credit.

(f) Good amounting to ` 45,000 was sold for ` 60,000 on cash basis.

Q.11 Prepare a Trial balance from following balances—   8

Name of account	Amount in `	Name of account	Amount in `
Capital	18753	Return outward	715
Drawings	2479	Sales	5142
Loan taken from Rajiv	1128	Building	6259
Salary	1528	Bills receivable	1259
Rent received	256	Copy right	315
Bills Payable	1010	Commission	437
Furniture	2142	Carriage outward	78
Purchase	3636	Debtors	3419
Return inward	519	Creditors	2137

Q.12 From the following information prepare a Bank Reconcilation statement on 31st March,2008   8

(i) Pass book showed credit balance ` 18000

(ii) A cheque received entered in cash book but was omitted to be paid in the bank ` 750

(iii) Bank has given debit ` 35 for bank charges.

(iv) Bank collected interest ` 250.

(v) Cheque issued amounted ` 10000,out of which ` 2600 were presented for payment.

(vi) A cheque of ` 3500 paid in to bank but not credited by bank.

(vii) A cheque ` 1800 received was sent in to the bank, but omitted to be debited in the cash book.

Q.13 Pass rectify entries for following errors--   8

(a) Depreciation charged on furniture ` 3150. Recorded in depreciation a/c ` 150 & furniture a/c ` 5310.

(b) Salary paid to Sanjay ` 7500 but debits to his personal a/c ` 5700.

(c) Goods sold to Ankush ` 5370. Recorded in Purchase return book ` 3750.

(d) Goods purchased from Mohit rs.12000 but recorded in sales book rs.2000. Mohit A/c correctly posted.

Q.14 From the following information prepare Cash Book with Bank column— 8

2007 `

July 1 Bank balance 50000

July 1 Cash balance 20000

July 3 Purchase goods by cheque 10000

July 6 Goods sold for cash 7000

July 9 Machinery purchase by cheque 6000

July 12 Cash sale & deposited in bank 8000

July 14 Purchase goods from Om for cash 5500

July16 Purchase stationery by chque 5000

July 20 Cheque given to Malik 2000

July 22 Cash withdrawal from bank for office use 8000

July24 Salary paid by Cheque 2000

July26 Cash deposited in to the bank 9000

July28 Cash withdrawal from bank for personal use 3000

July30 Received a cheque for commission 5600

July30 Paid rent 4000

Q.15 Journalise the following transaction : 10

April,2010 `

01 Started business with cash 50000

04 Goods purchase from Ashish (T.D.10%,C.D.5%) 50% cash paid 30000

05 Goods sold to Sanjay (T.D.20%,C.D.5%) 60% credit 40000

07 Machinery purchased of ` 8000 & wages paid ` 2000

12 Goods loss by fire ` 3000 Insurance company Accepted a claim for 90%

18 Sanjay become insolve only goods return by him 5200

20 Goods return to Ashish 3500

22 Cheque received from Insurance company & deposited in to the bank

27 Final settlement to Ashish with cash paid 9800

30 Depreciation charged on machine 5%

Q.16 Prepare following ledger A/c from Q.No.15. 4

(i) Ashish (ii) Discount

Q.17 From the following information prepare Purchase Book & Purchase return Book of Surya Electronic Trader, **11**

May1st,2008 Purchase goods from Rajesh electronic company

12 Dozen bulbs @ ` 80 per bulb

20 water heater @ ` 144each

Trade discount 10%

May 15,2008 Purchase from Chander lights for cash

28 ceiling fans@800 each

20 Table fans @1200 each

May17,2008 Bought goods from Rajendra Electronics

240 Tube lights@ 50each

60 Table fans @ 400each

24 Heaters @ 100each

May19,2008 Goods return to Rajesh Electronics

10 Bulbs & 5 Heaters

May21,2008 Goods return to Chander lights

5 Ceiling fans & 3 Table fan

May22,2008 Purchase from M/s Verma

2 computers @23000 each

May26, 2008 Purchase goods from Roshni Electric House

20 Table fans @ 600 each

30 Ceiling fans @ 960 each

24 Electric irons @ 100 each

Trade discount 20%

May27,2008 Goods return to Rajendra Electronics

10 Tube lights ,5 Table fans, 4 Heaters

Q.18 Prepare ledger A/c of purchase book and purchase return book of Q.No.17. 5

** ALL THE BEST **