Quarterly Examination 2015 – 16

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 following questions:

At the end of the Second World War, Japan was defeated , her economy was in ruins with a large proportion of her factories and a quarter of her housing destroyed by bombing Until 1952, she was occupied by Allied troops, mostly American under the command of General MacArthur. For the first three years , the Americans aimed at making sure that Japan could never start a war ; she was forbidden from having armed forces and was given a democratic constitution. Americans did not at this stage seem concerned about restoring the Japanese economy. But during 1948, the American attitude gradually changed as the Cold War developed.

Europe and Kuomintang crumbled in China. They felt a strong need for an ally in South-East Asia and began to encourage Japanese economic recovery. From 1950, industry developed rapidly and by 1953 production had reached a high level. American occupying forces were withdrawn in April 1952 though some troops remained for defense purposes.

Japan's rapid recovery was possible because Americans gave them vital help. Japanese goods were allowed into American markets on favorable terms and the USA supplied aid and equipments. An economically healthy Japan meant a buffer against communism in South-East Asia.

The Korean War brought orders for military equipments and supplies and American firms began to corporate with the Japanese on the development of new industries. The alliance with the U.S.A. protected Japan and she was able to invest money in industry instead of defense.

Keeping wages and government expenditure low, Japan ploughed back all her profits into her industries. Japanese products were very competitive in the world market.

Japan's farmers benefited by the land reforms, carried out by the Americans. She also had a series of stable governments, which implemented the suggested reforms effectively.

Given all these advantages, it is not very surprising the Japan took giant strides in her economic progress.

(i) A Choose the correct options: 1 X 3 = 3

(a) American occupying forces were withdrawn in :
        (i) March 1950   (ii) January 1948   (iii) April 1952   (iv) June 1953

(b) Japanese goods were allowed into :
        (i) European markets.   (ii) South-East Asian markets
        (iii) American Markets.   (iv) Korean markets.

(c) Who was benefited by the land reforms, carried out by Americans.
        (i) Industrialists.   (ii) Labors   (iii) Farmers   (iv) Politicians.

(ii) Answer the following questions: 1 X 3 = 3

(a) For how many years the Americans aimed at making sure that Japan could never start a war?

(b) How the Japan's rapid recovery was possible?

(c) What brought orders for military equipments and supplies and American firms began to corporate with the Japanese on the development of new industries?

(iii) Make a summary in 80 words of the above passage. Also suggest a suitable title.   3

Q.2   Read the passage given below and answer the following questions:

The first Olympics was held in Greece in 776 B.C. The prestige and glory of the Olympics spread far and wide. With the advent of Christianity the games lost their importance, as it was believed that they encouraged pagan worship in temples built to honor the Greek gods. It was Theodosius

First, who ordered the total destruction Olympia Sanctuary's temples and other structures in the year 394 A.D., which ended the era of the ancient Olympic Games.

It was due to the effort of Baron de Coubertin that the modern Olympics of the modern era began in 1896 and were held every four years except during the two World Wars.

The International Olympic Committee (IOC) was constituted in 1894. It had 15 representatives including Coubertin. The first Olympic medal was won by America's James Connolly in triple jump. The Marathon was the most important event and was won by a Greek named Spiridon Louis.

Olympia is a small village situated near the west coast of the Peloponnese Peninsula of Greece. It is noted for its archaeological ruins which are related to the temples for worship of Greek gods and the ancient Olympic stadium.

The visitor is impressed by the grandiose ruins, which show temple foundations, ruins of the temple Zeus, the tall columns, the altars and art objects that dot the site. Some of these objects are placed in the Archaeological museum. Another museum displays objects like stamps, photographs, documents, flags, maps and trophies belonging to the modern Olympics.

The games sought to bring various warring groups together in an atmosphere of friendly rivalry and competition. So a sacred truce would be called for the duration of the games that had assumed pan-Hellenic importance.

Some of the events included in the games were foot racing, wrestling, chariot-racing and horse racing. The names of the victors along with the name of events would be recorded for posterity. For the victors, it was the laurel wreath that was important as it signified their superior performance.

At the modern Olympics the sacred flame is lit at Olympia using sun power, by Greek maidens dressed in white. The event is presided over by a Greek priestess. The flame is then carried in a torch that travels across nations. The importance of the Olympic movement has been recognized over centuries as it brings people together in a spirit of friendly competition.

(i)   Choose the correct options: **1 X 3 = 3**
    (a) IOC stands for:
        (i) Indian Olympic Council.   (ii) International Olympic Council
        (iii) Indonesian Olympic Committee   (iv) International Olympic Committee.
    (b) Olympia Sanctuary's temples and other structures were destroyed in year:
        (i) 493 A.D.,   (ii) 349 A.D.,   (iii) 394 A.D.;   (iv) 439 A.D.
    (c) Olympia is a _____ situated near the west coast of the Peloponnese Peninsula of Greece
        (i) Country   (ii) State   (iii) Small village   (iv) valley

(ii) Answer the following questions: **1 X 3 =3**
    (a) About what the games lost their importance?
    (b) Who won the first Olympic medal?
    (c) At the modern Olympics, how the sacred flame is lit?

(iii) On the basis of your reading of the above passage make notes on it using heading and sub-heading. Use recognizable abbreviations, wherever necessary.   **5**

SECTION –B (WRITING & GRAMMAR)

Q3.   Suppose Bank of Bikaner has increased the Rate of Interest on Fixed Deposits. As the Manager of Jind Branch, write a notice for the Public Notice-Boards of the city giving necessary details to the people.

<center>OR</center>

You want to sell your Honda motorcycle. Draft a suitable advertisement under the classified columns 'For Sale' of local newspaper.   **4**

Q4.   You are Abhijit Khurana of 109/E-8, Ganesh Vihar, Moradabad. Draft an application for the post of Marketing Manager in Estar Textiles Ltd., Haldwani Road, Rampur in response to their advertisement that published in 'The National Times.' Enclose a Bio-Data also. Write to the Managing Director.

<center>OR</center>

The Sahitya Academy of India is organizing an International Book fair at Pragati Maidan, New Delhi. Design a poster, inviting people to come and enjoy the world of books.   **6**

Q.5 Strikes and Bandhs put the general public to a great inconvenience. Write a letter to the editor of a newspaper regarding the nuisance caused by strikes and bandhs. You are Nirmal Kumar, 356 Lawyer's Colony, Kurkshetra.

Share your experiences about the increasing rate of crime in your city in last two years. Write a letter to one of your friends. You are Nirmal Kumar, 356 Lawyer's Colony, Kurkshetra. **10**

OR

Write a Factual Description in not more than 125 words about '**A visit to an International Trade Fair**.'

Q.6 Read the following passage and locate the incorrect word. Write the correct word and underline the same. Write the answersin your answer sheet against the correct blank number. **½ X8=4**

One winter morning Father left a	(a) _____
Riding club on horseback. Their horse	(b) _____
fell with him. Not only did a	(c) _____
stupid animal fall but that	(d) _____
landed on Father's foot. Father got a	(e) _____
horse up and went in a ride.	(f) _____
But he found later that a of his	(g) _____
toes had been and he can't straighten it out.	(h) _____

Q.7 Fill in the blanks with appropriate words:- **½ X8=4**

I cannot believe all the tall claims made _____ behalf of the computers. ____computer can never and will never replace a book. A computer _____not give the same joy, which reading ____book ourselves ____ give us. We ____form our own opinions about ____book and not ____influenced by computers.

Q.8 Rearrange the words to make a meaningful sentences:- **1X2=2**
(a) Scorpions/to/people/like/where/live/live.
(b) When/doctors/patients/as demigods/there/was/a time/considered.

SECTION –C (LITERATURE & LONG READING)

Q.9 Read the extract and answer the questions: **1 X 3 = 3**
Now she's been dead nearly as many years
As that girl lived. And of this circumstances
There is nothing to say at all.
Its silence silences.
(a) 'That girl' here stands for what?
(b) When she's been dead?
(c) "Its silence silences' means for what?

Q.10 Answer any three of the questions given below: **3 x 3 = 9**
(a) Explain:"Old , so terribly old that she could not have grown older…'
(b) Describe the boat and the plan of the journey.
(c) Who was king Tut?
(d) What type of a man was uncle Khosrove?

Q.11 Answer the following question in 120 – 150 words:- **1 X 6 = 6**
(a) The narrator made up his mind that he would get Ranga married to Ratna. How did he accomplish his mission?

OR

(b) Describe how Yuri helps Albert in his efforts to stay away from the school.

Q.12 How can you say that Canterville Chase was a haunted place? **1 X 6 =6**

OR

The ghost remembered his victims one by one. Describe them.

Q.13 How can you say that the ghost had some common human characteristics in his behavior?

OR

How did the twins make a fool of the ghost? **1 x 6 = 6**

SECTION –D (LISTENING SKILLS & SPEAKING SKILLS) **20**
** ALL THE BEST **

Quarterly Examination 2015 – 16

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

General Instruction :-
   This Question paper consists of 27 Questions.
- Question No. 1 to 8 carry **One Mark** each. Answer should be in One Word OR One Sentence.
- Question No. 9 to 14 carry **Three Marks** each. Answer should be in about 50-75 words.
- Question No. 15 to 19 carry **Four Marks** each. Answer should be in about 75-100 words.
- Question No. 20 to 23 carry **Five   Marks** each. Answer should be in about 75-100 words.
- Question No. 24 to 27 carry **Six Marks** each. Answer should be in about 200 words.

Q.1   What is the primary objective of business?   1

Q.2   Mention two Economic objectives of the business other than profit?   1

Q.3   State and explain the concept under which a trade agreement made by one partner is binding on

the others?   1

Q.4   In today's world the joint Hindu family business are on decline. Why?   1

Q.5   Who heads the departmental enterprise?   1

Q.6   Give full from of followings :-   1

(i) Mou   (ii) BIFR   (iii) PSU   (iv) PSE

Q.7   Rohan transferred his college fee at 11.30pm. from his laptop. How could he do so?   1

Q.8   Name two Risks involved in e-Commerce.   1

Q.9   Raman stays in a hostel in USA and his parents stay in New Delhi. Raman's birthday is in ten days and his

parents with to gift him a pair of branded shoes. How can they gift Raman sitting in New Delhi?   3

Q.10   Every year, lot of agricultural production is spoilt during rainy season due to lack of proper storage

facilities in villages. Govt. has decided to construct a warehouse in radius of every 100km. So that

necessary goods can be stored. This will reduce wastage and goods will be available even during bad

weather condition. What values is Government trying to achieve?   3

Q.11   What is the main functions of BIFR?   3

Q.12   List the areas where the state or central owner ship is a preferred from of business organization. Justify

your choice of areas.   3

Q.13   Cooperative societies exemplify democracy and secularism. Explain.   3

Q.14   Discuss the following objectives of business :   3

(i)   Market standing   (ii) social Responsibility   (iii) Productivity

Q.15   Which type of Risk means chance of loss without any possibility of gain? Give reason?   4

Q.16   A company is the form of organization suitable for business, which need huge investments. How does a

company raise large amounts of funds?   4

Q.17   States four reasons for dilution of Government share from 51% to 26%?   4

Q.18 Akhil insured his factory for Rs. 40 Lakh against fire. Due to fire, he suffered a loss of Rs. 28 Lakh. How much amount he can recover from the Insurance company? Justify your answer? 4

Q.19 What are the ethical concerns involved in outsourcing? 4

Q.20 Why are e-business and outsourcing referred to as the emerging modes of business? Discuss the factors responsible for the growing importance of these trends? 5

Q.21 Discuss any five types of Insurance polices? 5

Q.22 Government of India established public sector enterprises to meet the post. Independence challenges of poverty, employment, illiteracy and regional imbalance. However, with time, Government reduced the number of Industries reserved under public sector and promoted disinvestment. Why in your opinion Government promoted disinvestment? 5

Q.23 Discuss in detail the various factors which must be considered while selecting a form of organization before starting a business. 5

Q.24 Explain with examples various types of Industries? 6

OR

Describe the activities relating to commerce.

Q.25 In a partnership business, partners must have a written agreement. What are the values followed in this statement? Explain in detail. 6

OR

Rohit and Mohit are partners dealing in shares. Mohit uses firms money to buy shares on his name. He did not disclose this Information with Rohit.

(i) Does Rohit has any share in the profit earned from sale of these shares?

(ii) Which values did Mohit ignore by using fir's money and not disclosing to his partner? 6

Q.26 Recently central Government allowed foreign direct investment in the consumer products but political parties most and domestic manufacturers opposed it aggressively. What is your opinion on this issue? 6

OR

What are departmental undertakings? State and explain any four features of departmental undertaking, Which differentiate them from statutory undertakings? 6

Q.27 Describe various types of Insurance and examine the Nature of risks protected by each type of Insurance. 6

OR

Explain Briefly the principles of Insurance with suitable examples?

ORAL + PROJECT → **10**

**ALL THE BEST **

Quarterly Examination 2015 – 16

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

Part - A

Q.1	Define Physical Education.	**1**
Q.2	Enlist the career options in the field of Physical Education.	**1**
Q.3	Define Physical fitness.	**1**
Q.4	Explain the meaning of Health.	**1**
Q.5	Mention the start and end of Ancient Olympic games.	**1**
Q.6	Write about Olympic motto.	**1**
Q.7	Define Yoga in your words.	**1**
Q.8	What do you mean by WADA.	**1**
Q.9	Define Sports Environment.	**1**
Q.10	Name the activities for Infant stage.	**1**
Q.11	What activities should be performed by an adult.	**1**
Q.12	Highlight the aim and objectives of Physical Education.	**3**
Q.13	Explain the principles of the integrated Physical Education.	**3**
Q.14	Write about the development of Physical Education in India.	**3**
Q.15	Explain the side effects of prohibited substances.	**3**
Q.16	Discuss blood doping and its effects.	**3**
Q.17	Explain any six Asanas and its effects.	**3**
Q.18	Discuss any three pranayams. What are their therapeutic effects?	**3**
Q.19	What is the importance of expert staff for positive sports environment.	**3**
Q.20	Discuss the factors which effect Physical fitness and wellness.	**5**
Q.21	Explain the components of wellness.	**5**
Q.22	Describe the sports Awards India.	**5**
Q.23	Highlight the main features of Modern Olympic games.	**5**
Q.24	Explain he elements of Yoga in detail.	**5**
Q.25	Explain the prohibited substances and methods.	**5**
Q.26	What are the activities recommended for Adolescence state. Discuss.	**5**

**ALL THE BEST **

Roll. No.

Quarterly Examination 2015 – 16

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

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

(i) $(143)_{10} = (?)_2 = (?)_8 = (?)_{16}$

(ii) $(23.75)_{10} = (?)_2 = (?)_8 = (?)_{16}$

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

(iv) $(110010.10)_2 = (?)_{10} = (?)_8 = (?)_{16}$

(v) $(1F2)_{16} = (?)_2 = (?)_8 = (?)_{10}$

(vi) $(31A)_{16} = (?)_8 = (?)_2 = (?)_{10}$

Q.2   Explain :- $4 \times 2 = 8$

        (i) Time sharing OS   (ii) Multiprocessing OS

        (iii) Real time OS   (iv) Multiprogramming OS

Q.3   Draw the memory chart of computer and also define volatile and Non volatile memory.   4

Q.4   Give differences :- (i) I/P unit v/s O/P unit (ii)   Primary memory v/s Secondary memory

                       (iii) 1GL v/s 2GL   (Iv) 1st Generation computer v/s 4th generation computer 4

Q.5   Calculate :   5

$(23)_8 + (77)_8 = (?)_8$

$(FF)_{16} + (BC)_{16} = (?)_{16}$

$(F9)_{16} - (2A)_{16} = (?)_{16}$

$(110110)_2 - (111)_2 = (?)_2$ (with 1's & 2's Complement)

Q.6   Write full forms of the following :-   2

(i)   COMUTER   (ii)   OS   (iii)   ASCII   (iv)   CAD

Q.7   Find outputs of the followings C++ Code :-   1

(i)
```
int a = 1;
while (a)
{cont<< "computer science";}
```

(ii)   1
```
for ( ;  ; )
Cout<< "XI class";
```

(iii)   1
```
a=3; b=4; c=a+b;
If (c<a);
Cout<< "c is lower";
else
cout <<"c is higher";
```

(iv)   2
```
a=1; b=2;
cout<<a++;
cout<<++a;
cout<<b++ + ++b;
cout<< ++b;
```

Q.8   Find errors and rewrite the code after removing all error and also underline each corrections.

(i)   ? includes (iostream)   2

```
{        void Main { }
         ( cout >> "am I in NLCS";
         Cin >>a;
         Cout<< a is not zero"; };
```

(ii)   a=1   2

```
While( ; a ; )
a + + + + + a ;cout>>a>>b;
cout << value of a is = "<<a
```

(iii) # includes < eostream. h>   2

```
         VOID MAIN
{        int a
         switch (a)
         case ;a
                 cout <<a
         case: b
                 cout << a
         case:c
                 cout <<a
```

Q.9   Write programs for the following :-

(i)   WAP to calculate Addition, subtraction, multiplication & division of two nos as per user's instructions (use switch).   3

(ii)   WAP to calculate payable amount for an electricity bill as per following :-   3

        Units   Rs. Per unit
        < 100   1 Re.
        =>100 and < = 300   2 Rs.
        > 300   3 Rs.

If the total amt. is more then 1000 then 10% extra tax is also included to the amt.

Eg. If unit $\rightarrow$ 350 then

$100\times1+20\times2+50\times3=$

$100+400+150= 650$ Rs.

(iii) WAP to Print the following pattern :   3

```
*
*       *
*       *       *
*       *       *       *
*       *       *       *       *
```

(iv)   WAP to Print the following pattern :   3

```
                1
        1       2
    1   2       3
1   2   3       4
```

(v)   WAP to print these series :

(a) 1   4   9   16   25   ------------n   2

(b) 0   1   1   2   3   5   8   ----------   3

(c) 1   3   5   7   9   11   ---------   2

(vi)   WAP to check whether a given no is palindrome or not.   2

(vii) WAP to find minimum number from 3 number.   2

(viii) WAP to calculate average of three number   2

Q.10 What is the advantage of machine language over high level language?   2

Q.11 Explain :- (i)   Relation operators.   (ii) Logical operators (iii) Shift operators   3

*** ALL THE BEST **

Quarterly Examination 2015 – 16

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 DEVELOPMENT)

Q.1   Which of the following is not a goal of five year plan?   1

(a) Equity   (b) Modernization   (c) Self reliance   (d) marketing

Q.2   Most considered estimation of NI is given by –   1

(a) Findlay Shirsas   (b) R C Desai   (c) Dadabhai Naoroji   (d) None of these

Q.3   Which five year plan is going on ---   1

(a)11th five year plan (b) 7th TYP   (c) 12th TYP   (d) None of these

Q.4   Tata Iron and steel company was in corporate in –   1

(a) 2001   (b) 1886   (c) 1907   (d) 1901

Q.5   Among the following which not a poverty alleviation pry –   1

(a) PGY   (b) SJSRY   (c) 20 point programme   (d) JPRRGY

Q.6   The minimum calorie intake by rural person –   1

(a) 2000   (b) 2400   (c) 2100   (d) 2300

Q.7   What were the main causes of India's agricultural stagnation during the colonial period?   3

Q.8   What do you understand by devaluation of rupees?   3

Q.9   Mention any two features of "**Green Revaluation**".   3

Q.10 Distinguish between the following [**Any One**] –   3

(i) Tariff and Non tariff barriers   (ii) Biateral and Multi-Lateral trade

Q.11 What is meant by "Food for work" programme?   3

Q.12 Explain "**modernization**" as a planning objective.   4

Q.13 How navaratna policy of the Government helps in improving PSUs in India?   4

Q.14 "**Subsidies are benefiting the fertilizer industry more than farmer**". Justify the statement.   4

Q.15 Discuss the economic policies pursued by the colonial Government and their impact on Indian economy. 6

Q.16 Discuss the impact of de industrialization and commercialization of agriculture on Indian economy. 6

OR

What do you mean by Liberlisation? Mention any four change made by it in Indian economy?

SECTION – B (STATISTICS)

Q.17 Ogives can be helpful in locating graphically the – 1
(a) Mode   (b) mean   (c) median   (d) None of these
Q.18 Which of the following is an example of sample method – 1
(a) Stratified sampling(b) opened sampling (c) Easy sampling   (d) Required sampling
Q.19 Among the following is not an important agency which collect data at National level – 1
(a) NSSO   (b) DGCIS   (c) RGI   (d) CSOS
Q.20 Which of the following is not a sector of economy – 1
(a) Primary   (b) Producing   (c) services   (d) management
Q.21 "Non sampling errors are more serious than sampling errors" – 1
(a) True   (b) False
Q.22 The lottery method always give a random sample – 1
(a) True   (b) False
Q.23 Define the terms (**Any Two**) – 3
(i) Random   (ii) Statistics   (iii) Census
Q.24 What are the merits of tabular presentation? 3
Q.25 What is "Loss of information" in classified data? 3
Q.26 What are different methods of Data collection? Name them. 3
Q.27 What do you mean by Economic. Why it is capital science? 3
Q.28 Present the following data into circular diagram. 4

Counties	Brazil	India	Ceylon	Thailand	China
Output (Tones)	60	100	120	250	1000

Q.29 Represent the following in suitable diagram showing the difference between S.P. and C.P. 4

Year	2001	2002	2003	2004	2005
Sale Price	22.0	27.3	30.3	32.7	28.2
Cost Price	19.5	21.7	25.6	33.5	30.0

Q.30 Write a brief note on "Census 2011". 4
Q.31 Do samples provide better result than surveys? Give reasons for your answer. 6
Q.32 Draw percentage sub divided bar diagram form following Data and compare : 6

Items of Expenditure	Family A	Family B
Food	220	300
Clothing	100	250
House Rent	80	125
Fuel and light	40	100
Education	50	125
Others	110	200

ORAL & Project   →   **10**

**ALL THE BEST **

Quarterly Examination 2015 – 16

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 $A = \{1,3,5,7,9,11,13,15,17\}, B = \{2,4,6,........\}$ and N is the universal set. Then find $A' \cup \big((A \cup B) \cap B'\big)$.

Q.2 Find $a \& b$, when $(2a+b, 11) = (1, a-3b)$.

Q.3 Find in degrees the angles subtended at the centre of a circle of diameter 50 cm. by an arc of length 11cm.

Q.4 Evaluate $\tan \dfrac{13\pi}{12}$.

Q.5 Evaluate $(1+i)^4 \times \left(1+\dfrac{1}{i}\right)^4$.

Q.6 How many terms are there in the A.P. 7,13,19,…….,205?

Section – B

Q.7 Let $T = \left\{ x : \dfrac{x+5}{x-7} - 5 = \dfrac{4x-40}{13-x} \right\}$ is T an empty set? Justify your answer.

Q.8 If $\bigcup = \{2,3,4,5,6,7,8,9,10,11\}, A = \{2,4,7\}, B = \{3,5,7,9,11\}$ and $C = \{7,8,9,10,11\}$ then compute :

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

Q.9 If $\tan(\alpha + \theta) = \eta \tan(\alpha - \theta)$, then show that $(\eta + 1)\sin 2\theta = (x-1)\sin 2\alpha$.

OR

Prove that : $\sqrt{2 + \sqrt{2 + \sqrt{2 + 2\cos 8\theta}}} = 2\cos\theta$.

Q.10 If $\cos\alpha + \cos\beta = 0 = \sin\alpha + \sin\beta$, then prove that $\cos 2\alpha + \cos 2\beta = -2\cos(\alpha + \beta)$.

Q.11 Prove that : $(\cos x - \cos y)^2 + (\sin x - \sin y)^2 = 4\sin^2\left(\dfrac{x-y}{2}\right)$.

OR

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

Q.12 Prove by the PMI that $10^{2n-1} + 1$ is divisible by 11

Q.13 Prove by the PMI that $\log x^\eta = \eta \log x$.

Q.14 Reduce $\left(\dfrac{1}{1-4i} - \dfrac{2}{1+i}\right)\left(\dfrac{3-4i}{5+i}\right)$ to the standard form.

OR

Find the modulus and argument of $z = \dfrac{(1+i)^{13}}{(1-i)^7}$.

Q.15 If honesty is represented by complex no. α and punctuality by complex number β such that $|\beta| = 1$ then show that $\left| \dfrac{\beta - \alpha}{1 - \bar{\alpha}\beta} \right|$ is prefect one.

Q.16 Let S be the sum P be the product and R be the sum of reciprocals of η terms in a G.P. Prove that $P^2 R^\eta = S^\eta$.

Q.17 Find the sum of series $5 + 55 + 555 + \ldots\ldots$ upto η terms.

Q.18 Prove that $(\cos x + \cos y)^2 + (\sin x - \sin y)^2 = 4\cos^2 \dfrac{x + y}{2}$

Q.19 Prove that $z_1 = 2 - i,\ z_2 = 1 + i$, find $\left| \dfrac{z_1 + z_2 + 1}{z_1 - z_2 + 1} \right|$

Section – C

Q.20 Find the domain and range of the followings relations :

(i) $R = \{(x, y) : x, y \in N, y = x^2 + 3 \text{ and } 0 < x < 5\}$

(ii) $R = \left\{ (x, y) : x, y \in N, y = \dfrac{1}{1 + x} \right\}$ and x is odd natural numbers.

Q.21 Prove that $4\sin A . \sin(60° - A)\sin(60° + A) = \sin 3A$ hence deduce that $\sin 20° \sin 40° \sin 60° \sin 80° = \dfrac{3}{16}$.

Q.22 Using PMI. Prove that $1.2 + 2.2^2 + 3.2^3 + \ldots + \eta.2^\eta = (\eta - 1)2^{\eta+1} + 2$.

OR

Using PMI. Prove that $\dfrac{1}{2} + \dfrac{1}{4} + \dfrac{1}{8+}\ldots\ldots\ldots\dfrac{1}{2^n} = 1 - \dfrac{1}{2^n}$

Q.23 The sum of two numbers is 6 times their geometric mean. Show that the numbers are in the ratio $(3 + 2\sqrt{2}) : (3 - 2\sqrt{2})$.

Q.24 Find the sum of η terms of the series $5 + 11 + 19 + 29 + 41\ldots\ldots$

OR

If f is a function satisfying $f(x + y) = f(x).f(y)$ for all $x, y \in N$ such that $f(1) = 3$ and $\sum\limits_{x=1}^{\eta} f(x) = 120$ find the value of η.

Q.25 Solve the following inequalities $3x + 2y \leq 150, x + 4y \leq 80, x \leq 15, y \geq 0, x \geq 0$ graphically.

Q.26 There are 200 individuals with a skin disorder, 120 had been exposed to the chemical C_1, 50 to chemical C_2 and 30 to both the chemicals C_1 and C_2 find the number of individuals exposed to

(i) Chemical C_1 but not chemical C_2.

(ii) Chemical C_2 but not chemical C_1 .

(iv) Chemical C_1 or chemical C_2.

**ALL THE BEST **

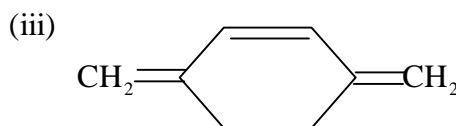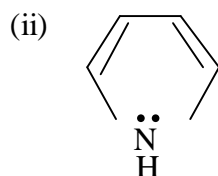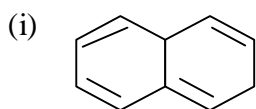# Quarterly Examination 2015 – 16

Time: 3:00 Hrs.   **M. M. 70**
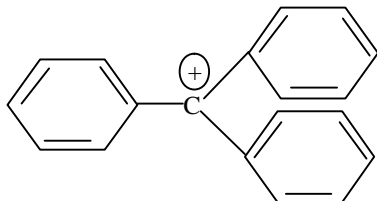
General Instruction :-

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 Mark.**

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

Q.1   Calculate the No. of atoms in – 52 moles of He?   1

Q.2   State de-Broglie principle.   1

Q.3   Would you expect the 1st I.P. of two isotopes of the same element to be same or different?   1

Q.4   Define co-ordinate bond or dative bond.   1

Q.5   Why is potassium and caesium, rater them lithium used in photoelectric cells?   1

Q.6   Will CCl_4 give white ppt. with AgCl on heating. Give reason?   2

Q.7   Trans pent 2ene is polar while Trans but 2ene is non-polar why?   2

Q.8   A solution is prepared by adding 2gm of a substance A to 18 gm of water. Calculate the mass percent of the solute?   2

Q.9   Write a note on photoelectric effect?   2

Q.10   What would be the IUPAC name and symbol for the element with atomic no. 120?   2

Q.11 CO_2 is gas while SiO_2 is solid. Explain?   3

Q.12   Draw the Lewis structure of (i) CO_2 (ii) $BeCl_2$ (iii) NH_3.   3

Q.13   Which of the two $\rightarrow$ $O_2N–CH_2–CH_2O^-$ OR $CH_3–CH_2–O^-$ is expected to be more stable and why?   3

Q.14   Which of the following compound are aromatic according to Huckel's rule?   3

(i)   (ii)   (iii)

$CH_2=$ $=CH_2$

N
H

Q.15   A compound contains 4.07% hydrogen, 24.27% carbon and 71.65% chlorine. It's molar mass is 98.96gm.

What are its empirical formula and molecular formulae?   3

Q.16   Write a short note on quantum no..

Q.17   Define followings :-   (i) Shielding effect   (ii) Electornegalivity (iii) ionization enthalpy   3

Q.18   Draw the MOT for He_2 and proves that it does not exist.   3

Q.19   Write a note on – Diborone its   (i) structure   (ii) Bonding   3

Q.20   Why the solution of Na_2CO_3 is alkaline?   3

Q.21   What is lowest set of Locants rule or first point of difference rule?   3

Q.22   Give Markovnikou's rule. And Anti Markovnikou's rule?   3

Q.23   The structure of triphenyl cation is given below. This is very stuble and some of its salts can be stored for month explain the cause of high stability of this cation.   4

Q.24   Define followings :-   5

    (i)   Isotops   (ii)   Isobars   (iii) Isotones   (iv) Isoelectronics   (v) Isomers

OR

The nucleus radios is of the order of 10^{-13} cm while atomic radius is of the order of 10^{-8}. Assuming the nucleus and the atom to be spherical, What fraction of the atomic volume is occupied by the nucleus?

Q.25 Write Octate rule? Write its limitations.   5

OR

Write the postulates of VSEPR theory?

Q.26   Write – (i) Friedel craft reaction (ii) Wurtz reaction.   5

OR

Short note on O, M, p directing group.

**ALL THE BEST **

Roll. No.

Quarterly Examination 2015 – 16

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   Is a large break on a bicycle wheel more effective than a small one? Explain.

Q.2   How many directions of projection are possible for the same horizontal range? Why?

Q.3   Is the measure of an angle dependent upon the unit of length? Explain.

Q.4   Can an object have uniform speed but still have acceleration? Give example.

Q.5   Why does handle are provided on the door at maximum distance from the hinges?

Q.6   Two sphere of the same mass and same external radius are exactly similar, one of them is solid while the
      other is hollow. Example how can you identify them?

Q.7   Find the dimensional formula of W and K from the equation $Y = A\cos$ (wt+kn). Where x is distance and
      t is time?

Q.8   One of the rectangular component of a force 30N is 20N. Find the other component?

Q.9   There is a limit beyond which the polishing of a surface increase friction resistance rather than decreasing
      it? Explain.

Q.10 Is the radius of gyration of a body a constant quantity? Explain.

Q.11 Two towns A and B are connected by a regular bus service with a bus leaving in either direction every T
      minutes. A man cycling with a speed of 20km/hr in the direction A to B notice that a bus goes past him
      every 18 min. in the direction of his motion, and every 6 min. in the opposite direction. What is the period
      T of the bus service and with what speed do the buses ply on the road?

Q.12 Find the magnitude and direction of the resultant of two vectors A and B in terms of their magnitudes and
      angle θ between than?

Q.13 Why Newton 2nd law of motion called peal laws of motion? Explain.

Q.14 Assuming that the mass m of the largest stone that can be moved by a flowing river depends upon velocity
      "v" density "d" of water and acceleration due to gravity g. Show that m varies with sixth power of the
      velocity flow?

Q.15 Three identical sphere each of radius R, placed in such a way, they touching with each other on a horizontal
      table. Where is the centre of mass of the system located.

Q.16 Obtain all three equations of motion for constant accelerating motion using method of calculus.

Q.17 Show that vectors $\vec{A} = (2\hat{i} + 4\hat{j} - 5\hat{k})$ and $(\hat{i} + 2\hat{j} + 2\hat{k})$ are perpendicular to each other.

Q.18 For three moving objects the distance are found to be directly proportional to the time t, t^2 and t^3. What is
      the nature of the net force on each other?

Q.19 The radius of curvature of a concave mirror measured by a spherometer, is given by $R = \dfrac{\lambda^2}{6h} + \dfrac{h}{2}$. The value of ℓ and h are 4.0cm and 0.065 cm respectively, where ℓ is measured by a meter scale and h by a spherometer. Find the relative error in the measurement of R.

Q.20 If force F, velocity v and time t are taken as fundamental quantities what would be the dimensions of work (w) in terms of F, v and t ?

Q.21 "Friction is an necessary evil" connect on this statement.

Q.22 The cap of a pen can be easily opened with the help of two fingers then with one figure. Why?

Q.23 You may have seen in a circus a motorcyclist driving in vertical loops inside a "death well" [A hollow spherical chamber with holes, so the spectators can watch from outside] When he is at the uppermost point with no support from below does not drop and perform his act.

    (i)   Why the motorcyclist does not droop down at the upper most point? Explain.

    (ii)   Give mathematical explanation?

    (iii)   What is the minimum speed required at the uppermost position to perform a vertical loop if the radius of the chamber is 25m.

Q.24 To find out the centre mass of a cone of radious r and height h.
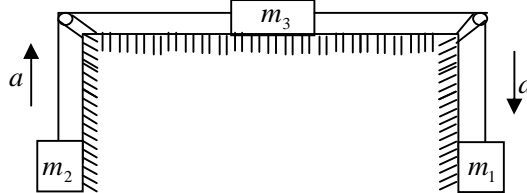
<p align="center">**OR**</p>

To find out the moment of Inertia of a solid sphere about the diameter of the sphere.

Q.25 To find out kinematic equations for rotational motion with uniform angular acceleration?

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

Find out the tension between mass m_1, m_2 and m_3 as shown in figure.

Q.26 (i) State projectile motion. Find (ii) path of projectile (iii) Time of flight (iv) maximum height of projectile (v) maximum horizontal range , incase of angular projectile?

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

    (i)   Define uniform circular motion. Find expression for centripetal acceleration.

(ii)   The position of particle is given by $\vec{r} = 3.0t\hat{i} + 2.0t^2\hat{j} + 5.0\hat{k}$ where t is in seconds and the coefficients have proper units for r to be in meters. Find velocity "v" and acceleration "a" of particle at any instant time t .

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

Quarterly Examination 2015 – 16

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

General Instruction :-

    Section A carries five questions of **One Mark** each.

    Section B carries five questions of **Two Marks** each.

    Section C carries twelve questions of **Three Marks** each.

    Section D carries a value based question of **Four Marks**.

    Section E consists of three questions of **Five Marks** each where in an internal choice has been provided.

Section A

Q.1   Name the plant that shows the feature of corolloid roots.   1

Q.2   Give reason why Selaginella bears two types of spores and Dryopteris bears only one type of spores?   1

Q.3   What type of root modifications are found in Mangroves?   1

Q.4   Write the floral formula of an actinomorphic, bisexual, hypogynous flower with five united sepals, five free petals, five free stamens and two united carpels, with superior ovary and axile placentation.   1

Q.5   Write the major differences between Pinocytosis and phagocytosis.   1

Section B

Q.6   Differentiate between Euchromatin and Heterochromatin.   2

Q.7   What are thylakoids and why are they called the structural and functional units of chloroplasts?   2

Q.8   Write any four points elaborating sexual dimorphism in frogs.   2

Q.9   Based on position classify different types of meristems.   2

Q.10   Write the distinguishing features of pteridophytes.   2

Section C

Q.11   Give the diagrammatic sectional view of (a) coelomate (b) pseudocoelomate (c) Acoelomate condition.   3

Q.12   Describe Ascomycetes in detail. Also diagrammatically show its life cycle.   3

Q.13   Differentiate between Oviparity, Viviparity and Ovo-viviparity.   3

Q.14   Write the distinguishing features of phylum Annelida.   3

Q.15   How can you say that family Liliaceae is economically important? Write a note. Also draw the floral diagram.   3

Q.16   Distinguish between dicot and monocot stem. (Write all the points).   3

Q.17   Draw the well labelled diagram of the mouth parts of a cockroach.   3

Q.18   Draw a well labelled diagram of different stages of secondary growth in a typical dicot stem.   3

Q.19   What do you understand by the following terms. (a) Capsule   (b) PPLO   (c) inclusion bodies.   3

Q.20   Diagrammatically show the various types of chromosomes on the basis of position of centromere.   3

Q.21   What do mean by Ribosome? Explain their structure & function.   3

Q.22   What are Dinoflagellates and what are their distinguishing features?   3

Section D

Q.23   After a field trip Seema was quietly thinking when Rashmi asked her what the matter was, she told that some plants are green and others colorful and some stems also appear green.   4

(a)   Why they appear different?

(b)   Whether green stem and leaf perform the same function. If Yes / No, Why?

(c)   What are the values shown by Seema?

Section E

Q.24   (a)   Give a detailed comparative account of the classes of Pisces.   3

         (b)   What is a Herbarium. Write its functions.   2

OR

Write all details of phylum Chordata. Also give a comparative account of Amphibia and Reptilia.   3+2

Q.25   Explain the secondary growth process in dicot stem (diagram not required). Diagrammatically show T.S. of a dorsiventral leaf.   2½+2½

OR

Describe the reproductive system of Frog. Also give the details of how digestion takes place in a cockroach.

Q.26   Explain all major differences between a Prokaryotic and Eukaryotic cells with diagram.   2+3

OR

Discuss in detail the structure and function of a Mitochondrion.Why is it called a semiautonomous organelle?

**ALL THE BEST **

Quarterly Examination 2015 – 16
Time: 3:00 Hrs   **M.M. 90**

Q.1   What do you mean by Intangible Assets ? Give any two example.   2

Q.2   What do you mean by Casting ?   2

Q.3   Explain any two importance of Bank Reconciliation Statement.   2

Q.4   Define Following words—   2
  (i) Revenue   (ii) Voucher

Q.5   Explain any two characteristics of Journal.   2

Q.6   Write nature of the following accounts   3
  (i) Commission A/c   (ii) Computer A/c   (iii) Reliance company A/c

Q.7   Write any three difference between Purchase book & Purchase account ?   3

Q.8   Write the correct answer:-   3
  (i) Which of the following equation is correct?
       (a) Assets + Capital = Liabilities   (b) Assets – Capital = Liabilities
       (c) Assets +Liabilities = Capital   (d) None of the above
  (ii) X commenced business on 1st April 2013 with a capital of rs. 600000. On 31st march 2014 his assets were worth Rs. 800000 and Liabilities Rs. 50000. His closing capital is Rs.
       (a) 200000   (b) 550000   (c) 750000   (d) None of the above
  (iii) A compound Journal entry ---
       (a) Generally extend to several pages   (b) Involves more than two transactions
       (c)Does not required narration   (d) None of the above

Q.9   Write the correct answer:-   3

  (i) Bank Reconciliation Statement is prepared by ---
       (a) Account holder   (b) Debtors   (c) Bank   (d) Creditors
  (ii) Which balance shows Bank overdraft from following

       (a) Debit balance of cash book   (b) Credit balance of Pass book

       (c)Credit balance of cash book   (d) None of the above

  (iii) An Assets account show a _____ Balance.

       (a) Credit   (b) Debit   (c) Debit or credit   (d) none of the above

Q.10   Goods purchased of Rs.5890 from Ganshyam. Pass rectify entries in following cases—   4

  (a) Not recorded in purchase account

  (b) Not recorded in Ganshyam account

  (c) Recorded in purchase account credit side

  (d) Recorded in Ganshyam account debit side Rs.5800

Q.11   Explain any two advantage and any two limitation of Accounting.   4

Q.12   Explain any two accounting concepts.   4

Q.13   From the following information prepare a Bank Reconcilation statement on 31st March,2008   6

  (i) Cash book showed debit balance ` 18000

  (ii) Bank has given debit ` 1400 for bank charges.

  (iii) Bank collected interest `1250

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

  (v) A cheque of ` 8500 paid in to bank but not credited by bank.

Q.14 From the following information prepare Cash Book with Bank column— 6

Feb. 2010   Rs.

1.	Started Business with cash	250000
3.	Opened a bank current account in PNB.	160000
6.	Bought goods by cheque	35000
9.	Sold goods to Ram	48000
10.	Received a cheque from Ram	30000
13.	Withdrew cash from Bank for personal use	12000
15.	Cheque of Ram deposited in to Bank	-------
19.	Paid salary ` 12000 in cash & Rent ` 8000 by cheque	-------
21.	Bank informed the cheque of Ram was dishonoured	-------
28.	Withdrew cash form Bank for office use	2000

Q.15 Set up accounting equation from following transaction : 6

a. Business started with cash Rs. 80000

b. Furniture purchased for cash   Rs.20000

c. Purchased goods from Mahesh on credit Rs.25000

d. Sold goods (costing Rs. 10000) to Mohan with cash Rs.14000

e. Telephone expenses paid Rs.12000

f. Depreciation charged on furniture Rs.1500

Q.16 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.17 Give rectify entries for following errors 8

(i) Furniture purchased from Gopi Rs. 21500 but entered in purchase book rs.12500.

(ii) Goods returned by Kailash Rs. 7800 but recorded in Purchase book but Kailash account correctly

posted.

(iii) Personal computer costing rs.50000 (market value rs.35000) introduced in business but omitted to

recorded in books.

(iv) Goods sold to Amar rs.4700 but recorded in purchase book rs.700

Q.18 Journalize the following transactions for the month of January,2015   10

1. Business started with cash , stock and furniture Rs.220000,Rs.60000,Rs.20000 respectively.

3.Goods purchased Rs.40000 (Trade Dis.10%, Cash Dis.5%)

5. Goods sold to Somnath Rs.60000. (Trade Dis. 10%)

8. Opened a Bank account rs.150000

10. Cash received from Somnath Rs.24000

15 Telephone expenses paid by cheque Rs.1200

20 Somnath become insolvent only 40% amount received from him.

23 Charity given goods rs.2500 & Cash Rs.1500

28 Cash received from Somnath Rs.10000

30 Interest on capital charged on capital Rs.4500

Q.19 Prepare following ledger account from Q.no.18—   2
(i) Capital A/c   (ii) Somnath A/c

Q.20 From the following information prepare Purchase Book & Sales Book of Indian furniture Mart ,Delhi   10

May1st,2008   Bought from Welcome Furniture
           2 Dining Table @ `1500 each
           20 Chairs @ ` 300 each
           Trade Discount 10%

May 15,2008   Sold to Laxmi Furniture
           3 4 Tables @ `1000 each
           20 Chairs @ `250 each
           10 Centre tables @ `400 each
           Trade Discount 15%

May19,2008   Rama Furniture Delhi sold to Indian Furniture Mart
           20 Chairs @ `300 each
           3 Sofa set @ `2000 each
           Trade discount 15%

May21,2008   Bhagwati furniture bought from Indian Furniture Mart
           3 Dining Table @ `2000 each
           4 Tables @ `1000 each
           20 Chairs @ `250 each

May22,2008   Sold to Daisy Furniture
           2 Centre Tables @ `1000 each
           30 Chairs @ `250 each
           1 Almirah @ 2500 each
           Trade Discount 10%

ORAL   →   **10**

** ALL THE BEST **