

**Annual Examination 2015 – 16****Time: 3:00 Hrs.****M. M. 100**

- Q.1 Write any two difference between Noncurrent assets and Current assets. 2
- Q.2 What do you mean by contra entry? Explain by example. 2
- Q.3 Explain Money Measurement Concept. 2
- Q.4 Write any three difference between Trial balance and Balance sheet 3
- Q.5 Define following terms of bills of Exchange- 3
- (a) Noting charges (b) Bill discounted (c) Bill Renewal
- Q.6 Calculate expenses related to stationery from following information 3

Particulars	amount
Stationery purchased during the year	6490
Opening stock of stationery	1215
Creditors for stationery beginning of the year the year	1690
Creditors for stationery end of the year the year	1480
Closing stock of stationery	545

- Q.7 From the following information calculate value of closing stock 3

Particulars	amount	Particulars	amount
Opening Stock	7800	Cash sales	85000
Cash Purchase	15000	Purchase return	8400
Total purchase	180000	Sales return	5000
Credit sales	120000	salary	6300
Advertisement	2500	wages	6100
Freight	1500	Gross profit on sales	20%

- Q.8 Prepare Debtors account and Bills receivable account and calculate missing amount from following information 4

Particulars	amount	Particulars	Amount
Opening balance of bills receivable	15200	Bills receivable endorsed	12000
Opening balance of debtors	48400	Bad debts during the year	6200
Cash sales	84000	Bad debts recovered	1500
Credit sales	356000	Discount allowed to debtors	1800
Sales return (20% from cash sales)	50000	Closing balance of bills receivable	8700
Cash received from bills receivable	42000	Closing balance of debtors	21500

- Q.9 Prepare receipts and payments account: 4

Particulars	amount	Particulars	Amount
Opening balance	12500	Furniture purchased	15000
Total subscription received during the year	30500	Creditors for furniture	5000
Outstanding subscription of current year	1700	Sports material sold (Book value)	8100
Salary paid of current year	6500	Profit on sale of sports material	2400
Salary paid for last year	1200	Total expenses of rent	3000
Donation received (capitalised)	4000	Out standing rent for current year	500

- Q.10 A company purchased a machine on 1<sup>st</sup> July,2010. On 31<sup>st</sup> December 2011 book value of the machine ` 25650. Depreciation provided on the machine 10% per annum on 31<sup>st</sup> December of each year on W.D.V. Calculate purchase price of machine. 4

- Q.11 Pass rectify entries for following errors 4  
 (a) Goods sold to Ravish ₹ 5200 but recorded in purchase return book ₹ 2500  
 (b) Furniture purchased ₹ 1500 but recorded in purchase account ₹ 500
- Q.12 Prepare bank reconciliation statement: 4  
 (a) Credit balance as per pass book ₹ 1680  
 (b) A customer directly deposited in to the bank ₹ 540  
 (c) bank collected interest on investment ₹ 210  
 (d) Cheque deposited in to the bank but not collected by bank ₹ 250  
 (e) Pass book deposited column overcast by ₹ 120
- Q.13 Pass closing entries for following account 4  
 (a) Interest on investment account (b) Bad debts recovered account  
 (c) Profit and loss account (net loss) (d) life insurance premium account
- Q.14 Prepare provision for bad debts account from following information 4  
**Trial balance information**  
 (i) Debtors- ₹ 155000 (ii) Bad debts ₹ 3600 (iii) Provision for bad debts ₹ 4800  
**Adjustments**  
 (i) Further bad debts ₹ 5000 (ii) Provision for bad debts maintain at 6% on debtors.
- Q.15 A small traders keep incomplete records of his business . calculate profit or loss from following information 6
- | Particulars    | 1-1-2014 (i) | 31-12-2014 (i) |
|----------------|--------------|----------------|
| Creditors      | 5200         | 4700           |
| Debtors        | 9700         | 11500          |
| Cash           | 4200         | 6400           |
| Furniture      | 2500         | 3000           |
| Stock          | 1800         | 2500           |
| Loan from bank | 2000         | 1500           |
- Additional information  
 (a) Depreciation to be charged on furniture 10%  
 (b) Drawings of ₹ 1000 per quarter  
 (c) Additional capital introduced during the year ₹ 3000
- Q.16 Prepare Cash book with bank column from following transactions of march 2015 6
- | Date | Particulars  | Amount |
|------|--|--------|
| 1    | Opening balances Cash in hand  | 1800   |
|      | Bank overdraft   | 4200   |
| 8    | Goods sold to Raghav with cash ₹ 20000 (T.D.10%) . 50% amount deposited into the bank. |        |
| 15   | Telephone expenses paid  | 800    |
| 18   | Goods purchased and cheque issued  | 3500   |
| 20   | Cheque received from Gaurav and endorsed to Akhil same day                             | 2800   |
| 25   | Cash withdrew for personal use from bank   | 1500   |
| 30   | Interest charged by bank on overdraft  | 500    |
| 31   | Cash deposited in to the bank from excess balance of cash ₹ 1000                       | ---    |
- Q.17 Pass journal entries of following transactions of august 2015 6  
 Aug. 1 Goods sold to Kamlesh, list price ₹ 100000 ( Trade discount 20%, cash discount 5%, 50% cash received)  
 Aug.7 Goods returned by Kamlesh list price rs.10000, and cheque received of ₹ 12000 deposited into the bank.  
 Aug.20 Kamlesh become in solve only 75% amount received from him.

Q.18 Prepare a Machine account for four years from following transactions:

8

Date	Particulars	Amount
Feb.1 ,2010	Purchase machine I	250000
April 30, 2011	Purchase machine II	100000
Dec.1, 2011	Sale half part of machine I	105000
Jan.1, 2012	Purchase machine III	200000
Aug.31, 2012	Sold second machine	25000

Rate of depreciation 12% P.A. as per straight line method.

Closing date of each accounting year is 31<sup>st</sup> December.

Q.19 On 1.1.10 X sold Goods to Y of ₹ 20000. Y accepted a bill for this amount & returned to X & duration of bill is 3 months. X discounted the bill from bank @ 12% P.A. same day. On maturity date the bill was dishonored. Bank paid ₹ 500 as noting charges. Y paid ₹ 5000 & Noting charges in cash to X & accepted a new bill for remain amt. for two months with Interest. Interest charged @ 12% P.A. on maturity date of new bill Y become in solve & paid only 40% amount. Record the above transactions in the books of X. 8

Q.20 Prepare Financial Statement from following Trial Balance and adjustments

10

Debit Balances		Credit Balances	
Furniture and Fittings	640	Capital	12890
Motor Vehicle	6250	Bills Payable	200
Building	7590	Sundry Creditors	2500
Bad Debts	125	Sales	15450
Sundry Debtors	3800	Bank Overdraft	2850
Opening Stock	3460	Purchase Return	125
Purchases	5575	Commission	175
Sales Return	200		
Advertising	450		
Interest	118		
Cash in Hand	650		
Taxes and Insurances	1250		
General Charges	782		
Salaries (11 Months)	3300		
<b>Total</b>	<b>34190</b>	<b>Total</b>	<b>34190</b>

Adjustments

1. Closing stock ₹ 2280
2. Furniture purchased during the year and amount paid by cheque ₹ 1360 but not recorded in books.
3. Goods used for personal use of ₹ 275
4. 1/3 of advertisement expenses related to next year
5. Depreciation to be charged on furniture 10%

**ORAL**



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**Annual Examination 2015 – 16****Time: 3:00 Hrs.****M. M. 100**

General Instructions:-

SECTION –A READING	20
SECTION –B WRITING & GRAMMAR	30
SECTION –C LITERATURE & LONG READING	30
SECTION –D LISTENING SKILLS & SPEAKING SKILLS	20

**SECTION –A (READING)****Q1. Read the passage given below and answer the following questions:**

Many of those who wish to succeed reaches stunning heights, but much more cannot come to their dreams any closer. The difference is that some people follow the laws of **success**, while the others do not. They just let down and do not believe in their own capabilities. While anybody knows that luck only smiles to the people who are expanding their boundaries, act with intention to achieve their goals. Everyone has all the capabilities to move forward, just not everyone sees it. And your task is to find your own path that will lead you to the life that you want.

To succeed, the first thing you need is to be in good health and a full capacity to work. If your body and spirit is in harmony and perfect condition, you will be able to go to your dreams of having fun; you will have enough stamina for action in this world. After all, you cannot reach success doing nothing. You need to do step by step to what is necessary to achieve the objectives.

And so that this way was easier, you need to combine physical and mental work. You should get rid of the internal limitations and negative thought, manage the power of thought and use a visualization technique to create the model of your success, beginning in the higher plane, and then in physical reality. Many successful people say that a visualization board helped them to succeed in life. They looked at the scheme of their daily goals in the form of images and sensations caused a feeling of having the desired.

Naturally, they believe in themselves and in the possibility getting what they wanted. Faith, knowing that you will succeed is one of the most important factors in the science of success. Success is achieved when a person expands the comfort zone, doing what he or she previously did, overcomes its fears and wins. When a person uses its strengths, really doing its job, it helps to develop the person's creativity and other remarkable abilities.

Such a person celebrates its victories and uses its failure as opportunities and lessons to be learnt in order to become stronger.

The main thing is to find your calling.

To reach success you need to find your calling. Something you'd really like to do. When work is a pleasure, your soul is rejoiced, so your ability is manifested in all its glory. This is very important if you are targeting not only money, but also a positive, happy life. Especially because to succeed in something that is not yours is possible, but is usually achieved with difficulty, overcoming many obstacles, and even there is succeeds, it will not make you truly happy. True dreams are realized easily as if the Universe itself helps a person to achieve amazing results.

A.1.1 A Choose the correct options:

1×6=6

(a) What is one of the most important factors in the science of success :

- (i) Faith                      (ii) Abilities                      (iii) glory                      (iv) strength

(b) What you have to do to reach success:

- (i) to be creative                      (ii) need to find your calling  
(iii) looking at daily goals                      (iv) to seek harmony

- (c) What will lead you to the life that you want ;
- |                             |                              |
|-----------------------------|------------------------------|
| (i) to believe in yourself  | (ii) to enhance your ability |
| (iii) to find your own path | (iv) to be more energetic    |
- (d) Everyone has all the capabilities to:
- |                                |                          |
|--------------------------------|--------------------------|
| (i) move forward               | (ii) be kind             |
| (iii) be separated from others | (iv) look for betterment |
- (e) To succeed, the first thing you need is to be.:
- |                                |   |
|--------------------------------|---|
| (i) well educated by parents   | (ii) in good health and a full capacity to work |
| (iii) curious about everything | (iv) none of these                              |
- (f) In para 5, a word that means the same as hindrance:
- |              |               |                       |               |
|--------------|---------------|-----------------------|---------------|
| (i) pleasure | (ii) positive | (iii) <u>obstacle</u> | (iv) amazing. |
|--------------|---------------|-----------------------|---------------|

A.1.2 Answer the following questions:

1×6=6

- What happens when work is a pleasure?
- What will you do to create the model of your success?
- What will happen If your body and spirit is in harmony and perfect condition?
- What many successful people say to succeed in life?
- When success is achieved?
- What helps a person to achieve amazing results?

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

The purchase behaviors of consumers towards different types of products are highly dependent on a myriad of factors which every company must take into consideration. Arguably, consumers have different tastes and preferences for different products depending on different products attributes such as taste, size, packaging, the expiry date, price and mostly the ingredients used to make the product. As defined above, consumer behavior is the kind of behavior displayed by consumers in the process of making purchase decisions towards products they think will suit their wants and needs. It is imperative to note that consumers are limited by the available time, effort and money when making purchase decisions which means that consumers seek for the best overall products that meet their wants and needs using the minimum effort, less money and time.

Marketers must be well aware of behaviors displayed by consumers towards different products particularly in highly competitive industries where products are almost similar in many attributes. Marketers must take into consideration the type of consumers they are dealing with including organizational and personal consumers. In the current case, personal consumers are the main target of the marketers because products such as Coca Cola, Pepsi Cola and RC Cola are mostly consumed by individual or personal consumers who buy goods or products for their own and their family use.

The marketing implications of the above blind tests conducted on the three brands namely Coca Cola, Pepsi Cola and RC cola can either be negative or positive implications. For example, Pepsi Cola being the most liked and the most identifiable brand among the three will require minimum marketing efforts because the consumers will display a routinized response behavior which means that consumers have already well established beliefs and knowledge towards Pepsi Cola as the sweetest brand. Hence, marketing this product will require minimum effort, time and resources in the marketplace because the consumers have a liking for the product.

However, it should be noted that this marketing implication is only positive in certain market segments and with specific personal consumers. In other market segments such as among the diabetic, overweight and obese personal consumers, the marketing implication of the above test would be negative meaning that the company would need to utilize numerous efforts, time and money to market the Pepsi Cola product to these segments of the market because the sweetness of Pepsi Cola is a detriment in these market segments. The other marketing implication for the consumer behavior tests conducted above is that advertisements costs for the Pepsi product would reduce significantly because consumers would have a way of differentiating the Pepsi

product in the marketplace just by testing the products. Arguably, the objective of marketing campaigns such as advertisements is to enable the consumers to differentiate between a company's products from the competitors' products. In this regard, the unique test of Pepsi Cola will be one of the differentiation techniques in the market which means that advertisements related to the brand would also reduce as consumers develop their own attachments to the Pepsi Cola.

- A.2.1 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**
- A.2.2 Write a summary of the above passage based on your notes. **3**

**SECTION –B (WRITING & GRAMMAR)**

- Q.3 Write an article on “Violence against Women” for a leading news paper in about 200 words. The following notes are to help you to make this composition. Use the information given below and write the article:

Women are victim - all communities of world - domestic as well as public - physical and mental - Various obligations, restrictions and regulations - to be married off at the tender age - women are victim of public violence - society need to be sensitized.

**OR**

You are Nilesh Srivastava , Marketing Manager of Sunshine Solar Equipments. Write a notice informing all the sales executives about the flat 10 % discount on its all equipments for next two months, as your company is celebrating the 50 years of its foundation. Mention all the necessary details. **4**

- Q.4 You are Ankit / Ankita staying at 4, South Extension Road, Mumbai. You have come across an advertisement in ‘Times of India’ for the recruitment of Computer engineer trainees by MKG software. Apply in response to this advertisement giving your detailed Curriculum Vitae. Invent all necessary details.

**OR**

Draft a poster on “Corruption”. **6**

- Q.5 You are Usha / Umesh. As the president of a voluntary organization you have visited a slum area in your city which was destroyed in a massive fire. Write a report on the tragic situation of these homeless people to be published in a magazine. (Word Limit: 150 words) **10**

- Q.6 Read the following passage. There is one error in each line. Find the error and write it correctly. **½x8=4**

Abdul Kalam is born on 15<sup>th</sup> October 1931  
in the temple city at Rameshwaram.

He is a devout Muslim. .

He offers prayers five times a day and fasted  
during the holy month in Ramazan.

In his autobiography, he is mentioned

that while he was young her father who was

the imam, the temple priest or the priest from

the nearby church used to sat together and discuss the  
common issues of the village.

Error Correction

e.g. is was ;

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

(d) \_\_\_\_\_

(e) \_\_\_\_\_

(f) \_\_\_\_\_

(g) \_\_\_\_\_

(h) \_\_\_\_\_

- Q.7 Fill in the blanks with appropriate phrases with the help of instructions given for making coffee. 1×4=4
- A- Take half cup milk and half cup of water.  
 B- Pour it in pan, keep the pan on fire.  
 C- Meanwhile add one teaspoon full of instant coffee into a cup.  
 D- Put sugar to taste; mix and serve hot.

Half cup of milk and half cup of water (A)..... in a pan and the pan (B) ..... . One teaspoon full of coffee powder (C)..... with the required quantity of sugar. When the liquid starts boiling (D).....into the cup. The coffee and sugar are mixed and served hot.

- Q.8 Rearrange the words to make a meaningful sentences: - 1×2=2
- (a) you/have/how much/experience/got.  
 (b) the few/rupees/I had/I've/spent already.

**SECTION –C (LITERATURE & LONG READING)**

- Q.9 Read the extract and answer the questions: 1×3=3
- They talked of love and preached of love,  
 But did not act so lovingly,  
 Was that the day!
- (a) Name the poem and its composer?  
 (b) Who are 'they'?  
 (c) What does the poet observe about their behaviour?

- Q.10 Answer any three of the questions given below: 3×3=9
- (a) What does the speaker say about father –son relationship?  
 (b) Which course of study Taplow prefer and why?  
 (c) Where did the king want an arc to be constructed and why?  
 (d) What disturbed Andrew out of his thoughts as he sat brooding by the kitchen fire?

- Q.11 Answer the following question in 120 – 150 words: - 1×6=6
- (a) "No generation has free hold on the earth. All we have is a life with a full repairing lease."  
 Explain with reference to 'The Ailing Planet- The Green Movement's Role'?
- OR
- (b) The play 'Mother's Day' is a humorous and satirical depiction of the status of the woman in a family. Bring out briefly the elements of humour and satire?

- Q.12 Explain the funeral ceremony of the Canterville ghost? 1×6=6
- OR

"Death must be so beautiful". What is the view of the ghost about death? Explain.

- Q.13 On the basis of the story of the Canterville ghost, explain why Virginia comes to the conclusion that "love is stronger than both – life and death"?
- OR
- What benefits did Virginia count when she suggested the Canterville ghost to become a family ghost in America? 1×6=6

**SECTION –D (LISTENING SKILLS & SPEAKING SKILLS) 20**

**Annual Examination 2015 – 16****Time: 3:00 Hrs.****M. M. 70**

Q.1

A). Go through the c++ code shown below , and find out the possible output/outputs from the suggested output options (i) to (iv). Also write the minimum and maximum value , which can be assigned to variable MyNum.

```
#include<iostream.h>
#include<stdlib.h>
void main()
{randomize();
int MyNum, Max=5;
MyNum=20+random(Max);
for(int N=MyNum;N<=25;N++)
cout<<N<<"*";
}
```

- i) 20\*21\*22\*23\*24\*25
- ii) 22\*23\*24\*25\*
- iii) 23\*24\*
- iv) 21\*22\*23\*24\*25

**3**

b) Find the output of the following program.

```
#include<iostream.h>
void Packing(char *string)
{char ch='A';
for(int L=0;string[L]!='\0';L++)
for(int i=0;i<=L;i++)
if(string[i]=='-')
{for(int j=i;j<=L;j++)
String[j]=string[j+1];
i--;}
else
if(isdigit(string[i])) string[i]=ch++;}
void main()
{char STD_CODE[]="THE-STD-Code—is--001";
Packing(STD_CODE);
cout<< STD_CODE;
getch();
}
```

**3**

c) study the following and select the possible outputs from (i) to (iv).

```
#include<iostream.h>
#include<stdlib.h>
void main()
{randomize();
int array[10]={1,2,3,4,5,6,7,8,9,10};
```

```

int N=6;
int number= random(array[N]);
for(int i=number;i>=1;i--)
{cout<<i;
If(i!=1)cout<<',';
}}

```

Outputs

- i) 7,5,3,2,1
- ii) 4,3,2,1
- iii) 7,5,3,2,1
- iv) 6,5,4,3,2,1

3

d) Find output for the following c++ code:-

```

#include<iostream.h>
#include<ctype.h>
void Encrypt(char T[])
{for(int i=0;T[i]!='\0';i+=2)
If(T[i]=='A' || T[i]=='E')
T[i]='#';
else
If(islower(T[i]))
T[i]=toupper(T[i]);
else
T[i]='@';}
void main()
{char text[]="Save EArthH";
Encrypt(text);
cout<<text<<endl;
}

```

3

e) Find output for the following:-

```

#include<iostream.h>
struct Package
{int Length,Breadth,Height;};
void occupies(Package M)
{cout<<M.Length<<"X"<<M.Breadth<<"X"<<M.Height<<endl;}
void main()
{Package P1={100,150,50},P2,P3;
++P1.Length;
occupies(P1);
P3=P1;
++P3.Breadth;
occupies(P3);
P2=P3;
P2.Breadth+=50;
P2.Height--;
occupies(P2);}

```

3

Q.2 What is the difference between local variable and global variable? Also give a suitable C++ code to illustrate both. 3

Q.3 Define with example:- 1 ½ × 4 = 6

- (i) Union operation                      (ii) Cartesian product operation  
 (iii) Primary key                         (iv) Degree

Q.4 Consider the following tables WORKERS and DESIGN, write SQL commands for the statements (i) to (iv) and give outputs for SQL queries (v) to (viii).

Table: WORKERS

W_ID	FIRSTNAME	LASTNAME	ADDRESS	CITY
102	Sam	Tones	33, EIM st.	Paris
105	Sarah	Ackerman	440 U.S. 110	New York
144	Manila	Sengupta	24 Friends Street	New Delhi
210	George	Smith	83 First Street	Howard
255	Mary	Jones	842 Vine Ave.	Losantiville
300	Robbert	Samuel	9 Fifth cross	Washington
335	Henry	William	12 More street	Boston
400	Ronny	Lee	121 Harrison st	New York
451	Pat	Thompson	11 red road	Paris

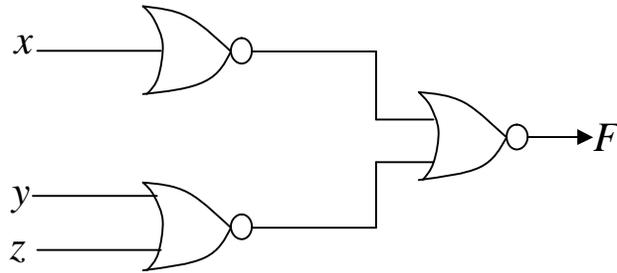
Table: DESIGN

W_ID	SALARY	BENEFITS	DESIGNATION
102	75000	15000	Manager
105	85000	25000	Director
144	70000	15000	Manager
210	75000	12500	Manager
255	50000	12000	Clerk
300	45000	10000	Clerk
335	40000	10000	Clerk
400	32000	7500	Salesman
451	28000	7500	Salesman

- i) To display W\_ID, FIRSTNAME, ADDRESS and CITY of all employees living in New York from the table WORKERS.
- ii) To display the contents of WORKERS table in ascending order of LASTNAME.
- iii) To display the FIRSTNAME, LASTNAME, TOTAL SALARY of all clerks from the table WORKERS and DESIGN, where TOTAL SALARY is calculated as SALARY + BENEFITS.
- iv) To display the minimum salary among managers and clerks from the table DESIGN.
- v) `SELECT FIRSTNAME, SALARY FROM WORKERS, DESIGN  
WHERE DESIGNATION="MANAGER" AND WORKERS.W_ID=DESIGN.W_ID;`
- vi) `SELECT COUNT(DISTINCT DESIGNATION) FROM DESIGN;`
- vii) `SELECT DESIGNATION, SUM(SALARY) FROM DESIGN  
GROUP BY DESIGNATION HAVING COUNT(*) < 3;`
- viii) `SELECT SUM(BENEFITS)  
FROM WORKERS  
WHERE DESIGNATION="Salesman";`

4+2=6

- Q.5 Define Logic gates. Explain NAND and NOR gates with logic symbol and truth table. 2
- Q.6 State idempotence law. Verify the law using truth table 2
- Q.7 Interpret the following logic circuit as a Boolean expression :- 2



- Q.8 Prepare truth table for the following expression:-  $A'B+B'C'$  2
- Q.9 Simplify following Boolean function using K-map. 3+3=6
- i)  $F(U,V,W,Z)=\sum(0,1,2,4,5,6,8,10)$
- ii)  $F(A,B,C,D)=\sum(1,2,3,7,9,11,12,14,15)$
- Q.10 Draw the circuit diagram for the following Boolean expression:- 1+1+1=3
- i)  $A'BC+AB'C'+ABC$
- ii)  $(A+B).(B'+C).(A+B+C')$  using NOR and NAND gates
- Q.11 WAP for the followings:-
- i) To convert decimal no. into binary. 2
- ii) To print pascal's triangle. 2
- iii) 1,3,5,7,..... 2
- iv) 1,1,2,3,5,8,13,21,..... 3
- v) To copy one string to another. 2
- vi)
- ```

1
121
12321
1234321

```
- vii) WAF to print factorial of a no. 2
- viii) To copy all even nos from an array to another array even and odd nos to odd array from 1d array Number. 2
- Ex:- `Number[]={1,2,3,4,5,6,7}`  
`Odd[]={1,3,5,7}` and `even[]={2,4,6}` 3
- Q.12 Explain with syntax and example:- 1×3=3
- (i) `strcpy()`                      (ii) `strcat()`                      (iii) `strcmp()`
- Q.13 Write full forms of the followings:- ¼ ×4=1
- (i) SQL                      (ii)DDL                      (iii)DML                      (iv)DCL

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

## Annual Examination 2015 – 16

Time: 3:00 Hrs.

M. M. 70

**General Instructions:**

- (i) All questions are compulsory.
- (ii) The question paper consists of Five sections A, B, C, D and E.  
**Section–A** has 5 questions of **One Mark** each.  
**Section –B** has 5 questions of **Two Marks** each.  
**Section – C** has 12 questions of **Three Marks** each.  
**Section – D** has 1 value base question of **Four Marks**.  
**Section –E** contains 3 questions of **Five Marks**.
- (iii) There's no overall choice However an internal choice has been provided in Section E (All 3 questions with a weight age of Five Marks) .
- (iv) Draw diagrams. neat and labeled, wherever required.

**Section - A**

- Q.1 Which annelid is an ectoparasite without any setae and parapodia?
- Q.2 What do you mean by casparian strips?
- Q.3 Which compound acts as an intermediate between glycolysis and Kreb's cycle?
- Q.4 Why are vacuoles called semi-autonomous organelles?
- Q.5 Deficiency of which hormone leads to Diabetes Insipidus.

**Section – B**

- Q.6 In what ways, Bryophyta is advanced over algae? Give any Four points.
- Q.7 Why are Deuteromycetes commonly known as fungi Imperfecti? Mention any two characteristics of Mycelium of such a fungi.
- Q.8 Write any four functions of connective tissues.
- Q.9 Give the diagrammatic representation of various components of ER.

Q.10 What is Erythroblastosis Foetalis? Which situation is responsible for this abnormality?

**Section – C**

Q.11 What do you mean by vernalization? What is its significance and how is it different from photo periodism?

Q.12 (i) What are symport, antiport and uniport? Also show them by a diagram.

(ii) Any three functions of diffusion.

Q.13 Give the diagrammatic representation of photorespiration. Also write its importance in brief.

Q.14 What is thyroid gland? Give its important functions.

Q.15 Briefly explain the countercurrent mechanism in the Henle's loop of a Nephron- Write your answer point wise **ONLY**.

Q.16 Diagrammatically show human digestive system.

Q.17 What is the difference between primary, secondary and tertiary structure of proteins?

Q.18 Describe the events taking place during interphase.

Q.19 Differentiate between DNA & RNA on the basis of any six points.

Q.20 Give three important points of difference between male and female frog. Also draw the diagrams of posterior end of abdomen of male & female cockroach.

Q.21 Differentiate between collenchyma and sclerenchyma. Also draw their diagrams.

Q.22 Define the term Taxonomy. What is the utility of taxonomy?

Q.23 Farmers grow crops of Trifolium and plough it back in the field. Kailash was surprised to know the probable cause for the same. Teacher accompanied Kailash in the Trifolium field and showed him number of root nodules in the root of Trifolium plant. He then explained the cause for ploughing back of Trifolium.

(i) To which family does Trifolium belong.

(ii) Name the bacterium that helps in nodule formation.

(iii) Which pigment exists in root nodules and what is its colour.

(iv) Why is this pigment called oxygen scavenger.

(v) What values are associated with above observation?

Q.24 Draw a diagram of vertical section of human Eye and label it.

Describe the structure & function of various parts in brief. 5

**OR**

What is oxygen dissociation curve? List the various factors which result in causing this curve. 5

**“OTBA”**

Q.25 The poor man's material is ironically proving to be highly expensive. Explain. 5

Q.26 Describe in detail how your body systems work in a co-ordinated, well integrated manner. Take help of diff examples. 5

\*\*\*\*\*

Q.24 Write a short note on ozone layer & its depletion with suitable chemical reaction.

**OR**

Explain the following terms :-

- (i) Asphyxiation                      (ii) Chlorosis                      (iii) Asbestosis  
(iv) Siltation                              (v) Eutrophication

Q.25 Explain Ionisation of weak Electrolytes – Ostwald's dilution law.

**OR**

Write a brief note on Buffer solution.

Q.26 What happens when –

- (i) An Alkaline solution of potassium ferricyanide is react with  $H_2O_2$ .  
(ii) Hydrogen peroxide is added to acidified potassium permagnate solution.  
(iii)  $H_2O_2$  is added to lead sulphide.  
(iv)  $H_2O_2$  is added to silver oxide.  
(v)  $H_2O_2$  is added to acidified ferrous sulphate solution.

**OR**

Explain **any Two** water purification techniques .

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Roll No. \_\_\_\_\_

Code. No. 11/Chemistry/NLCS/45

## Annual Examination 2015 – 16

Time: 3:00 Hrs.

M. M. 70

**General Instructions:-**

**Q. No. 1 to 5 (1 Mark each),      Q. No. 6 to 10 (2 Marks each),  
Q. No. 17 to 22 (3 Marks each),    Q. No. 23 Value Based (4 Marks)  
Q. No. 24 to 26 (5 Marks each)**

**Attempt all questions**

- Q.1 Give the numerals for multiple named penta & exci.  
Q.2 What is meant by stationary orbit?  
Q.3 Name the element which can belong both to group IA & VIIA?  
Q.4 What types of bonds & how many of each r present in  $NH_4^+$ ?  
Q.5 Why is Dalton's law of partial pressure not applicable to a mixture of  $NH_3$  &  $HCl$  or  $CO$  &  $O_2$  gases?  
Q.6 Predict the sign of eutroph change for the following reactions –  
(i)  $2SO_{3(g)} \rightarrow 2SO_{2(g)} + O_{2(g)}$   
(ii)  $2Al_{(s)} + 3Fe^{2+}_{(ag.)} \rightarrow 2Al^{3+}_{(ag.)} + 3Fe_{(s)}$   
Q.7 Define solubility product.  
Q.8 Chlorine dioxide  $ClO_2$  is used to kill bacteria in food and beverage industries. It is obtained by following reaction -  
 $Cl_2 + 2NaClO_2 \rightarrow 2ClO_2 + 2NaCl$ . Identify the substance oxidized & reduced as well up oxidizing & reducing agents in the reaction.

- Q.9 If Zn pieces are added in aq. acidified.  $FeCl_3$  solution deep yellow colour of  $FeCl_3$  fades and changes to light green. But if  $H_2$  gas is passed into  $FeCl_3$  solution. There is no change why?
- Q.10 There is a white deposit in a glass vessel in which  $NaOH$  is stored. Why?
- Q.11 Explain why (i) Boron shows amphoteric nature (ii)  $TiCl_3$  is unstable while  $TiCl$  is stable (iii)  $Al^{3+}$  is hydrated and exist as  $[Al(H_2O)_6]^{3+}$  it is said to behave as an acid.
- Q.12 An Alkane has the molecular mass equal to 72. Give the possible structural isomers along with their IUPAC names.
- Q.13 three tests for unsaturation of hydrocarbon.
- Q.14 What do you mean by – (i) green chemistry (ii) Photochemical smog (iii) BOD ?
- Q.15 The density of 3M solution of  $NaCl$  is  $1.25g\ m^{-1}$ . Calculate the molality of solution.
- Q.16 Explain Dual nature of matter with suitable expression.
- Q.17 How could you explain the fact that first ionization enthalpy of sodium is lower than that of magnesium but its second ionization enthalpy is higher than that of magnesium?
- Q.18 (i) Out of O-Nitrophenol & P-Nitrophenol which has higher boiling point & Why?  
 (ii) Why glucose, Fructose, Sucrose etc are soluble in water though they are covalent compounds?  
 (iii)  $BaSO_4$  is an ionic compound but it is insoluble in water why?

- Q.19 Write differences between ideal gas & real gas.
- Q.20 Express the change in internal energy of a system when –
- No heat is absorbed by the system from surroundings, but work (w) is done on the system What type of wall does the system have?
  - No work is done on the system, but q amount of heat is taken out from the system & given to surrounding. What type of wall does the system have?
  - 'w' amount of work is done by the system & amount of heat is supplied to the system. What type of system would it be?
- Q.21 Explain Le-Chatelier's principle; what will be the effect of term. Pressure, catalyst on chemical equilibrium.
- Q.22 (i) Sketch and label a galvanic cell that make use of following redox reaction –  

$$Zn(s) + 2Ag^+(aq.) \rightleftharpoons Zn^{2+}(aq.) + 2Ag(s)$$
 (ii) Define Electrochemical series.  
 (iii) Define Disproportionation reaction
- Q.23 **Hydrogen peroxide is a very useful compound in medical science. It is used to clean ear wax. It is also used to clean wounds; when hydrogen peroxide comes in contact with blood cell. It bubbles furiously. Bubbles are also observed when it is used in cosmetics for hair & skin, bleach.**
- Which property of hydrogen peroxide makes it cleaning agent?**
  - What is the reason behind the eruption of furious bubbles when hydrogen peroxide comes in contact with blood cells?**

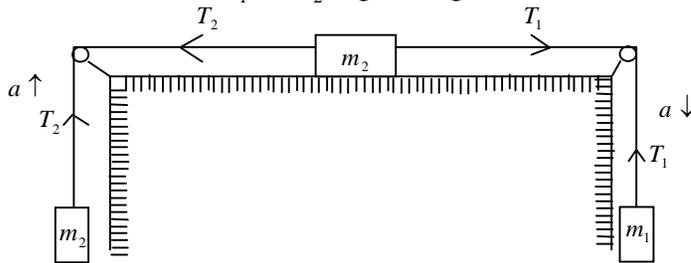
OR

- (i) What are beats? How are they produced? Show that the beat frequency for maximum and minimum amplitude is  $n_1 - n_2$ .
- (ii) Prove that in case of perfectly elastic collision relative velocity before collision is always equal to relative velocity after collision.

- Q.26
- (i) What is a Carnot engine? Explain the various operations for a Carnot's heat engine working between two temperatures?
  - (ii) State Carnot's theorem. Prove that the efficiency of a reversible heat engine is maximum.

OR

- (i) State the 2<sup>nd</sup> law of thermodynamics?
- (ii) Define banking of a road? Find an expression for the maximum velocity of a vehicle without slipping.
- (iii) Find tensions  $T_1$  &  $T_2$  in the given figure.



\*Best of Luck\*

Roll No. \_\_\_\_\_

Code No. 11/Physics/NLCS/45

## Annual Examination 2015 – 16

Time: 3:00 Hrs.

M. M. 70

### General Instructions :-

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

- Q.1 Name the waves which do not require a material medium to propagate?
- Q.2 What is the value of bulk modulus for an incompressible liquid?
- Q.3 Define Boyle's law in terms of density.
- Q.4 What physical quantity does the area under the force-displacement curve represent?
- Q.5 If a man goes from the surface of the earth to a height equal to the radius of the earth, then what will be his weight relative to that on the earth?
- Q.6 Explain why still water runs deep?
- Q.7 The velocity  $v$  of waves depends on the wavelength  $\lambda$ , density of water  $\rho$  and the acceleration due to gravity  $g$ . Deduce by the method of dimensions the relationship between these quantities.
- Q.8 A projectile is fired horizontally with a velocity  $u$ . Show that its trajectory is a parabola. Also obtain an expression for its time of flight.
- Q.9 A refrigerator is to maintain eatables kept inside at  $9^\circ\text{C}$ . If room temperature is  $36^\circ\text{C}$ , calculate the coefficient of performance?

- Q.10 Water rises in a capillary tube, whereas mercury falls in a capillary tube? Explain.
- Q.11 Show that in case of close organ pipes only odd harmonics formed?
- Q.12 Why is invar used for making pendulum of clocks?
- Q.13 State Kirchoff's law for black body radiation and explain with suitable example?
- Q.14 Derive major formula for ideal gas.
- Q.15 Derive an expression for moment of inertia of a thin uniform circular ring about an axis passing through the centre and perpendicular to the plane of ring. Hence determine the moment of inertia of ring about its diameter. Also find radius of gyration in such case.
- Q.16 Find specific heat capacity of water.
- Q.17 State Newton's formula for sound waves in air point out the error and discuss Laplace's correction.
- Q.18 (i) Prove that the total energy of particle in S.H.M. is constant.  
(ii) Show graphically variation of kinetic energy and potential energy with time of a particle in S.H.M.
- Q.19 A U-tube contains water and methylated spirit separated by mercury. The mercury columns in the two arms are in level with 10.0cm of water in one arm and 12.5cm of spirit in the other. What is the specific gravity of spirit?
- Q.20 Prove that the rate of change of angular momentum is equal to torque acting on body.

- Q.21 Show that for small oscillation the motion of simple pendulum is simple harmonic. Derive an expression for its time period. Does it depend on the mass of bob?
- Q.22 Draw load Expansion curve for elastic string and explain it. Also classified the type of material on the basis of this curve?
- Q.23 Raju saw her grandmother try to clean a carpet. She was feeling difficulty in lifting the carpet. Raju helped his grandmother in cleaning the carpet by beating it with a stick.**
- (i) **What are the values displayed by Raju?**
- (ii) **Name the scientific principle involved in Raju's action?**
- (iii) **Give one such more example.**
- Q.24 (i) Discuss energy distribution of black – body radiation spectrum. Explain Wein's displacement law of radiation and stephan's law of heat radiation.  
(iii) State Newton's law of cooling. Deduce the relation  $T = T_0 + ce^{-kt}$  and plot the for same?

OR

State the law of equipartition of energy, using this law to determine the value of  $C_p$ ,  $C_v$  and  $\gamma$  for – (i) Monoatomic  
(ii) Diatomic (iii) Triatomic and (iv) Polyatomic

- Q.25 What is Doppler effect of sound? Derive the expression for apparent frequency. When –
- (i) Source is movable and listener stationary.  
(ii) Source stationary and listener movable.  
(iii) Source and listener both movable.

Roll No. \_\_\_\_\_ Code No. 11/Mathematics/NLCS/48

## Annual Examination 2015 – 16

Time: 3:00 Hrs.

M. M. 100

General Instruction :-

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 Two finite sets have  $m$  and  $n$  elements the number of subsets of the first is 112 more than that of the second set. Find the values of  $m$  and  $n$ .
- Q.2 Find the radian measure for  $33^\circ 15'$ .
- Q.3 Find  $n$ , if  ${}^{n-1}P_3 : {}^n P_4 = 1 : 9$ .
- Q.4 Find the centre and radius of the circle  $2x^2 + 2y^2 - x = 0$ .
- Q.5 Write the contra positive of the statement. If you are born in India, then you are a citizen of India.
- Q.6 A coin is tossed twice, what is the probability that at least one tail occurs.

### Section – B

- Q.7 Find the probability that when a hand of 7 cards is drawn from a well shuffled deck of 52 cards, it contains (i) All Kings (ii) 3 Kings (iii) at least 3 kings.
- Q.8 Find the domain and range of the following real function

$$f(x) = \sqrt{9 - x^2}.$$

- Q.9 If  $\tan x = \frac{b}{a}$ , then find the value of  $\sqrt{\frac{a+b}{a-b}} + \sqrt{\frac{a-b}{a+b}}$ .

OR

Find the value of the expression

$$\cos^4 \frac{\pi}{8} + \cos^4 \frac{3\pi}{8} + \cos^4 \frac{5\pi}{8} + \cos^4 \frac{7\pi}{8}.$$

- Q.10 Prove that  $- 2 \cdot 7^n + 3 \cdot 5^n - 5$  is divisible by 24 for all  $n \in N$ .

Q.11 Convert the complex number -  $z = \frac{i-1}{\cos \frac{\pi}{3} + i \sin \frac{\pi}{3}}$  in the polar form.

**OR**

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

Q.12 If  ${}^{56}P_{r+3} : {}^{54}P_{r+3} = 30800 : 1$  then find the value of  $r$ .

Q.13 Show that the middle term in the expansion of  $(1+x)^{2n}$  is  $\frac{1.3.5 \dots (2n-1)}{|n|} 2^n \cdot x^n$  where  $n$  is a positive integer.

Q.14 The ratio of the AM and GM of two positive numbers  $a$  and  $b$  is  $m : n$  show that -

$$a : b = \left[ m + \left( \sqrt{m^2 - n^2} \right) \right] : \left[ m - \left( \sqrt{m^2 - n^2} \right) \right].$$

**OR**

Let  $S_n$  denotes the sum of the first  $n$  terms of an A.P. If  $S_{2n} = 3S_n$  then find the ratio  $S_{3n} : S_n$ .

Q.15 If  $p$  is the length of perpendicular from the origin on the line

$$\frac{x}{a} + \frac{y}{b} = 1 \text{ and } a^2, p^2, b^2 \text{ are in A.P. then show that } a^4 + b^4 = 0.$$

Q.16 Show that the area of the triangle formed by the lines

$$y = m_1x + c_1, y = m_2x + c_2 \text{ and } x = 0 \text{ is } \frac{(c_1 - c_2)^2}{2|m_1 - m_2|}.$$

Q.17 An equilateral triangle is inscribed in the parabola  $y^2 = 4ax$ , where one vertex is at the vertex of the parabola. Find the length of the side of the triangle.

Q.18 Find the equation of the set of point p the sum of whose distance from A (4,0,0) and B (-4, 0, 0) is equal to 10.

Q.19 Find the derivative of  $f(x)$  from the first principle, where

$$f(x) = \sin x + \cos x.$$

**OR**

Evaluate  $\lim_{x \rightarrow \frac{\pi}{6}} \frac{2 - \sqrt{3} \cos x - \sin x}{(6x - \pi)^2}$ .

### **Section - C**

Q.20 In a survey of 200 students of a school. It was found that 120 study Mathematic, 90 study Physics and 70 study Chemistry, 40 study mathematics and Physics, 30 study Physics and Chemistry, 50 study Chemistry and Mathematics and 20 none of these subjects. Find the number of students who study all the three subjects.

Q.21 Prove that -  $\cos^3 A + \cos^3 (120^\circ + A) + \cos^3 (240^\circ + A) = \frac{3}{4} \cos 3A$ .

Q.22 How many litres of water will have to be added to 1125 litres of the 45% solution of acid so that the resulting mixture will contain more than 25% but less than 30% acid content.

Q.23 Find the value of -  $(a^2 + \sqrt{a^2 - 1})^4 + (a^2 - \sqrt{a^2 - 1})^4$ .

Q.24 If  $a\left(\frac{1}{b} + \frac{1}{c}\right), b\left(\frac{1}{c} + \frac{1}{a}\right), c\left(\frac{1}{a} + \frac{1}{b}\right)$  are in A.P. Prove that  $a, b, c$  are in A.P.

Q.25 Evaluate :  $\lim_{x \rightarrow 0} \frac{\tan x + 4 \tan 2x - 3 \tan 3x}{x^2 + \tan x}$ .

**OR**

Find the derivative of the following function  $f(x) = \frac{x}{\sin^n x}$ .

Q.26 From the data given below state which group in more variable A or B.

| Marks   | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
|---------|-------|-------|-------|-------|-------|-------|-------|
| Group A | 9     | 17    | 32    | 33    | 40    | 10    | 9     |
| Group B | 10    | 20    | 30    | 25    | 43    | 15    | 7     |

**\*\*Best of Luck\*\***

**OR**

Best Books Pvt. Ltd. is a leading publishing house. They print and sell books across the country. Ragini joined as a marketing manager. During a sales meeting she suggested to sell books online. Everyone in the meeting looked surprised because from last many years they have been selling books by visiting schools, book sellers etc. The sales Director asked A Ragini to prepare a detailed report on “online selling” concept. Soon books were available online. Within three months the publisher received a big order from Canada. This would be their first export so the sales manager is now trying to understand the export procedure.

- (i) State and Explain concept of selling online.
- (ii) Discuss the payment mechanism for online business.
- (iii) Explain in brief the procedure to export books to Canada.

Q.27 What Advantages does issue of debentures provide over the issue of equity shares? 6

**OR**

State the merits and demerits of public deposited and retained earnings as methods of business finance.

**ORAL + PROJECT →**

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**10**

Roll No. \_\_\_\_ Code. No. 11/Business Studies/NLCS/70

**Annual Examination 2015 – 16**

**Time: 3:00 Hrs.**

**M. M. 100**

General Instruction :-

Question No. 1 to 8 carry **One Mark** each. Question No. 9 to 14 carry **Three Marks** each. Question No. 15 to 19 carry **Four Marks** each. Question No. 20 to 23 carry **Five Marks** each. Question No. 24 to 27 carry **Six Marks**

- Q.1 State two things which should be considered to measure market standing? 1
- Q.2 Name the Industries, which are set up with in proximity of raw materials. 1
- Q.3 Mention any two objectives of Public Sector before 1991. 1
- Q.4 State three financial facilities provided by postal department. 1
- Q.5 What are non core business Activities? 1
- Q.6 Give two examples of legal responsibilities. 1
- Q.7 Define “Commercial Paper”. 1
- Q.8 Where is WTO located? How many members it has as on today? 1
- Q.9 State the basic differences between indent and trade enquiry. 3
- Q.10 Whole sellers help to avail the economies of scale. What is meant by economies of scale? 3
- Q.11 State the features of cottage Industries. 3
- Q.12 Trading concern required large amount of gives capital as compared to manufacturing concern. Do you agree? Give reason to support your Answer. 3
- Q.13 Explain any three elements of business Ethics. 3
- Q.14 Elaborate the steps involved in online trading. Explain. 3

- Q.15 What are various types of Industries? Explain 4
- Q.16 Explain the following terms and also mention the name of organization they are related to - 4
- (i) Perpetual succession (ii) Common seal (iii) Karta  
(iv) Artificial person
- Q.17 State difference between private and public sector on the basis of :-4
- (i) management (ii) ownership (iii) Accountability  
(iv) Motive (v) Distribution of Income
- Q.18 Write a short note on various telecom services available for enhancing businesses. 4
- Q.19 Evaluate the need for outsourcing and discuss its limitations. 4
- Q.20 Discuss in brief the various kinds of social responsibilities. Explain with examples. 5
- Q.21 Explain trade credit and bank credit as a sources of short term finance for business enterprises. 5
- Q.22 Small scale Industries are not ready for global competitions. Do you agree? Explain. 5
- Q.23 Wholesalers are the middlemen who do nothing but Increase the cost of product? Do you agree? Give reason support your Answer. 5
- Q.24 Itinerant traders have been an integral part of internal trade in India. Analyse the reasons for their survival in spite of competition from large scale retailers. 6

**OR**

Imagine life without your local market. What difficulties would a consumer face if there were no retail shops?

- Q.25 WTO was born out of GATT but today it is much more powerful than GATT. Discuss. 6

**OR**

Prime surgical is currently purchasing blood pressure monitoring machines from Jai Durga an Importer and selling in the retail market. He has been approached by a manufacturer in China to offer same blood pressure monitoring machines at much cheaper prices. But only problem is that Prime surgical must place an order of 1000 units. Discuss the procedure prime surgical may have to follow if he Decides to import from China. Also, advise him the whether he should Directly buy or continue to purchase from the importer? 6

- Q.26 Rohit and Gurbinder are partners selling electronic products across India. They Import the components from China and assemble them in their factory established in rural area of Jharkhand. Most of the workers in the factory are children and women. They are paid very less salaries thus owners save on labour cost. They sell their products across India and in nearby countries like Bangladesh, Nepal and Srilanka. They store their stocks in a warehouse but do not take proper safety measures against fire or burglary. There was a short circuit in the factory and as result most of the stock with Insurance company but there claim was rejected. 6
- (i) Identify which type business Rohit and Gurbinder were doing? Give one reason to support your Answer.
- (ii) State any two problems faced by the type of business mentioned in (a).
- (iii) Identify the cause of business risk suffered by Rohit and Gurbinder.
- (iv) Why do you think the Insurance company rejected the claim?

Q.27 Distinguish between : 2+2=4

- (i) Census and sampling method
- (ii) Primary and secondary data
- (iii) Fisher's method

Q.28 If the Arithmetic mean of the data given below is 28. Find –

(i) Missing frequency (ii) Median of the series

|                        |      |      |       |       |      |       |
|------------------------|------|------|-------|-------|------|-------|
| Profit per retail shop | 0-10 | 10-2 | 20-30 | 30-40 | 40-5 | 50-60 |
| No. of retail shop     | 12   | 18   | 27    | $f$   | 17   | 6     |

OR

Write six important functions of statistics.

Q.29 Calculate the price Index No. by –

- (i) Laspeyre's method and (ii) Paasche's method.
- (iii) Fisher's method 6

| Commodity | Base Years (1999) |              | Current Year (2008) |                   |
|-----------|-------------------|--------------|---------------------|-------------------|
|           | Price (Rs.)       | Total Expend | Price (Rs.)         | Total Expenditure |
| A         | 2                 | 200          | 3                   | 300               |
| B         | 8                 | 72           | 10                  | 100               |
| C         | 12                | 60           | 15                  | 90                |
| D         | 7                 | 49           | 10                  | 80                |

**ORAL + PROJECT → 10**

\*\*All the Best\*\*

**Roll No. \_\_\_\_\_ Code. No. 11/Economics/NLCS/70**

## Annual Examination 2015 – 16

**Time: 3:00 Hrs.**

**M. M. 100**

General Instruction :-

- (i) All question in both the sections are compulsory.
- (ii) Question No. 1 to 5 and 16-20 carry **One Mark** each.
- (iii) Question No. 6 to 10 and 21-25 carry **Three Marks** each.
- (iv) Question No. 11 & 12 and 26 & 27 carry **Four Marks** each.
- (v) Question No. 13 & 14 and 28 & 29 carry **Six Marks** each.

### Section – I (Indian Economic Development)

- Q.1 Name three notable economist who estimated India's per capital income during the colonial Period. 1
- Q.2 Give meaning of occupational structure. 1
- Q.3 "Services sector contributed maximum to the GDP in 1990" what does it mean? 1
- Q.4 Write name of power generation station in India in thermal, solar, Atomic and hydro. (One of each). 1
- Q.5 Define Environments. 1
- Q.6 Explain the various causes which were responsible for economic reforms. 3

OR

Discuss the fiscal reforms introduced under the new economic policy of 1991.

- Q.7 State any four failures of the Indian plans. 3
- Q.8 Discuss the principle components of Industrial policy Resolution 1956. 3
- Q.9 "Both economic and social infrastructure are crucial" Do you agree this statement give reason. 3

- Q.10 Draw pyramid of health system of India. 3
- Q.11 Write four vital functions of the Environment. 4
- Q.12 Define unemployment according to NSSO. What are three sources of data on unemployment. 4
- Q.13 Discuss the various measures which can be taken to remove poverty in India. 6

OR

Salient feature of the strategy of Industrial growth during 1950-90.

- Q.14 “**Even though green revolution helped India to achieve self sufficiency in food grains still it suffered from certain limitation**”. In the light of above statement discuss the various limitation of green revolution.

**OTBA**

- Q.1 As a student of class XI, draft five value points and elaborate them to participate in favor of a debate on “India- Pakistan: trading partners”. 5
- Q.2 Being a reporter of a business daily, draft five major obstacles in Indo- Pak trade. 5

**Section – II (Statistics for Economics)**

- Q.16 “Arithmetic mean is positional value”. Defined or refute. 1
- Q.17 Graphic location of mode is done with reference to - 1
- (i) Cumulative frequency curve (ii) Frequency Polygon
- (iii) Frequency Curve (iv) Histogram
- Q.18 A scatter diagram - 1
- (i) Is a statistical test (ii) Must be liner
- (iii) Must be curvilinear (iv) Is a graph of  $x$  and  $y$  values

- Q.19 What is the meaning of scarcity? 1
- Q.20 How to find mode when mean and median is gives? 1
- Q.21 In 2007, out of a total of 2000 applicants in a college 200 were from Commerce background. The number of girls was 750, out of which 330 were from Science stream. In 2008 the total number of applicants was 3500 of which 2200 were boys. The no. of students from Science stream was 1100 of which 610 were girls. Tabulate the given information. 3

- Q.22 Find out interquatile range, Quartile deviation and its coefficient from the following : 3
- 44 40 50 58 62 72 47 67.

OR

Calculate mean deviation and its coefficient –

|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| $X$ | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| $Y$ | 5     | 8     | 16    | 8     | 3     |

- Q.23 Find the median of the following data : 3

|                              |     |     |     |     |     |    |    |    |
|------------------------------|-----|-----|-----|-----|-----|----|----|----|
| Age greatest than (In years) | 0   | 10  | 20  | 30  | 40  | 50 | 60 | 70 |
| No. of person                | 230 | 218 | 200 | 165 | 123 | 73 | 28 | 8  |

- Q.24 What is secondary data? What are its sources? 3
- Q.25 Calculate Range and Coefficient of range : 3

|                 |   |    |    |    |    |    |
|-----------------|---|----|----|----|----|----|
| Marks           | 5 | 10 | 15 | 20 | 25 | 30 |
| No. of Students | 8 | 12 | 7  | 15 | 5  | 2  |

- Q.26 In a singing competition, two judges rank. The seven contestants a follows : 4

|          |   |   |   |   |   |   |   |
|----------|---|---|---|---|---|---|---|
| Judge I  | 5 | 4 | 7 | 3 | 1 | 2 | 6 |
| Judge II | 6 | 5 | 2 | 1 | 3 | 4 | 7 |

Roll No. \_\_\_\_\_ Code. No. 11/Physical Ed./NLCS/57

## Annual Examination 2015 – 16

Time: 3:00 Hrs.

M. M. 70

- Q.1 Give the aim of physical education according to the J.F. William. 1
- Q. 2 Define physical fitness. 1
- Q. 3 Who was the first president of I.O.A.? 1
- Q. 4 Who describes yoga as “Evenness of temper”? 1
- Q. 5 Which asanas help to cure diabetes? 1
- Q. 6 Define sports environment. 1
- Q. 7 List any four main systems of the human body. 1
- Q. 8 Give an example of Third law of motion in sports activities. 1
- Q. 9 What do you mean by biomechanics? 1
- Q. 10 Enlist the causes of plateau. 1
- Q. 11 Define sports training. 1
- Q. 12 Explain the career options for physical education. 3
- Q. 13 Explain any three components of positive life style. 3
- Q. 14 Explain the following :-  $1\frac{1}{2} + 1\frac{1}{2} = 3$
- (i) Olympic flag (ii) Olympic torch
- Q. 15 Highlight harmful effects of prohibited substances. 3
- Q. 16 Explain any two essential elements of positive sports environment. 3

- Q. 17 List the importance of Anatomy and Physiology. 3
- Q. 18 Explain the primary laws of learning. 3
- Q. 19 What do you mean by limbering down. Give its benefits? 3
- Q. 20 State the difference of following terminologies: -  $2\frac{1}{2} + 2\frac{1}{2} = 5$
- (a) Skills and Techniques.
- (b) Tactics and Strategies.
- Q. 21 Discuss the adolescences needs problems and management steps.  $1 + 2 + 2 = 5$
- Q. 22 Explain the various classes of leerer. Give example from body. 5
- Q. 23 Explain the structure and working of Heart. 5
- Q. 24 Explain the importance of test and measurement in sports. 5
- Q. 25 Explain any five elements of yoga in detail. 5
- Q. 26 Which is the biggest sports award in India. Explain any two sports awards?  $1 + 2 + 2 = 5$

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