

Roll. No.

Code No. 12/NLcs/English/122

## Quarterly Examination 2014 – 15

Time: 3:00 Hrs.

M. M. 100

General Instruction :-

SECTION – A READING	30
SECTION – B WRITING	30
SECTION – C LITERATURE & LONG READING TEXT	40
<u>SECTION – A (READING)</u>	

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

1. It was three in the afternoon when Philip left the realms of commonsense. He was so weary with travelling that he had fallen asleep in the train. His fellow-passengers had the usual Italian gift of divination, and when Monteriano came they knew he wanted to go there, and dropped him out. His feet sank into the hot asphalt of the platform, and in a dream he watched the train depart , while the porter who ought to have been carrying his bag, ran up the line playing touch-you-last with the guard. Alas! he was in no humour for Italy. Bargaining for a legno bored him unutterably. The man asked six lire; and though Philip knew that for eight miles it should scarcely be more than four, yet he was about to give what he was asked, and so make the man discontented and unhappy for the rest of the day. He was saved from this social blunder by loud shouts, and looking up the road saw one cracking his whip and waving his reins and driving two horses furiously and behind him there appeared the swaing figure of a woman, holding star-fish fashion on to anything she could touch. It was Miss Abbott, who had just received his letter from Milan announcing the time of his arrival, and had hurried down to meet him.
2. He had known Miss Abbott for years, and had never had much opinion about her one way or the other. She was good, quiet, dull, and amiable, and young only because she was twenty-three: there was nothing in her appearance or manner to suggest the fire of youth. All her life had been spent at Sawston with a dull and amiable father, and her pleasant, pallid face, bent on some respectable charity, was a familiar object of the Sawston streets. Why she had ever wished to leave them was surprising; but as she truly said, “I am John Bull to the backbone, yet I do want to see Italy, just once. Everybody says it is marveilous, and that one gets no idea of it from books at all.” The curate suggested that a year was a long time; and Miss Abbott, with decorous playfulness, answered him, “Oh, but you must let me have my fling! I promise to have it once, and once only. It will give me things to think about and talk about for the rest of my life.” The curate had consented; so had Mr. Abbott. And here she was in a legno, solitary, dusty, frightened, with as much to answer and to answer for as the most dashing adventuress could desire.
3. They shook hands without speaking. She made room for Philip and his luggage amidst the loud indignation of the unsuccessful driver, whom it required the combined eloquence of the station-master and the station beggar to confute. The silence was prolonged until they started. For three days he had been considering what he should do, and still more what he should say. He had invented a dozen imaginary conversations, in all of which his logic and eloquence procured him certain victory. But how

to begin? He was in the enemy's country, and everything-the hot sun, the cold air behind the heat, the endless rows of olive-trees, regular yet mysterious-seemed hostile to the placid atmosphere of Sawston in which his thoughts took birth.

(Adapted from '*Where Angels Fear to Tread*' by E. H. Forster)

Q.1.1 On the basis of your reading of the passage, answer the following questions by choosing the best of the given choice. 3

(i) Philip was able to reach Monteriano with the help of .....

- (a) his co-passengers (b) the legno driver  
(c) Miss Abbott (d) his own commonsense.

(ii) Miss Abbott had come to receive after .....

- (a) receiving Philip's letter in Milan (b) hearing Philip's loud shouts  
(c) the bargaining for a legno bored him (d) seeing a familiar object on Swaston streets

(iii) Miss Abbott proclaimed that she wanted.....

- (a) to go to Swaston (b) to persuade the vicar  
(c) to go to Italy just once (d) to read books about Italy

Q.1.2 Answer the following questions:-

**5 × 1 = 5**

(i) Why would Philip's behaviour make the legno driver feel discontented?

(ii) Why did Miss Abbott come hurrying down to the station?

(iii) What facts do we gather about Miss Abbott from the Passage?

(iv) What was the dilemma faced by Philip in the presence of Miss Abbott?

(v) What does the expression '**John Bull**' indicate?

Q.1.3 Find words from the passage which mean the same as:-

**3**

- (a) very much (para – 1) (b) Pleasant (para – 2) (c) to prove somebody wrong (para -3)

Q.2 Read the following passage carefully and answer the questions that follow :

1. It was pretty late in the autumn of the year, when the declining sun struggling through the mist which had obscured it all day, looked brightly down upon a little Wiltshire village, within an easy journey of the fair old town of Salisbury.
2. Like a sudden flash of memory or spirit kindling up the mind of an old man, it shed a glory upon the scene, in which its departed youth and freshness seemed to live again. The wet grass sparkled in the light; the scanty patches of verdure in the hedges-where a few green twigs yet stood together bravely, resisting to the last the tyranny of nipping winds and early frosts- took heart and brightened up; the stream which had been dull and sullen all day long, broke out into a cheerful smile; the birds began to chirp and twitter on the naked boughs, as though the hopeful creatures half believed that winter had gone by, and spring had come already. The vane upon the tapering spire of the old church glistened from its lofty station in sympathy with the general gladness; and from the ivy-shaded windows such

gleams of light shone back upon the glowing sky, that is it seemed as if the quiet buildings were the hoarding-place twenty summers and all their ruddiness and warmth were stored within.

3. Even those tokens of the season which emphatically whispered of the coming winter, graced the landscaped, and, for the moment, tinged its livelier features with no oppressive air of sadness. The fallen leaves, with which the ground was strewn, gave forth a pleasant fragrance and subduing all harsh sounds of distant feet and wheels created a repose in gentle unison with the light scattering of seed hither and thither by the distant husbandman, and with the noiseless passage of the plough as it turned up the rich brown earth, and wrought a graceful pattern in the stubbled fields. On the motionless branches of some trees, autumn berries hung like clusters of coral beads, as in those fabled orchards where the fruits were jewels; others stripped of all their garniture, stood, each the centre of its little heap of bright red leaves, watching their slow decay; others again, still wearing theirs, had them all crunched and crackled up, as though they had been burnt; about the stems of some were piled, in ruddy mounds, the apples they had borne that year; while others (hardy evergreens this class) showed somewhat stern and gloomy in their vigour, as charged by nature with the admonition that it is not to her more sensitive and joyous favourites she grants the longest term of life. Still athwart their darker boughs, the sunbeams struck out paths of deeper gold; and the red light, mantling in among their swarthy branches, used them as foils to set its brightness off, and aid the luster of the dying day.
4. A moment and its glory was no more. The sun went down beneath the long dark lines of hill and cloud which piled up in the west an air city, wall heaped on wall, and battlement on battlement; the light was all withdrawn; the shining church turned cold and dark; the stream forgot to smile; the birds were silent; and the gloom of winter dwelt on everything.

(Adapted from '*Martin Chuzzlewit*' by Charles Dickens)

Q.2.1 On the basis of your reading of the passage, answer the following questions by choosing the best of the given choice.

3

- (i) The day being described is .....
- (a) a dull evening in the late autumn                      (b) as bright day in early autumn  
(c) a dull evening in late spring                              (d) a dull morning in late autumn
- (ii) The sound of passing footsteps was muffled because .....
- (a) falling leaves had covered the ground              (b) there was a repose all around  
(c) people wore muffled shoes                              (d) the road had been ploughed
- (iii) The momentary brightness was gone when .....
- (a) the sun set beneath the dark line of hills              (b) when the hills became airy  
(c) when the church turned cold and dark              (d) the wintry gloom was on the battlement

Q.2.2 Answer the following questions briefly.

5 × 1 = 5

- (i) What effect did the sun have on the grass and hedges?
- (ii) What effect did the sunshine create on the windows of buildings?
- (iii) What reference tells us that there is work ahead for the farmer?
- (iv) How do the berry bearing trees appear during this season?
- (v) Give a suitable title.

Q.2.3 Find the words from the passage which mean the same as.

3

- (a) not moving (para 3)
- (b) sheen (para 3)
- (c) a row of bushes (para 2)

Q.3 Read the following passage carefully and answer the questions that follow :

Effective speaking depends on effective listening. It takes energy to concentrate on hearing and concentrate on understanding what has been heard.

Incompetent listeners fail in a number of ways. First, they may drift. Their attention drifts from what the speaker is saying. Second, they may counter. They Then, they filter. They exclude from their understanding those parts of the message which do not readily fit with their own frame of reference. Finally they react. They let personal feeling about speaker or subject override the significance of the message which is being sent.

What can a listener do to be more effective? The first key to effective listening is the art of concentration. If a listener positively wishes to concentrate on receiving a message his chances of success are high. It may need determination. Some speakers are difficult to follow, either because of voice problems, or because of the form in which they send a message. There is then particular need for the determination of a listener to concentrate on what is being said.

Concentration is helped by alertness. Mental alertness is helped by physical alertness. It is not simply physical fitness, but positioning of the body, the limbs and the head. Some people also find it helpful to their concentration if they hold the head slightly to one side. One useful way for achieving this is intensive note-taking, by trying to capture the critical headings and sub-headings the speaker is referring to.

Note-taking has been recommended as an aid to the listener. It also helps the speaker. It gives him confidence when he sees the listeners are sufficiently interested to take notes; the patterns of eye-contact when the note-taker looks up can be very positive; and the speaker's timing is aided – he can see when a note-taker is writing hard and can then make effective use of pauses.

Q.3.1 Postures too is important. Consider the impact made by a less competent listener who pushes his chair backwards and slouches. An upright posture helps a listener's concentration. At the same time it is seen by the speaker to be a positive features amongst his listeners. Effective listening skills have an impact on both the listener and speaker.

- (i) On the basis of your reading of the above passage make notes on it in point only, using sub headings. Also we recognizable affrications, wherever necessary, supply a title to it. **5**
- (ii) Write a summary of the above passage in about 80 words. **3**

## SECTION – B ( WRITING )

- Q.4 You are Rakesh / Rakshita, Head Boy / Head Girl of Oasis Public School, Jaipur. Draft a **Notice** in not more than 50 words for School Notice Board, asking the students to give their names for taking part in the Inter class Volleyball Comp. 4
- Q.5 Recently you attended a Seminar on Adult Education Programme organized by the CBSE. Write a **Letter** to your friend through informal letter about the benefit you get from this programme.(120-150 words) 6
- Q.6 You wish to deliver a Sspeech to spread awareness against the dependence on tuitions. Write the **Speech** highlighting the benefits of self-reliance and self study. .(150 – 200 words) 10
- Q.7 You are Varun / Deepti. Your school sent you to take part in a contest conducted by IIT Delhi on the topic “Modern Technology and human life” and won the first prize. Write a **Report** about the event in not more than 150-200 words. 10

## SECTION – C LITERATURE & LONG READING TEXT

- Q.8 Read the extract and answer the questions :- 4  
Far far from gusty waves these children’s faces.  
Like rootless weeds, the hair torn around their pallor  
The tall girl with her weighed-down head.  
The paper seeming boy, with rats eyes.
- (i) Where do you think are these children sitting?  
(ii) How do the faces and hair of these children look?  
(iii) Why is the head of the tall girl weighed down?  
(iv) What do you understand by the ‘The paper seeming boy, with rat’s eyes?’
- Q.9 Answer the following questions in 30-40 words :- 3 × 4 = 12
- (i) Why does Kamala Das describe the young trees as sprinting?  
(ii) According to Neruda, what can we learn from the earth?  
(iii) According to Jo, why should the wizard hit mommy?  
(iv) Why does Derry feel comfortable with Mr. Lambs?
- Q.10 How does humanity dominate patriotism as per the message given in the lesson “**The Enemy**” 6
- Q.11 Edla Willmansson’s hospitality and respect help the rattrap seller to become a better person. Write a para in about 100 words expressing your views about how kindness and respect touch the inner corner of person’s heart and helps him to transform. 6
- Q.12 Who is Mr. Marvel? What was he doing when the voice interrupted him? Mr. Marvel seems to be observed about his shoes comment. 6
- Q.13 Mrs. Hall was no longer needy to put up with stranger. She decides to stop serving him and even replied to him fiercely. What insight do you get into her character from the chapter? 6

# 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 6 carry **One Mark** each.  
Section – B Question No. 7 to 19 carry **Four Marks** each.  
Section – C Question No. 20 to 26 carry **Six Marks** each.

### Section – A

- Q.1 if A is a square matrix of order 3 such that  $|A| = 8$ , find  $|3A|$ .
- Q.2 If  $y = \sec^3 x$  find  $dy/dx$ .
- Q.3 Evaluate  $\int \sin \frac{x}{2} dx$ .
- Q.4 If  $y' = \frac{dy}{dx}$ , write the order and degree of given differential equation.  $y' + \frac{2}{y'} = x^2$ .
- Q.5 Write the principle value of  $\sin^{-1}\left(\sin \frac{4\pi}{3}\right)$ .
- Q.6 Find the slope of tangent of curve  $y = x^3 - 2x + 1$  at point (2,5).

### Section – B

- Q.7 Consider a function  $f(x) = 9x^2 + 6x - 5$  such that  $f : R^+ \rightarrow [-5, \infty)$ . Show that  $f(x)$  is invertible, also find inverse of  $f(x)$  i.e.  $f^{-1}$ .

**OR**

Show that the relation  $R_1$  in the set of real numbers  $R$  defined by  $R_1 = \{(a, b) \in R \times R \mid a \leq b^3\}$ , is neither reflexive, nor symmetric, nor transitive.

- Q.8 Prove that :  $2 \tan^{-1} \frac{1}{3} + \tan^{-1} \frac{1}{7} = \frac{\pi}{4}$ .
- Q.9 If  $\cos^{-1} \frac{x}{a} + \cos^{-1} \frac{y}{b} = \alpha$ , prove that  $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{2xy}{ab} \cos \alpha = \sin^2 \alpha$ .

**OR**

Prove that  $\tan^{-1} \frac{1}{4} + \tan^{-1} \frac{2}{9} = \frac{1}{2} \cos^{-1} \frac{3}{5}$ .

- Q.10 Find  $x$ , if  $[x \ -5 \ -1] \begin{bmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{bmatrix} \begin{bmatrix} x \\ 4 \\ 1 \end{bmatrix} = 0$ .

- Q.11 Let  $A = \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$ , show that  $(aI + bA)^n = a^n I + na^{n-1} bA$ , where I is the identity matrix of order 2 and  $n \in N$ .

- Q.12 Using proportion of determinants, prove that –

$$\begin{vmatrix} 1 & a^2 + bc & a^3 \\ 1 & b^2 + ca & b^3 \\ 1 & c^2 + ab & c^3 \end{vmatrix} = -(a-b)(b-c)(c-a)(a^2 + b^2 + c^2).$$

Q.13 Using properties of determinants, prove that –

$$\begin{vmatrix} a^2+1 & ab & ac \\ ab & b^2+1 & bc \\ ca & cb & c^2+1 \end{vmatrix} = 1+a^2+b^2+c^2.$$

Q.14 If  $\sin y = x \cos(a+y)$  show that  $y' = \frac{\cos^2(a+y)}{\cos a}$ .

Q.15 Find the equations of the tangent and normal to the curve  $x^{2/3} + y^{2/3} = 2$  at  $(1,1)$

Q.16 Evaluate :  $\int \frac{\sin x}{\sin(x-a)}$  OR  $\int \frac{(3x+2)dx}{(x-1)(2x+3)}$ .

Q.17 Prove that :  $\int_0^a \sin^{-1} \sqrt{\frac{x}{a+x}} dx = \frac{a}{2}(\pi - 2)$ .

Q.18 Find the area of the region included between the parabolas  $y^2 = 4ax$  and  $x^2 = 4ay$  ( $a > 0$ ).

Q.19 Solve the differential equation :

$$(1+e^{2x})dy + (1+y^2)e^x dx = 0; \text{ given } x=0 \text{ then } y=1.$$

### Section – C

Q.20 Show that  $f : N \rightarrow N$ , given by  $f(x) = \begin{cases} x+1, & \text{if } x \text{ is odd} \\ x-1, & \text{if } x \text{ is even} \end{cases}$  is a objective function.

Q.21 If  $A = \begin{bmatrix} 1 & 2 & 1 \\ -1 & 1 & 1 \\ 1 & -3 & 1 \end{bmatrix}$ , find  $A^{-1}$  and use it to solve the equation

$$x+2y+z=4, -x+y+z=0 \text{ and } x-3y+z=2.$$

Q.22 If  $y = \tan^{-1}\left(\frac{5ax}{a^2-6x^2}\right)$ , prove that  $\frac{dy}{dx} = \frac{3a}{a^2+9x^2} + \frac{2a}{a^2+4x^2}$ .

**OR**

If  $x^p y^q = (x+y)^{p+q}$ , then prove that  $\frac{dy}{dx} = \frac{y}{x}$ .

Q.23 Prove that the volume of the largest cone that can be inscribed in a sphere of radius  $R$  is  $\frac{8}{27}$  of the volume of the sphere.

Q.24 Integrate :  $\int_0^1 \frac{\log(1+x)}{1+x^2} dx$ .

Q.25 Sketch the region common to the circle  $x^2 + y^2 = 16$  and the parabola  $x^2 = 6y$ . Also find the area of the region using integration.

**OR**

Using integration, find the area of the triangle whose vertices are  $(2,0)$ ,  $(4,5)$  and  $(6,3)$ .

Q.26 Solve the differential equation –

$$\sqrt{1+x^2+y^2+x^2+y^2} + xy \frac{dy}{dx} = 0.$$

**\*\*ALL THE BEST \*\***

**Quarterly Examination 2014 – 15****Time: 3:00 Hrs.****M. M. 70**

- Q.1 Define Encapsulation and Data hiding concept of OOPs. **4**
- Q.2 Give the name of the header files to execute these function :- (i) puts. ( ), (ii) pow ( ) **2**
- Q.3 What will be the possible O/P of the following code :- **6**

```
# include <iostream. h >
# include <stdlib. h>
const int LOW= 15;
void main ( )
{
    randomize ( ) ;
    int POINT=5, Number;
    for ( int I = 1; I <=4, I++)
    {
        Number = LOW + random (POINT);
        cout <<Number<< “ : ” ;
        POINT – – ;
    }
}
```

- (a) 19 : 16 : 15 : 18    (c) 19 : 16 : 14 : 18  
 (b) 14 : 18 : 15 : 16    (d) 19 : 16 : 15 : 16

- Q.4 Find output :- **5**

```
# include <iostream.h>
# include <ctype.h>
void main ( )
{
    char Mystring [ ] = “ What @ OUTPUT !” ;
    for ( int I = 0; Mystring [ I ] !=’\0’, I++)
    { if (! isalpha (Mystring [ I ]))
        Mystring [ I ] = ‘*’;
      else if ( isupper (Mystring [ I ] ))
        Mystring [ I ] = Mystring [ I ] + 1;
      else
        Mystring [ I ] = Mystring [ I + 1 ];
    }
    cout <<Mystring ;
}
```



Q.5 Explain function overloading with all conditions. 5

Q.6 Define a class student with the following specification private members : 4 + 2 =6

admno                                    integer  
sname                                    20 characters  
eng, math, science                    float  
total                                    float  
ctotal ( )                                A function to calculate eng + math + science with float return type.

Public members :-

→ Takedata ( ) function to accept values for admno, sname, eng, maths, science and inuoke ctotal( ) to calculate total.

→ Showdata ( ) function to display all the data members on the screen.

Q.7 Answer the questions (i) and (ii) after going through the following program : 4

```
class Science
{
    char topic [ 20 ];
    int weightage;
public :
    Science ( ) //f1
    {
        strcpy (topic, "optics: ");
        weightage =30;
        cout << "Topic Acinated";
    }
    ~ Science ( ) //f2
    {
        cout << "Topic Deactivated";
    }
};
```

(i) Name the specific feature of class shown by F1 and F2 in the above example.

(ii) How would F1 and F2 get executed?

Q.8 Answer the question (i) to (iv) based on the following code :-

6

```
class Regular
{
    char schoolcode [ 10 ];
public :
    void InRegular ( ) ;
    void OutRegular ( ) ;
};
class Distance
{
    char studycentrecode [ 5 ];
public :
    void InDistance ( ) ;
    void OutDistance ( ) ;
};
class Course : public Regular, private Distance
{
    char Code [ 5 ];
    float Fees;
    int Duration;
public :
    void InCourse ( ) ;
    void OutCourse ( ) ;
};
```

- (i) Which type of inheritance is shown in the above eg.?
- (ii) Write names of all the member functions accessible from outcourse() function of class course.
- (iii) Write name of all the members accessible through an object of class course.
- (iv) Is the function InRegular () accessible Inside the function InDistance ()? Justify your answer.
- Q.9 (i) WAP to count total Number of “the” present in a text file. **4**
- (ii) Write a function TRANSFER () in c++ that would copy all those records which are having Area Code as “DEL” from PHONE.DAT to PHONBACK.DAT. **4**
- (iii) Explain all modes to open the file. **4**
- Q.10 Give the output of the following program **4**
- ```
# include <iostream.h>
int main ()
{
    int a = 32, *ptr=&a;
    char ch= 'A', & cho=ch;
    cho += a; * ptr+=ch;
    cout <<a<< “ ” <<ch <<endl;
    return 0;
}
```
- Q.11 If an array B [ 11 ] [ 8 ] is stored as column wise and B [ 2, 2 ] is stored at 1024 and B [ 3, 3 ] at 1084 find the address of B [ 5, 3 ] and B [ 1, 1 ]. **4**
- Q.12 Given two arrays A and B, copy last 5 elements of B after first element of A to create another array C. Assume length of A and B is greater than 5. **3**
- Q.13 Write push function of the stack implemented by an array. **4**
- Q.14 Evaluate the following postfix notation of expression ( show status of stock after execution of each operation ). 4,10, 5,+ , \* 15, 3, /, - . **4**
- Q.15 Define cardinality. **1**

**\*\*ALL THE BEST \*\***

## Quarterly Examination 2014 – 15

Time: 3:00 Hrs.

M. M. 70

**Note : Question No. 1 to 5 carry One Mark only.**

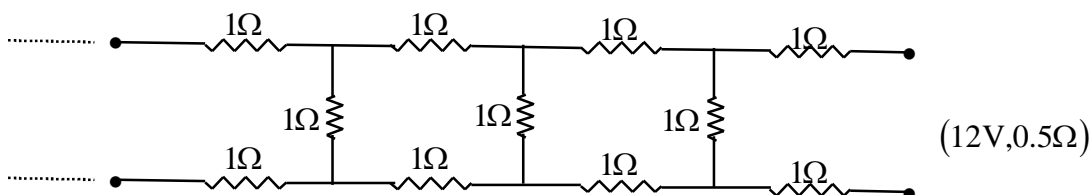
- Q.1 How does dielectric constant change with temperature?  
 Q.2 State the mathematical form of wheat stone bridge.  
 Q.3 What is the nature of magnetic field in a moving coil galvanometer?  
 Q.4 What is the basic cause of induced emf?  
 Q.5 What is meant by wattles current?

Question No. 6 to 10 carry Two Marks each.

- Q.6 Show that induced charged depend on charge in magnetic flux.  
 Q.7 Find the condition when an electron does not deflected if it moves in electromagnetic field.  
 Q.8 If magnetic monopole existed, how gauss law of magnetism be modify.  
 Q.9 Maganin or Eureka is used for making standard resistance coil. Why?  
 Q.10 Find capacitance of capacitor when a conductor plate placed between plate of capacitor.

**Question No. 11 to 22 carry Three Mark each.**

- Q.11 How can it possible to produced high potential on our body without getting shock? Explain.  
 Q.12 Prove that two parallel conductor carrying current in the opposite direction repel each other. Hence find the expression for force per unit length.  
 Q.13 Cell A has an emf  $E_A$  & internal resistance  $r_A$  while cell B has emf &  $E_B$  & internal resistance  $r_B$ . Dervie expression for the equivalent emf and internal resistance in parallel combination.  
 Q.14 Derive an expression to find the phase relation between peak current & peak voltage for an AC circuit containing capacitor only?  
 Q.15 Find electric field intensity due to an electric dipole on equatorial point.  
 Q.16 “Lenz Law is the consequence of conservation of energy” justify the statement with suitable example.  
 Q.17 When two concentric sphere of radians  $r_1$  &  $r_2$  having charge  $Q$  &  $q$  are connected with each other then all charge resides on outer surface of outer sphere, prove it.  
 Q.18 Determine the current draw from 12V supply with internal resistance  $0.5 \Omega$  by the infinite network shown in fig.



- Q.19 Two concentric circular coils, one of small radius  $r_1$  and the other of very large radius  $r_2$  such that  $r_1 \ll r_2$  are placed co-axially with centers coincide obtain mutual inductance of the arrangement?
- Q.20 What are the parameter of earth magnetism define each with suitable diagram?
- Q.21 Find out expression for magnetic field due to a current carrying circular ring of radius "a" on axis of the ring.
- Q.22 (i) Which bulb has greater resistance – 40w or 60w bulb, when connected across the same supply.  
(ii) What happen when a resistance less wire is connected to a battery.

**Question No. 23 carry Four Mark only.**

- Q.23 After studying the chapter on capacitor, one student raises a question that the capacitors are similar to a battery as they both store electrical energy. Most students of the class agree with him but the teacher disagrees with the –**

**4**

- (i) What values are displayed by the student?  
(ii) What is the difference between a capacitor & batter?

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

- Q.24 Use gauss theorem find electric field intensity at a point & due to circular ring of charge Q.

**OR**

Find electric potential at any generated point P at angle  $\theta$  due to electric dipole.

- Q.25 What is transformer, define its type and write working principle of each? Also define which type of energy loss take place.

**OR**

What is dead coil galvanometer? Write its principle & working & explain the use of radius magnetic field.

- Q.26 What is a meter bridge? Write its principle & derive the expression for same, how can you find out the specific resistance of unknown wire?

**OR**

What is potentiometer? Write working principle use potentiometer how can compare e.m.f. of two primary cell?

**\*\*ALL THE BEST \*\***

**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 meant by adaptive radiation? 1
- Q.2 Name the primate family in which the humans have been placed. 1
- Q.3 What is the cranial capacity of man? 1
- Q.4 What was sealed in the spark chamber in famous Miller and Urey simulation experiment. 1
- Q.5 Mention the two additional processing which hnRNA needs to undergo after splicing so as to become functional. 1
- Q.6 How are chasmogamous flowers different from cleistogamous flowers? 2
- Q.7 What is the forensic test for rape? 2
- Q.8 Where are fimbriae present in human female reproductive system? 2
- Q.9 List two essential roles for ribosomes during translation. 2
- Q.10 State Gause's principle and explain it with an example. 2
- Q.11 Differentiate between Down's syndrome & Turner's syndrome. 3
- Q.12 Describe in brief the structure of t-RNA. 3
- Q.13 Diagrammatically show Urey-Miller's experiment and briefly describe it under suitable points. 3
- Q.14 Explain Co-dominance using suitable example. 3
- Q.15 What is DNA finger printing? Explain the various steps involved in it / (write your answer point wise). 3
- Q.16 Write any three differences between primary and secondary succession. 3
- Q.17 Briefly describe the processes and products of decomposition. 3
- Q.18 Diagrammatically show - (i) a mature dehisced anther (ii) sectional view of mammary gland. 3
- Q.19 What is foetal ejection reflex? Explain how it leads to parturition. 3
- Q.20 Answer the following :- 3
- (i) Why is polar region not suitable habitat for tiny humming birds?
- (ii) Define thermocline.
- (iii) Name a denitrifying bacterium.
- Q.21 (i) What is point mutation. Explain with an example.  $1\frac{1}{2}+1\frac{1}{2}=3$
- (ii) What kind of mutation is taking place in Cri-du chat syndrome. Explain it.

Q.22 (i) Why is a man unable to pass on sex linked gene to his son? 1 + 2 = 3

(ii) In a certain population the frequency of three genotypes is as follows –

|           |   |     |     |     |
|-----------|---|-----|-----|-----|
| Genotype  | : | BB  | Bb  | bb  |
| Frequency | : | 22% | 62% | 16% |

What is likely to be the frequency of B & b alleles?

**Q.23 Nidhi read an article about the presence of harmful level of DDT in human beings. She failed to understand the reason for this and discussed this issue with her biology teacher who explained to him the reasons.**

**Read the above passage and answer the following questions :-**

(i) **What is the reason for high concentration of DDT in human beings?** 2

(ii) **What is biomagnification?** 1

(iii) **What value is displayed by Arun's biology teacher?** 1

Q.24 Draw and explain a logistic curve for a population of density (N) at time (t) whose intrinsic rate of natural increase in (r) and  $\neq$  carrying capacity (k). 5

OR

Draw age distribution patterns curves and explain each of them.

Q.25 Describe Hardy Weinbergs principles and the factors affecting it. 5

OR

Describe the process of translation in detail.

Q.26 Describe the hormonal control of menstrual cycle in humans. 5

OR

Explain various special techniques used in assisted reproduction techniques (ART).

\*\*ALL THE BEST \*\*

## 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 -5 and 18-22 are very short answer questions carrying 1 mark. They are to be answered in one sentence each.
3. Questions 6-10 and 23-27 are short answer questions carrying 3 marks each. Answers to them should not normally exceed 60 words each.
4. Questions 11-16 and 28-30 are also short answer questions of 4 marks each. Answers to them should not normally exceed 70 words each.
5. Questions 17 and 31-33 are long answer questions of 6 marks each. Answers to them should not normally exceed 100 words each.

### SECTION – A ( MICRO ECONOMICS )

- Q.1 What happens to total expenditure on a commodity when its price falls and its demand is price elastic? 1
- Q.2 How is the demand for a good affected by a rise in prices of other goods? 1
- Q.3 What change will take place in marginal product, when total product increases at a diminishing rate? 1
- Q.4 What is law of variable proportions? 1
- Q.5 In Delhi toned milk is sold by Mother Dairy @ 21/ltr. Where is it costs government ₹ 23/ltr. In which form government is intervening? 1
- Q.6 Explain the difference between a planned economy and a market economy. 3
- Q.7 Explain why is production possibility frontier concave? 3
- Q.8 Give the meaning of '**Inferior Good**' and explain the same with help of an example? 3
- Q.9 A firms AFC of producing 2 units of a good is ₹ 9 and given below is its total cost schedules. Calculate its AVC & MC for each of the given level of output. 3
- |          |    |    |    |
|----------|----|----|----|
| Output : | 1  | 2  | 3  |
| TC :     | 23 | 27 | 30 |
- Q.10 The price elasticity of demand of a good is 0.75. Calculate the percentage fall in its price that will result in 15% rise in its demand? 3
- Q.11 A new steel plant comes up in Jharkhand. Many people who were previously unemployed in the area are now employed? How will this affect the demand curve for colour TVs in the region? 4
- Q.12 Explain the relation between marginal cost and average variable cost? 4
- Q.13 Distinguish between decrease in demand and decrease in quantity demanded. 4
- Q.14 What is demand curve of the commodity negatively sloped? 4
- Q.15 Explain the total variable cost curve, TC curve & AFC curve in single diagram. 4
- Q.16 Explain the properties of Indifference curve. 4

- Q.17 (i) What is a budget line?  
(ii) A consumer consumes only two goods. For the consumer to be in equilibrium why must MRS be equal to the ratio of prices of the two goods. Explain. 1+5=6

**Section – B**

- Q.18 What are transfer income? Give an example. 1
- Q.19 What is the main function of money in an economic system? 1
- Q.20 What is high powered money? 1
- Q.21 What is reverse repo rate? 1
- Q.22 What is the value of marginal propensity to consume when marginal propensity to save is zero? 1
- Q.23 How equilibrium level of income / output is determined? Use S-I approach. 3
- Q.24 Classify the following into stock and flow :- 3
- (i) National Income      (ii) Exports      (iii) Population of India      (iv) Investment  
(v) Expenditure on food by household      (vi) Deposit in saving account of a Bank
- Q.25 Explain the relationship between investment multiplier and MPC. 3
- Q.26 Explain the meaning of inflationary gap with the help of diagram? 3
- Q.27 How does money overcome the problems of partial System? Explain briefly. 3
- Q.28 From the following data calculate :- 4
- |        |                                                             |             |
|--------|-------------------------------------------------------------|-------------|
| (a)    | Private Income                                              |             |
| (b)    | Personal Income                                             | (in crores) |
| (i)    | GDPFC                                                       | 750         |
| (ii)   | Income from domestic product accruing to the private sector | 590         |
| (iii)  | Net other current transfers from general government         | 110         |
| (iv)   | Net Indirect Taxes                                          | 130         |
| (v)    | Net other current transfers from abroad                     | 80          |
| (vi)   | Net factor Income from abroad                               | (-) 70      |
| (vii)  | Saving of private corporate sector                          | 60          |
| (viii) | Corporation Tax                                             | 20          |
- Q.29 Explain the ‘**Lender of last resort**’ function of Central Bank? 4
- Q.30 Giving reasons state whether the following statements are true or false. 4
- (i) APS is always greater than zero  
(ii) Value of investment multiplier varies between zero P infinity.
- Q.31 The saving function in an economy is  $S = -200 + 0.25Y$ .  
The economy is in equilibrium when income is equal to 2000. Calculate. 6
- (i) Investment expenditure at equilibrium level  
(ii) Autonomous Consumption  
(iii) Investment Multiplier



Q.32 Calculate National Income and Net National Disposable income from the following: 6

|        | Income                                   | ( ₹ in Lakhs) |
|--------|------------------------------------------|---------------|
| (i)    | Net change in Stock                      | 50            |
| (ii)   | Government final consumption expenditure | 100           |
| (iii)  | Net current transfers to abroad          | 30            |
| (iv)   | Gross domestic fixed capital formation   | 200           |
| (v)    | Private final consumption expenditure    | 500           |
| (vi)   | Net imports                              | 40            |
| (vii)  | Depreciation                             | 70            |
| (viii) | Net Factor income from abroad            | (-) 10        |
| (ix)   | Net Indirect Tax                         | 120           |
| (x)    | Net Capital transfers to abroad          | 25            |

Q.33 Calculate National Income by (i) Income (ii) Expenditure method. 6

|        |                                            |     |
|--------|--------------------------------------------|-----|
| (i)    | Government final consumption expenditure   | 100 |
| (ii)   | Subsidies                                  | 10  |
| (iii)  | Rent                                       | 200 |
| (iv)   | Wages and Salaries                         | 600 |
| (v)    | Indirect taxes                             | 60  |
| (vi)   | Private final consumption expenditure      | 800 |
| (vii)  | Gross domestic capital formation           | 120 |
| (viii) | Social Security contributions by employers | 55  |
| (ix)   | Royalty                                    | 25  |
| (x)    | Net factor income paid to abroad           | 30  |
| (xi)   | Interest                                   | 20  |
| (xii)  | Consumption of fixed Capital               | 10  |
| (xiii) | Profit                                     | 130 |
| (xiv)  | Net Exports                                | 70  |
| (xv)   | Change in stock                            | 50  |

**\*\*ALL THE BEST \*\***

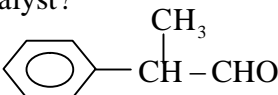
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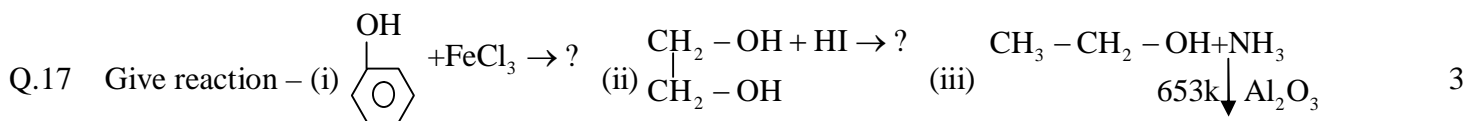
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## Quarterly Examination 2014 – 15

Time: 3:00 Hrs.

M. M. 70

- Q.1 Give an example of 12-16 compound. 1
- Q.2 2.5gm. Ethanoic acid is dissolved in 75gm. Benzene calculate the molality. 1
- Q.3 The rate constant for which order of reaction is independent of the limits of concentration? 1
- Q.4 What is Ziegler Natta catalyst? 1
- Q.5 Write a IUPAC name of  1
- Q.6 Calculate the electrode potential of hydrogen electrode in contact with the solution of pH = 10. 2
- Q.7 How is cast iron different from pig iron? 2
- Q.8 Give a path showing the conversion of secondary alcohol to higher tertiary alcohol. 2
- Q.9 Explain SN<sup>1</sup> & SN<sup>2</sup> reaction with suitable eg. 2
- Q.10 Give the percent composition of Brass & Bronze. 2
- Q.11 It was found by X-ray diffraction that copper crystallizes in fcc unit cell with edge length 3.608 × 10<sup>-8</sup> cm. In another experiment density of copper is found to be 8.92 g cm<sup>-3</sup>. Find out the atomic mass of copper. 3
- Q.12 The V.P. of pure liquid A & B are 450 & 750 mm Hg at 350K the total V.P. is 600 mm Hg. Calculate the composition of the mixture also determine the composition of vapour phase. 3
- Q.13 State Kohlrausch's law with suitable graph. 3
- Q.14 The rate constant for 1<sup>st</sup> order reaction is 60 s<sup>-1</sup>. How much time will it take to reduce the initial con. of the reactant to its 1/16<sup>th</sup> value? 3
- Q.15 Define emulsion & give method of preparation of them. 3
- Q.16 Explain Electrorefining method of Extraction of metal. 3



- Q.18 Give reason :- (i) Hell – volhard zelinsky reaction (ii) Kolbe's Electrolysis 3
- Q.19 The treatment of alkyl chlorides with aqueous KOH leads to the formation of alcohol but in the presence of alcoholic KOH alkenes are major products. Explain. 3
- Q.20 Write the mechanism of reaction of HI with methoxymethane. 3
- Q.21 How much change is required in coulomb for the following reduction – 3
- (i) 1 mol of Al<sup>3+</sup> to Al? (ii) 1 mol of Cu<sup>2+</sup> to Cu? (iii) 1 mol of MnO<sub>4</sub><sup>-</sup> to Mn<sup>2+</sup>?

Q.22 What are the disperse phase & medium in the following :- 3

(i) Milk (ii) Smoke (iii) Pumic Stone

Q.23 'Stability of crystal is reflected in the magnitude of its melting point'. Comment. Give M.P. of solid water, Ethyl alcohol, diethyl ether methane what can you say about the inter molecular forces between these molecule. 4

Q.24 Write a short note or shape selective catalyst. 5

**OR**

Write five characteristics of Enzyme catalysis.

Q.25 How will you give the following conversion : 5

(i) Toluene to Benzyl alcohol (ii) Benzene to biphenyl

**OR**

Explain why : (i) alkylhalide though polar, immiscible in water

(ii) Grignard reagent should be prepared under anhydrous conditions

Q.26 Give the following reactions : (i) Cannizzaro reaction (ii) Aldol reaction (iii) Etard reaction (iv) Gatterman-Koch reaction (v) Stephen reaction 5

**OR**

Derive Integrated rate equation for 1<sup>st</sup> order of reaction.

**\*\*ALL THE BEST \*\***

Roll. No.

Code No. 12/NLCS/Business Studies/80

## Quarterly Examination 2014 – 15

Time: 3:00 Hrs.

M. M. 80

- Q.1 Name the function of management, which ensures work accomplishment as per plan? 1
- Q.2 Name the foreman who arrange all the resources inputs and setup to start the work smoothly? 1
- Q.3 Name the ministry which introduced eco mark? 1
- Q.4 ABC Ltd. Decides to advertise their product on T.V. and radio. What types of plan should it prepare? 1
- Q.5 Define span of control. 1
- Q.6 Name first two stages of evolution of HRM. 1
- Q.7 Give two examples of Semantic Barriers. 1
- Q.8 What is feedback in controlling? 1
- Q.9 What are the three categories of objectives of management? 3
- Q.10 Which technique of Taylor suggest that each worker should be supervised by specialists? Give the designation of any two types of specialists suggested by Taylor? 3
- Q.11 Explain briefly any three rights available to a consumer under the consumer protection act. 3
- Q.12 What do you mean by “placement and orientation”? 3
- Q.13 “An effort to control everything may and up controlling nothing”. Comment. 3
- Q.14 What can manufacturers, consumers and Government do to remove the evils of Advertising? 4
- Q.15 “Leadership is required only for less efficient subordinates”. Do you agree? Explain any four reasons in support of your answer. 4
- Q.16 Your school has vacancies of teachers. The Eligible staff had already been promoted to some posts. Still some vacancies are left. Explain any four sources of recruitment you will use for filling up these vacancies. 4
- Q.17 “Authority can be delegated but responsibility cannot”. Explain. 4
- Q.18 Explain “objective” and “Policy” as types of plans using suitable examples. 4.
- Q.19 Raman is working as “plant superintendent” in Tifco Ltd. Name the managerial level at which he is working? State any four functions he will perform as “plant superintendent” in this company. 4
- Q.20 “100 grams of extra material in a pack of one kg.” is an example of one of the techniques of “promotion mix”. Name the technique and explain two other techniques of promotion mix. 5

OR

“Bending the customer according to the product” and “Developing the product according to customer’s Needs” are the two important concepts of marketing management. Identify the concepts and differentiate between the two?

Q.21 What is mean by Divisional organization structure? How is it beneficial for multi-product companies? 5

**OR**

What is mean by “informal organization list any two limitations of informal organization?

Q.22 “Luck of proper management results in wastage of time, money and efforts”. Do you agree with this statement? Give reasons in support of your answer. 5

**OR**

Test the fact that “Management is an art”.

Q.23 Explain the technique of “Functional foremanship” and the concept of “Mental Revolution” as enunciated by Taylor. 6

**OR**

Explain the meaning and nature of management principles.

Q.24 Though planning is an important tool of management, yet it is not a remedy for all types of problems”. Do you agree with this statement? Give any five reasons in support of your answer. 6

**OR**

“Planning is of vital importance in the managerial process”. Do you agree? Explain in brief, any five reasons in support of your answer.

Q.25 Explain briefly the various marketing function performs by a modern business enterprise. 6

**OR**

Advertising costs are passed on to the consumers in the form of high prices” and “some Advertisements are in bad taste”. Do you agree? Give reasons in support of your answer

**\*\*ALL THE BEST \*\***

**Quarterly Examination 2014 – 15****Time: 3:00 Hrs****M.M. 80**

- Q.1 Write any two difference between Fixed capital and fluctuating capital. **2**
- Q.2 A,B & C were partners in a firm sharing profits in 3:2:1 ratio. They admitted D as a new partner. Each partner Surrenders  $\frac{1}{5}$  of his share in favour of D. Calculate new profit sharing ratio for A,B,C & D and also calculate Sacrificing ratio for old partners. **3**
- Q.3 P,Q,R & S are partners sharing profit in the ratio of 4:3:2:1. P retires and his share is acquired by Q & S in ratio of 2:3. Calculate new profit sharing ratio and gaining ratio. **3**
- Q.4 The capital of P,Q & R for the year ending 2008 after adjustment of profit and drawing were rs.80000, rs.60000 and rs.40000 respectively. Their drawings were rs.20000, rs.150000, rs.10000 respectively. Net profit for the year 2008 was ₹. 120000.  
Subsequently it was found this interest on capital @ 5% per annum and interest on drawings : P- ₹. 500, Q- ₹. 350, and R- ₹. 200 was omitted.  
Their profit sharing ratio was 3:2:1. Pass rectifying entry giving workings clearly. **4**
- Q.5 A firm earn ₹. 60000 profit for the year 2008. The normal rate of return is 10%. The firm has assets worth ₹. 700000 & out side liabilities ₹. 210000. Determine value of goodwill by capitalization method. **4**
- Q.6 A,B, and C are partners in a trading firm. The firm has a total fixed capital of ₹. 60000 held equally by all the partners. Under the partnership deed, the partners were entitled to:  
(a) A and B to a salary of ₹. 1800 & ₹. 1600 per month respectively.  
(b) In the event of death of partner , Goodwill was to be valued at 2 year's purchased of average profit of last three years.  
(c) Profit up to date of death base on the profits of the previous year.  
(d) Partners were to be charged interest on drawings at 5% per annum and allowed interest on capital @ 6% per annum.  
B died on January 1<sup>st</sup> 2011. His drawings to the date of death were 200 and interest thereon ₹. 60. the profits for the year ending March 31<sup>st</sup> 2008, 2009 and 2010 were ₹. 21200, ₹. 3200(Dr.) ₹. 9000 respectively. Prepare B' Capital account to calculate the amount to be paid to his executors. **4**
- Q.7 Raghav a partner in a firm was retired from the firm on January 1<sup>st</sup> 2010. His capital account shows after all the adjustment credit balance ₹. 75000. ₹. 3000 paid to him immediately and remaining balance to be paid in three equal annual installments with interest @ rate of 8% per annum. You are required to prepare Raghav's capital account and his loan account till to final payment. Firm prepare final account on December 31<sup>st</sup> each year. **4**
- Q.8 A,B, and C entered in to a partnership on October 1<sup>st</sup> 2004 to share profits and losses in the ratio of 3:2:1. A however personally guaranteed that C's share of profit after charging interest on capital 5% per annum would not be less then ₹. 30000 in any year. The capital contributed were A ₹. 100000, B ₹. 200000, and C ₹. 100000. The profit for the period ended March 31<sup>st</sup> 2005 were ₹. 120000. Show distribution of profits. Give your answer with proper reason. **4**
- Q.9 Pass necessary journal entries for the following transactions on the dissolution of the firm of James and Haider who were sharing profit and loss in the ratio of 2:1.  
(a) Haider took over all the investments at ₹. 12000 (Book Value ₹. 10500)  
(b) Sundry creditors ₹. 20000 were paid at 5% discount.  
(c) Realization expenses ₹. 2000 paid by James.  
(d) Debit balance shows in realization account ₹. 10200. **4**
- Q.10 Sachin and Virat are partners with profit sharing ratio of 3:2. Dhoni entered into the partnership firm as anew partner for  $\frac{1}{4}$  share in firm. Dhoni bring ₹. 40000 for his capital and bring ₹. 20000 for goodwill. Remaining profit distributed by sachin and Virat by equally. Half amount of goodwill withdrawal by old partners. Pass necessary entries for goodwill treatment at time of Dhoni's admission. **4**

- Q.11 P and Q are partners in a firm with capital ₹. 300000 and ₹. 200000 respectively. P gave a loan of ₹. 150000 to the firm. The profit of the firm before allowing interest on loan to ₹. 75000. for the year ending 31<sup>st</sup> March 2008. Show distribution of profit after considering the followings: 6
- Interest on capital allowed @5% per annum.
  - Interest on drawings is charged @ 6% per annum. Drawings of P and Q during the year were ₹. 50000 & ₹.40000 respectively.
  - P's allowed commission @1% of sale which is ₹. 300000.
  - Q is entitled to a commission @ 5% of net profit after charging commission of P and his own.
  - 10% of divisible profit be transferred to reserve account.

- Q.12 The Balance sheet Madan and Mohan who shared profits and losses in the ratio of 3:2 as on 31<sup>st</sup> march 2010 was as follows:

| <b>Liabilities</b>        | <b>₹.</b>     | <b>Assets</b>                      | <b>₹.</b>     |
|---------------------------|---------------|------------------------------------|---------------|
| Creditors                 | 28000         | Cash at Bank                       | 10000         |
| Workmen compensation fund | 12000         | Debtors 65000<br>Less: P.B.D. 5000 | 60000         |
| General reserve           | 20000         | Stock                              | 30000         |
| Capitals:                 |               | Investments                        | 50000         |
| Madan                     | 60000         | Patents                            | 10000         |
| Mohan                     | 40000         |                                    |               |
| <b>Total</b>              | <b>160000</b> | <b>Total</b>                       | <b>160000</b> |

They decided to admit Gopal on April 1<sup>st</sup>, 2010 for ¼ on the following terms:

- Gopal shall bring ₹. 25000 as his share of premium of goodwill.
  - The accrued income of ₹. 500 be provided for.
  - The market value of investments of ₹. 45000.
  - A debtor whose dues of ₹.1000 were written off as bad debts paid ₹. 800 in full settlement.
  - A claim of ₹. 2000 on account of Workmen compensation fund to be provided for.
  - Patents was found under valued by ₹. 5000.
  - Gopal to bring in Capital to equal to ¼ of the total capital of new firm after all adjustments.
- Prepare Revaluation A/c, Partners Capital A/cs and the Balance Sheet of the new firm 6
- Q.13 Following in the Balance Sheet of X, Y and Z as on 31<sup>st</sup> March 2008. They shared Profit in the ratio of 3:3:2.

| <b>Liabilities</b> | <b>₹.</b>     | <b>Assets</b>                      | <b>₹.</b>     |
|--------------------|---------------|------------------------------------|---------------|
| Creditors          | 250000        | Cash at Bank                       | 50000         |
| General reserve    | 80000         | Bills Receivable                   | 60000         |
| Partner's loan A/c |               | Debtors 80000<br>Less: P.B.D. 4000 | 76000         |
| X                  | 50000         | Stock                              | 124000        |
| Y                  | 40000         | Fixed Assets                       | 300000        |
| Capital A/c        |               | Advertisement Suspense A/c         | 16000         |
| X                  | 100000        | Profit and loss A/c                | 4000          |
| Y                  | 60000         |                                    |               |
| Z                  | 50000         |                                    |               |
| <b>Total</b>       | <b>630000</b> | <b>Total</b>                       | <b>630000</b> |

On 1<sup>st</sup> April, 2008, Y Decided to retire from the firm on the following terms:

- Stock to be depreciated by ₹. 12000.
- Advertisement suspense account to be written off.
- Provision for Bad and doubtful debts to be increased to ₹. 6000.
- Fixed Assets be Appreciated by ₹. 10%.
- Goodwill of the firm be valued at ₹. 80000 and amount due to retiring partners be adjusted in X's and Z's Capital A/c.

Prepare revaluation Account, Partners Capital Accounts and Balance Sheet to give effect to the above. 6

- Q.14 A, B and C Shared profit in the ratio of 3:2:1. They decided dissolve the firm and appointed A to realize the assets. A is to receive 5% commission on sale of assets (except cash) and is to bear all expenses of realization. The Balance Sheet of the firm was as follows: 6

| <b>Liabilities</b>             | ₹.             | <b>Assets</b>     | ₹.            |
|--------------------------------|----------------|-------------------|---------------|
| Bills payable                  | 25000          | Cash in hand      | 22500         |
| Creditors                      | 60000          | Debtors           | 52300         |
| Provident fund                 | 12000          | Stock             | 36000         |
| Investment Fluctuation Fund    | 6000           | Investments       | 15000         |
| Commission received in advance | 8000           | Plant             | 91200         |
| Capital A/c                    |                | Profit & loss A/c | 54000         |
| A                              | 90000          |                   |               |
| B                              | 60000          |                   |               |
| C                              | 10000          |                   |               |
| <b>Total</b>                   | <b>2710000</b> | <b>Total</b>      | <b>271000</b> |

Additional Information:

- (i) A realized the assets as follows:

Debtors ₹. 30000, Stock ₹. 26000, Investments at 75% value, Plant at ₹. 42750. Expenses of realization amounted to ₹. 4100.

- (ii) Commission received in advance is returned to customer after deducting ₹. 3000 for work done.

- (iii) Firm had to pay ₹. 7200 for outstanding salaries, not provided for earlier.

- (iv) Compensation to employees paid by the firm amounted to ₹. 9800. this liability was not provided for in the above Balance Sheet.

- (v) ₹. 25000 had to be paid for Provident Fund.

Prepare necessary accounts at time of dissolution of the firm.

#### PART- B

- Q.15 Compute Interest Coverage Ratio of Gee Ltd. It has 10% Debentures for ₹. 800000 and Net profit ₹. 252000 after deducting tax @ 40%. 2
- Q.16 Discuss any two limitation of Cash Flow Statement. 2
- Q.17 Under what major head and sub-head the following items will appear in the balance sheet of a company as per schedule VI ? 3
- (i) Raw Materials           (ii) Stores and spares           (iii) Goods in transit
- Q.18 From the following information of Y Ltd. Prepare Comparative Statement of Profit and loss— 3

| particulars                                              | 2012(₹.) | 2013 (₹.) |
|----------------------------------------------------------|----------|-----------|
| Revenue from operations                                  | 2000000  | 2500000   |
| Other Income (% of Revenue from operations)              | 5%       | 4%        |
| Cost of material consumed(% of Revenue from operations)  | 50%      | 48%       |
| Employees benefit expenses (% cost of material consumed) | 30%      | 32%       |
| Other expenses ( % of Revenue from operations)           | 10%      | 12%       |
| Tax Rate                                                 | 40%      | 40%       |

- Q.19 From the following information compute Current Ratio and Acid-Test Ratio : 4

| S.No. | Particulars           | ₹.    | S.No | Particulars                   | ₹.     |
|-------|-----------------------|-------|------|-------------------------------|--------|
| 1     | Current Investment    | 40000 | 7    | Short-term Provisions         | 3000   |
| 2     | Inventories           | 5000  | 8    | Other current liabilities     | 5000   |
| 3     | Trade Receivable      | 2000  | 9    | Short-term Loans and Advances | 4000   |
| 4     | Short Term Borrowings | 20000 | 10   | Tangible Fixed Assets         | 100000 |
| 5     | Trade Payables        | 2500  | 11   | Cash and Cash Equivalents     | 15250  |
| 6     | Prepaid Expenses      | 2000  | 12   | Advance tax                   | 8250   |



| Particulars                                   | 2010 (i.)     | 2011 (i.)     |
|-----------------------------------------------|---------------|---------------|
| <b>I. EQUITY AND LIABILITIES</b>              |               |               |
| 1. Shareholders Funds                         |               |               |
| Share Capital                                 | 250000        | 300000        |
| <i>Reserve and Surplus</i>                    |               |               |
| Profit & Loss Account                         | 80000         | 85000         |
| <b>2. Non Current Liabilities (Bank loan)</b> | 120000        | 100000        |
| <b>3. Current Liabilities</b>                 |               |               |
| Trade payable (Creditors)                     | 315000        | 310000        |
| <i>Short term provision</i>                   |               |               |
| Provision For Tax                             | 195000        | 125000        |
| <b>Total</b>                                  | <b>960000</b> | <b>920000</b> |
| <b>II ASSETS</b>                              |               |               |
| <b>1.Non-Current-Assets</b>                   |               |               |
| (a) Fixed Assets                              | 520000        | 400000        |
| <b>2.Current Assets</b>                       |               |               |
| Trade receivable: Debtors                     | 110000        | 200000        |
| Bills Receivable                              | 220000        | 210000        |
| Stock                                         | 95000         | 80000         |
| Cash & Cash Equivalent                        | 15000         | 30000         |
| <b>Total</b>                                  | <b>960000</b> | <b>920000</b> |

Additional Information—

1. Depreciation charged on Fixed Assets was ₹. 70000
2. Tax paid during the year ₹. 180000

**\*\* ALL THE BEST \*\***

**Quarterly Examination 2014 – 15****Time: 3:00 Hrs****M.M. 70****Part - A**

- |      |                                                                                                    |   |
|------|----------------------------------------------------------------------------------------------------|---|
| Q.1  | What do you mean by sports environment?                                                            | 1 |
| Q.2  | Name any five adventure sports.                                                                    | 1 |
| Q.3  | What do you mean by macro nutrients?                                                               | 1 |
| Q.4  | What do you understand by seedling?                                                                | 1 |
| Q.5  | What are postural deformities?                                                                     | 1 |
| Q.6  | State food supplement.                                                                             | 1 |
| Q.7  | What is Craus-weeler-test?                                                                         | 1 |
| Q.8  | What do you mean by ageing?                                                                        | 1 |
| Q.9  | Discuss the effects of ageing on the size and strength of muscles?                                 | 2 |
| Q.10 | Briefly explain about skin fold measurement?                                                       | 2 |
| Q.11 | Elucidate two disadvantages of weight training.                                                    | 2 |
| Q.12 | Briefly discuss flat-foot?                                                                         | 2 |
| Q.13 | Briefly explain about types of league tournaments?                                                 | 2 |
| Q.14 | Briefly explain about eating disorder?                                                             | 3 |
| Q.15 | Discuss about camping in detail?                                                                   | 3 |
| Q.16 | Discuss the concept of women's participation in sports?                                            | 3 |
| Q.17 | Discuss any three immediate effects of exercise on cardio-vascular system?                         | 3 |
| Q.18 | Elucidate the Rockport one-mile-test in detail.                                                    | 5 |
| Q.19 | Suggest physical activities as corrective measures for Flat-Foot and lordosis.                     | 5 |
| Q.20 | What do you mean by knock-out tournaments? Draw the fixture of 21 teams on knock-out basis.        | 5 |
| Q.21 | Vitamins are essential for our metabolic process. "What happen if we devoid our diet of vitamins"? | 5 |

**Part - B**

- |      |                                                                           |   |
|------|---------------------------------------------------------------------------|---|
| Q.22 | Write the history of your major game?                                     | 2 |
| Q.23 | Write any three general rules of your game?                               | 3 |
| Q.24 | Draw the field/court with all specification and measurement of your game. | 5 |
| Q.25 | Explain different types of warm up with their advantages?                 | 3 |
| Q.26 | Enlist common sports injuries in your major game.                         | 2 |
| Q.27 | Write about the Rajiv Gandhi Khel Ratna Award and Arjun Award?            | 5 |