AE-F 11/2/2013

SUBJECT : ECONOMICS [SET-II]

Time : 3 hrs. **M.M. : 95**

General Instructions :

(i) All questions are compulsory.

(ii) Questions 1 to 5 and 16 to 20 are very short answer questions of 1 mark each. Answer to each of these should be written in one sentence.

(iii) Questions 6 to 9 and 21 to 25 are short answer type questions of 3 marks each. Answer to each of these should not exceed 60 words.

(iv) Questions 10 to 13 and 26 to 28 are also short answer questions of 4 marks each. Answer to each of these should not exceed 70 words.

(v) Questions 14 to 15 and 29 to 31 are long answer questions of 6 marks each. Answer to each of these should not exceed 100 words.

(vi) Attempt all parts of a question at one place.

SECTION-A (Statistics for Economics)

Q1. Draw a scatter diagram to show perfect negative correlation between X and Y. (1)

Q2. Calculate range if the lowest value is 45 and the highest value is 75. (1)

Q3. State any one merit of arithmetic mean. (1)

Q4. Calculate mode if median is 30 and arithmetic mean is 10. (1)

Q5. State any one merit of direct personal interview method. (1)

Q6. Distinguish between census method and sampling method. (3)

Q7. Explain any three functions of statistics. (3)

Q8. Calculate mode from the following data :

More than	c.f.
More than 0	70

More than 5	66
More than 10	56
More than 15	31
More than 20	16
More than 25	6

(3)

Q9. Prepare a pie diagram from the following data :

Country	Percentage of exports (%)
U.S.A.	25
Japan	15
U.K.	30
China	20
Others	10

(3)

OR

In a sample study about eating habits in two towns, the following information was received :

Town A : Males were 70%, Total vegetarians were 65%, Male non-vegetarians were 20%.

Town B : Females were 45%, Males non-vegetarians were 20%, Female vegetarians were 15%.

Represent the above data in a tabular form. (3)

Q10. Calculate Mean Deviation from median from the following data: (4)

Wages (in ₹) :	15	25	35	45	55
No. of workers :	10	30	50	30	20

Q11. Explain any two uses each of Consumer Price Index and Wholesale Price Index. (4)

Q12. Calculate Quartile Deviation from the following data: (4)

C.I. :	50-100	100-150	150-200	200-250	250-300	300-350
Frequency :	2	10	10	4	4	20

Q13. Locate median graphically from the following data: (4)

Marks :	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students :	3	9	18	30	18	12

OR

Determine mode graphically from the following data : (4)

Marks :	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students :	5	10	20	5	10	8

Q14. Calculate coefficient of variation from the following data (Take A = 50) : (6)

C.I. :	0-20	20-40	40-60	60-80	80-100
Frequency :	2	4	7	4	3

Q15. Calculate Karl Pearson's coefficient of correlation from the following data using direct method. Also interpret the result.

X :	2	1	5	3	4	7	6
Y :	1	3	2	4	7	5	6

(6)

OR

Calculate Spearman's coefficient of rank correlation from the following data. Also interpret the result.

X :	12	13	11	12	12	14	18	15
Y :	23	26	28	28	27	29	30	20

(6)

SECTION-B (Indian Economic Development)

Q16. Define disinvestment. (1)

Q17. Name any two goals of economic planning in India. (1)

Q18. Define organic farming. (1)

Q19. List one point of difference between absolute and relative poverty. (1)

Q20. Define agricultural marketing. (1)

Q21. Explain how investment in education stimulates economic growth. (3)

OR

Differentiate between human capital and human development. (3)

Q22. Is it necessary to generate employment in the formal sector rather than in the informal sector. Give reasons. (3)

Q23. Underscore any three economic challenges faced by the Indian economy at the time of independence. (3)

Q24. Explain how import substitution can protect domestic industry. (3)

Q25. Explain "Growth oriented approach" to remove poverty. (3)

Q26. "During the past century, the atmospheric temperature has risen by 1.1°F and sea level has risen several inches". Suggest few measures to improve this situation. (4)

Q27. Explain the role of Bank rate and Case Reserve Ratio in controlling inflation in an economy. (4)

Q28. Briefly explain the Industrial Policy Resolution, 1956. (4)

OR

Explain various policy measures undertaken to increase the agricultural production in India after independence. (4)

Q29. (a) Explain any three measures taken by government to improve agricultural marketing.

(b) Discuss the drawbacks of health infrastructure in India. (3+3=6)

OR

(a) What are the challenges before the power sector in India?

(b) Define agricultural diversification. Why is agricultural diversification essential for sustainable livelihood? (3+3=6)

Q30. (a) Discuss the problems that forced the Indian government to change their policies in 1991.

(b) Outsourcing has intensified in India in post-reform period. Discuss. (3+3=6)

Q31. (a) "The economic reforms introduced in China are responsible for its pace of development". Do you agree? Give reasons in support of your answer.

(b) Mention the salient demographic indicators of China, Pakistan and India. (3+3=6)

SUBJECT : MATHEMATICS (SET-I)

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

General Instructions :

(i) Read all questions carefully.

(ii) All questions are compulsory.

(iii) The question paper consists of 29 questions divided into three sections - A, B and C.

(iv) Section-A, comprises of 10 questions of 1 mark each. Section-B, comprises of 12 questions of 4 marks each, Section-C, comprises of 7 questions of 6 marks each .

(v) Use of calculators is not permitted.

SECTION-A

Q1. If A = {a, b, c}; B = {b, d, e} and U = {a, b, c, d, e, f, g} then find (AUB)'.

Q2. If A = {1, 2} and B = {3, 4} then find number of relations from A to B.

Q3. Find value of tan 15°.

Q4. Find modulus and argument of $\frac{1}{1+i}$

Q5. Find the sum of $1 - \frac{1}{2} + \frac{1}{2^2} - \frac{1}{2^3} + \ldots\ldots$ upto infinity.

Q6. Events A and B are such that P (not A or not B) = 0.25. State whether A and B are mutually exclusive.

Q7. If the variance of 20 observations is 5 and each observation is multiplied by 5, then find the new variance.

Q8. Find the ratio in which the line segment joining the points (4, 8, 10) and (6, 10, –8) is divided by YZ-plane.

Q9. Find equation of parabola whose focus is at (0, –3) and directrix is y = 3.

Q10. Solve $-5 \leq \frac{5 - 3x}{2} \leq 8$

SECTION-B

Q11. Find co-ordinates of the foci and the vertices, the eccentricity and the length of the latus rectum of curve $49y^2 - 16x^2 = 784$.

Q12. Two lines passing through the point (2, 3) intersect each other at an angle of 60°. If slope of one line is 2, find the equation of the other line.

Q13. Evaluate $\lim_{x \to \pi/2} \frac{\cot x - \cos x}{(\pi - 2x)^3}$

Q14. If 4-digit number greater than 5000 are randomly formed from the digits 0, 1, 3, 5 and 7, what is the probability of forming a number divisible by 5 when the repetition of digits is not allowed?

Q15. (i) If the equations of the two diameters of a circle are $x - y = 5$ and $2x + y = 4$ and radius of the circle is 5 units, find equation of circle.

(ii) Find the equation of the circle which touches both the axes in 1st quadrant and whose radius is 5.

Q16. Of the members of three athletic teams in a certain school, 21 are in the basketball team, 26 in hockey team and 29 in the football team, 14 play hockey and basketball, 15 play hockey and football, 12 play football and basketball and 8 play all the three games. How many members are there in all?

Give two points to state importance of sports in a students life.

Q17. Find the domain and range of the real valued function

$$f(x) = \frac{3}{2 - x^2}$$

Q18. Using the principle of mathematical induction for all $n \in N$, prove that $n(n+1)(n+5)$ is a multiple of 3.

Q19. Find the general solution of the equation

$\sin x + \sin 3x + \sin 5x = 0$.

Q20. Find the number of ways of selecting 4 cards from a pack of 52 playing cards? In how many of these

(i) four cards belong to four different suits,

(ii) cards are of the same colour?

Justify the statement – Playing cards for money is not good for society.

Q21. Find the co-efficient of x^5 in the product $(1 + 2x)^6 (1 - x)^7$ using binomial theorem.

Q22. Show that the points A (3, 3, 3), B (0, 6, 3), C (1; 7, 7) and D (4, 4, 7) are the vertices of a square.

SECTION-C

Q23. Solve the given system of inequalities graphically and write vertices of the solution region.

$x + 2y \leq 10$

$x + y \geq 1$

$x - y \leq 0$

$x, y \geq 0$

Q24. Prove that

(i) $$\frac{\sin A + \sin 3B + \sin 5A + \sin 7A}{\cos A + \cos 3A + \cos 5A + \cos 7A} = \tan 4A$$ (3)

(ii) In any triangle ABC,

$a \sin (B - C) + b \sin (C - A) + c \sin (A - B) = 0$ (3)

Q25. Find derivatives of the following functions with respect to x.

(i) $\dfrac{px^2 + qx + r}{(ax + b)^2}$ (3)

(ii) $\tan x\,(ax^2 + \sin x).(p + q \sec x)$. (3)

Q26. Find the image of the point (3, 8) with respect to the line $x + 3y = 7$, assuming the line to be a plane mirror.

Q27. Prove that the sum to n terms of the series

$$11 + 103 + 1005 + \ldots \text{ is } \frac{10}{9}\left(10^n - 1\right) + n^2$$

Q28. Calculate the mean and standard deviation of the given distribution using any method.

Marks	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Number of student	3	6	13	15	14	5	4

Q29. If the co-efficients of a^{r-1}, a^r and a^{r+1} in the expansion of $(1+a)^n$ are in arithmetic progression, prove that

$$n^2 - n(4r + 1) + 4r^2 - 2 = 0$$

SUBJECT : MATHEMATICS (SET-II)

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

General Instructions :

(i) Read all questions carefully.

(ii) All questions are compulsory.

(iii) The question paper consists of 29 questions divided into three sections - A, B and C.

(iv) Section-A, comprises of 10 questions of 1 mark each. Section-B, comprises of 12 questions of 4 marks each, Section-C, comprises of 7 questions of 6 marks each .

(v) Use of calculators is not permitted.

SECTION-A

Q1. If U = {1, 2, 3, 4, 5, 6, 7, 8, 9}, A = {1, 2, 3, 4}, B = {2, 4, 6, 8}. Find (A – B)'.

Q2. Let R = {(x, x^3) : x is prime, $x < 8$}. Write the relation R in roster form.

Q3. If $\sin x = \frac{3}{5}$ $\cos y = \frac{-12}{13}$, where x and y both lie in second quadrant, find the value of $\sin (x + y)$.

Q4. Find the least positive integral value of m for which $\left(\frac{1+i}{1-i}\right)^m = 1$.

Q5. The sum of an infinite GP is $\frac{80}{9}$ and its common ratio is $\frac{-4}{5}$. Find its first term.

Q6. If E and F are events such that $P(E) = \frac{1}{4}$, $P(F) = \frac{1}{2}$, and $P(E \text{ and } F) = \frac{1}{8}$, Find P (not E and not F).

Q7. Find the distance of point (2, –3, 4) from x-axis.

Q8. Find the slope of the line, which makes an angle of 30° with the positive direction of y-axis measured anti-clockwise.

Q9. Find the equation of a circle with centre (h, k) and touching the y-axis.

Q10. Solve the inequation $-3 \leq 3 - 2x < 9$, $x \in R$.

SECTION-B

Q11. Find the equation of the ellipse whose centre lies at origin, major axis lics on x-axis, the eccentricity is $\frac{2}{3}$ and the length of the latus rectum is 5 units.

Q12. Find the equation of the line passing through the intersection of the line $x + 2y + 3 = 0$ and $3x + 4y + 7 = 0$ and parallel to the line $y - x = 8$.

Q13. Evaluate $\lim_{x \to \pi} \frac{\sin 3x - 3\sin x}{(\pi - x)^3}$.

Q14. 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) exactly 3 Kings

Playing cards for money is a bad habit justify. (3+1)

Q15. Find the coordinates of the points which trisect the line segment joining the points P (4, 2, –6) and Q (10, –16, 6).

Q16. Prove by Principle of Mathematical Induction

$$\frac{1}{1.4}+\frac{1}{4.7}+\frac{1}{7.10}+\ldots..+\frac{1}{(3n-2)(3n+1)}=\frac{n}{3n+1}$$

Q17. Find the equation of the circle which passes through the centre of the circle $x^2+y^2+8x+10y-7=0$ and concentric (same centre) with the circle $2x^2+2y^2-8x-12y-9=0$.

Q18. Find the domain and range of the real function

$$f(x)=\frac{1}{1-x^2}$$

Q19. A T.V. survey gives the following data for T.V. watching; 60% watch program A, 50% watch program B, 47% watch program C, 28% watch programs A and B, 23% watch programs A and C, 18% watch programs B and C, 8% watch programs A, B and C. Draw Venn diagram to illustrate this information.

(i) Find how many percentage of people do not watch any program.

(ii) Write one advantage of media in day to day life.

Q20. In any triangle ABC, prove that

$$\frac{(a-b)}{c}\cos\frac{C}{2}=\sin\frac{(A-B)}{2}$$

Q21. Find the number of arrangements which can be made from the letters of the word NEWSPAPER such that

(i) there is no restriction

(ii) all vowels are together

Newspaper reading enhances knowledge. Give two reasons.

Q22. Find the coefficient of a^4 in the product $(1+2a)^4(2-a)^5$ using binomial theorem.

SECTION-C

Q23. (i) Prove that

$$\cos 2x \cos\frac{x}{2} - \cos 3x \cos\frac{9x}{2} = \sin 5x \sin\frac{5x}{2}$$

(b) Find the general solution of the equation

$\sec^2 2x = 1 - \tan 2x$.

Q24. Find the sum of the following series up to n-terms.

$$\frac{1^3}{1} + \frac{1^3+2^3}{1+3} + \frac{1^3+2^3+3^3}{1+3+5} + \ldots\ldots$$

Q25. Show that the middle term in the expansion of $(1+x)^{2n}$ is

$\frac{1.3.5.....(2n-1)}{n!}\ 2^n x^n$, where n is a positive integer.

Q26. Differentiate following functions

(i) $\left(\sqrt{x} + \frac{1}{x}\right)\left(x - \frac{1}{\sqrt{x}}\right)$

(ii) $\frac{a + b\cos x}{\sin x}$

Q27. Calculate mean, variance and standard deviation for the following frequency distribution.

class	0-30	30-60	60-90	90-120	120-150	150-180	180-210
frequency	2	3	5	10	3	5	2

Q28. Find equation of the line which is equidistant from parallel lines $9x + 6y - 7 = 0$ and $3x + 2y + 6 = 0$.

Q29. Solve the given system of inequalities graphically and write vertices of the solution region.

$x + 2y \leq 10$

$x + y \geq 1$

$x - y \leq 0$

$x, y \geq 0$

XI

AE-F 20|2/2013

SUBJECT : COMPUTER SCIENCE (SET-I)

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

General Instructions :

i) All questions are compulsory.

ii) Programming Language : C++

Q1. (a) Distinguish between Software and Hardware. (2)

(b) Write a short note on the programming in low level language. (1)

(c) What is the significance of Task bar? (1)

(d) Find the eight-bit two's complement of $(-119)_{10}$ (2)

(e) Convert $(4716)_8$ to hexadecimal. (2)

(f) Convert $(1011011)_2$ to decimal. (1)

(g) What is ROM? (1)

Q2. (a) Write a short note on the Modular programming. (1)

(b) What is polymorphism? Explain with an example. (2)

(c) What is meant by Encapsulation? (1)

(d) How are keyword different from identifiers? Explain with an example. (2)

(e) What will be the size of following constants : "Sachin Tendulkar", "T", "\t", 't'. (2)

(f) What is the difference between logical error and semantic error? Give one example of each. (2)

Q3. (a) What do you mean by user defined data types? How many user defined data types does C++ provide? (2)

(b) Write a program to input any number and to print Square of that number. (2)

(c) What do you understand by the following :

(i) Pointer (ii) references (2)

(d) Discuss any two operator and their types with example. (2)

(e) State why are following expressions invalid?

(i) age > 70 && < 90

(ii) income > = 5000 || && val < 500 (2)

Q4. (a) Differentiate between break and exit( ) statement. (1)

(b) What is an Iteration Statement? Which iteration statements does C++ provide? (2)

(c) What is the use of "break" statement in switch statement? Explain with an example. (2)

(d) Write 'do...while' loop that displays the numbers from 100 to 200. (2)

(e) Write a program to find the sum of the following series $\frac{x}{1!} - \frac{x^3}{3!} + \frac{x^5}{5!}$..... n terms (3)

Q5. (a) Name the header files, to which following built-in functions belong to :

(i) setw ( ) (ii) toupper ( )

(iii) strcpy ( ) (iv) cos ( ) (2)

(b) Write a program to input any string and to count the number of letter 'P' exists in the string. (3)

(c) Explain the following with example :

(i) Local Scope (ii) Class Scope (2)

(d) What do you understand by call by value? Explain with an example. (2)

(e) What is actual parameter? Explain with an example. (1)

Q6. (a) Write a program to input n numbers and to arrange all numbers in ascending order. (3)

(b) Write a program to input any matrix with m rows and n columns and to print lower triangle matrix. (3)

(c) Details of 50 clients of an investment company are stored in an array of structures. Details include customer name, code, date of starting, number of years, interest rate, and total amount. Write a program to calculate compound interest for these clients. (4)

Q7. (a) What is the error in the following structure definition?

```
struct  {int day, month, year;
        } bdate;
          bdate jdate, rdate;
```
(1)

(b) Write a program to find difference between two complex numbers using function. (4)

(c) Give the output of the following program :

```
# include<iostream.h>
struct pixel
{     int C, R;
};
void Display (pixel P)
{
     cout<<"col"<<P.C<<"Row"<<P.R<<endl;
```
(3)

```
}
void main ( )
{     pixel   X = { 40, 50 }, Y, Z;
      Z = X;
      X · C + = 10;
      Y = Z;
      Y · C + = 20;
      Y · R + = 20;
      Z · C – = 15;
      Display (X);
      Display (Y);
      Display (Z);
}
```

(3)

(d) Explain nested structure with an example. (2)

(4)

XI

AE-F 20/2/2013

SUBJECT : COMPUTER SCIENCE (SET-II)

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

General Instructions :

i) All questions are compulsory.

ii) Programming Language : C++

Q1. (a) Distinguish between input unit and output unit. (2)

(b) Write a short note on the programming in high level language. (1)

(c) What is the significance of Recycle Bin? (1)

(d) Convert $(2C9)_{16}$ to decimal. (1)

(e) Convert $(ABCD)_{16}$ to Octal. (2)

(f) Find the eight-bit two's complement of $(-121)_{10}$ (2)

(g) What is RAM? (1)

Q2. (a) Write a short note on Procedural Programming. (1)

(b) What is inheritance? Explain with an example. (2)

(c) What is meant by Abstraction? (1)

(d) What are tokens in C++? Write all types of tokens allowed in C++. (2)

(e) What will be the size of following constants : "Mona Singh", "a", '\n', 'n'. (2)

(f) What is the difference between run-time error and syntax error? Give one example of each. (2)

Q3. (a) What do you mean by derived data types? How many derived data types does C++ provide? (2)

(b) Write a program to input any number and to print Square root of that number. (2)

(c) What do you understand by a class in C++? Explain with an example. (2)

(d) Discuss any two operators and their types with example. (2)

(e) State why are following expressions invalid?

(i) asm = 5100 || val < 35

(ii) res ! > 20 || ! x > 20 (2)

Q4. (a) Differentiate between while and do...while loop in C++ language. (2)

(b) What is Selective Statement? Which selective statements does C++ provide? (2)

(c) What is the use of default statement in switch statement? Explain with an example. (2)

(d) Write a 'for loop' that displays that numbers from 100 to 200. (1)

(e) Write a program to find the sum of the following series $\frac{x}{1!} - \frac{x^3}{3!} + \frac{x^5}{5!} \ldots\ldots$ n terms (3)

Q5. (a) Name the header files, to which following built-in functions belong to :

(i) isalnum ( ) (ii) gets ( )

(iii) fabs ( ) (iv) strlen ( ) (2)

(b) Write a program to input any string and to count the number of letter 't' exists in the string. (3)

(c) Explain the following with example :

(i) Function Scope (ii) File Scope (2)

(d) What do you understand by call by reference? Explain with an example. (2)

(e) What is formal parameter? Explain with an example. (1)

Q6. (a) Write a program to input n numbers and to arrange all numbers in descending order. (3)

(b) Write a program to input any matrix with m rows and n columns and to print upper triangle matrix. (3)

(c) An array stores details of n students (roll no, name, marks in five subjects). Write a program to create such an array and print out a list of students who have failed in more than one subject. Assume 40% as pass marks. (4)

Q7. (a) What is the error in the following structure definition?

```
struct   {int day, month, year;
         } bdate;
           bdate jdate, rdate;
```
(1)

(b) Write a program to find sum of two distances with feet and inches using function. (4)

(c) Give the output of the following program :

```
# include <iostream.h>
struct point
{     int X, Y;
};
void Show (point P)
{
      cout<<P.X<<':'<<P.Y<<endl;
}
void main ( )
{     point   U = { 20, 10 }, V, W;
```

(3)

```
V = U;
V . X + = 20;
W = V;
U . Y + = 10;
U . X + = 5;
W . X – = 5;
Show (U);
Show (V);
Show (W);
}
```

(3)

(d) Explain nested loop with example. (2)

(4)

SUBJECT : ENGLISH (SET-I)

Time : 3 Hrs. **M.M.: 80**

General Instructions :

1. ***This paper is divided into four sections, A, B, C and D.***
2. ***All the sections are compulsory.***
3. ***Separate instructions have been given for each section and each question. Read them carefully and follow them meticulously.***
3. ***Do not exceed the prescribed word limit.***

SECTION-A (READING)

Q1. Read the following passage carefully : (8 marks)

1. A piano teacher described an interesting encounter she had with a young lady who came to inquire about music lessons. The young lady asked her, "How long will this course take? My father tells me that it is in fashion now to be able to play musical instruments and that I should learn one quickly. I want something that will be quick, fast and easy like, like ...." When the amused teacher explained that it would take a lifetime of meticulous practice to learn music, her face fell and, needless to say, she never returned.
2. The single most important factor that distinguishes those of us who succeed in any venture and those of us who don't, is this 'instant coffee' attitude. Most of us want results quickly. We want to reach the top immediately and get worked up when things go wrong. Perseverance and patience are forgotten words. We get upset, frustrated and angry when a skill or activity requires us to put in a lot of effort and time. We get dejected and want to give it up. Things should be easy. Why should things take long? It is unfair!
3. Life is too short and there is not enough time to do all the things we want to. We tend to compare with others and get upset when they seem to be doing well – dismissing their achievement as pure luck, or think that they have support, help, approach ... that God is being too kind to them and not to us. And so we give up.
4. But such thinking serves no good. For, it doesn't solve the problem. Life is tough for those with the 'instant coffee' attitude. Success, real success and happiness come to those who have a 'bread-making' attitude. Those who are willing to knead the dough, wait for hours for it to rise, only to punch it down and knead some more, wait for another couple of hours for it to rise again, then bake it before it is ready to be eaten. Nothing is instantaneous. For every endeavour—whether in the area of career, academics, music, sports, relationships, physical fitness, or even in spirituality—it is a long arduous journey.
5. Only if we are willing to put in the time, painstaking effort and have faith, can we get results. If we don't accept this difficult-but-true fact of life, our lives will be far from being happy and fulfilling. For we may not make that extra effort which can change the course of life dramatically, for the good.
6. The major problems with these 'instant coffee' solutions are that they are invariably shortlived. If we stubbornly refuse to give up this search for quick solutions, all we do is end up on the wrong track. We never gain anything lasting from them. However, if we just pause to analyse what we are doing, we will realise how much time we are wasting searching for such magical solutions which simply do not exist. We actually save time when we stop this futile search and accept the proven methods of treading the straight and narrow, however difficult it may seem initially.

(a) On the basis of your reading of the passage, answer the following questions :

(i) Why did young lady wishing to learn piano not go back to the piano teacher? (2)

(ii) What does 'instant coffee' attitude mean? (1)

(iii) Mention two important qualities that a person with 'bread making' attitude has. (1)

(iv) What causes a person with 'instant coffee' attitude to get upset or dejected? (1)

(b) Find words from the passage which mean the same as : (3)

(i) be persistent/refuse to stop/continuous efforts (para 2)

(ii) effort to the point of exhaustion/tiring (para 4)

(iii) obstinately/strictly (para 6)

Q2. Read the following passage carefully : (7 marks)

1. We need money to survive, to be comfortable, to indulge and enjoy ourselves. Even as children, though not earning ourselves, we seek pocket money from parents. The more the money, more the purchasing power. Not surprisingly, money is the single most sought after commodity today.

2. To acquire wealth, however, one needs knowledge. The main purpose of education is to acquire knowledge that prepares you to face life and help build your character. If the only purpose of knowledge acquisition is to earn money, then education is narrowed down to the knowledge required for only a low level of subsistence.

3. Broader and deeper knowledge has several advantages over material wealth. Knowledge can be used to make money, but it cannot really be purchased with money, it is acquired by individual effort. Worldly wealth is limited, knowledge is unlimited. Knowledge cannot be taken away or stolen. It is not burdensome to carry and it causes no anxiety. Safeguarding one's costly Worldly possessions could be a source of immense anxiety. Wealth could diminish but knowledge increases when shared. A man of wealth is respected only till he possesses it; an erudite person is respected even long after he is no more.

4. The Mundaka Upanishad speaks of two kinds of knowledge; 'apara vidya' or lower knowledge acquired by study of the Vedas, rituals and astrology for one's well being in the material world, and 'para vidya' or higher knowledge, knowledge of the imperishable Being or God. One of the three main paths to be followed to attain liberation is jnana-yoga, or union with God through knowledge.

5. Krishna says in the Bhagavad Gita : "Realisation and competence gained through spiritual practices are never lost." Material wealth is an impediment for a seeker of "para-vidya', because it is a source of obstruction. As Krishna says : "He on whom I want to bestow My grace, I slowly deprive him of all his wealth."

(a) On the basis of your reading of the above passage, make notes on it, using headings and sub-headings. Also use recognizable abbreviations wherever necessary. Supply a suitable title to the notes. (5)

(b) Write the summary of the above passage in about 80 words. (2)

SECTION-B (WRITING)

Q3. These days a lot of accidents occur due to negligence of traffic rules. People must strictly adhere to safety norms. On behalf of the Delhi Traffic Police, design a poster on the theme 'Road Safety'. (4)

OR

You are Aakash/Varsha. You have been invited to attend the wedding of your friend's sister in the month of March. Respond to the invitation, regretting your inability to attend it.

Q4. You are Rajat/Radhika, President, Health Club of Blossom Public School, Delhi. You recently attended an Asthma Care Camp organised by Sanjay Gandhi Memorial Hospital, Delhi. Write a factual description of the same in about 100-125 words. (6)

OR

There were many vacant spaces in your colony which were lying unattended and uncared for. You and your friends decided to beautify and develop those areas into green parks or playgrounds for the benefit of all. With almost no money and lots of enthusiasm of the children of the colony, your project became a roaring success. You have been approached by a local newspaper to share your success story. Write the report in 100-125 words for Chandigarh Times.

Q5. You are Avinash/Avantika. You recently came across an advertisement in the 'Hindustan Times' for the post of Marketing Manager at M/s K.L. Cloth House. Write the application for this job with complete biodata. (7)

OR

In corporate offices people are exposed to long and stressful hours sitting before their computers. This has given rise to health related problems. As a concerned citizen, write a letter to the Editor of a national daily highlighting some of the health hazards to which the individuals are exposed. Also suggest suitable measures that an organisation can take to ensure their employees' welfare. You are Meghna/Mukul.

Q6. You are Manish/Mansi. Many of your friends receive expensive gifts from their parents but not the attention and time of their parents. Write an article for your school magazine urging all the parents to give more time and moral support to their children, especially the adolescent. Also stress on how a secure home atmosphere plays a key role in promoting success in life (150-200 words). (8)

OR

You an Malik/Malika. You are concerned about the poor quality of the unhygienic food supplied at some of the fast food centres in your locality, which is highly detrimental to health. Write an article for a national daily on this issue highlighting the health hazard that may be caused (150-200 words).

SECTION-C (TEXT BOOKS)

Q7. Read the lines given below and answer the questions that follow : (3 marks)

"When did my childhood go?
Was it the day I ceased to be eleven,
Was it the time I realised that Hell and Heaven,
Could not be found in Geography,
And therefore could not be,
Was that the day!"

(a) What does the question in line 1 mean? (1)

(b) Why does the poet feel that Hell and Heaven are not real places? (1)

(c) Where can the poet find his childhood? (1)

OR

"And forever, by day and night, I give back
life to my own origin,
And make pure and beautify it;
(For song, issuing from its birth-place,
after-fulfilment, wandering
Reck'd or unreck'd, duly with love returns)."

(a) In what manner does the rain help its own origin? (1)

(b) Why has the poet given the life-cycle of the song? (1)

(c) Explain – 'And make pure and beautify it.' (1)

Q8. Answer the following questions in about 30-40 words each : (2x2=4)

(a) Which incident has been captured in the snapshot? (A Photograph)

(b) How does the poet bring out the helplessness of the father in the poem? (Father to Son)

Q9. Answer *any three* questions from the questions given below : (2x3=6)

(a) Describe how the grandmother spent her time while the narrator sat inside the village school. (The Portrait of a Lady)

(b) How has the concept of sustainable development been defined? (The Ailing Planet)

(c) What does the narrator tell the reader about his village Hosahalli? (Ranga's Marriage)

(d) Why did the king order that the chief of builders should be hanged? (The Tale of Melon City)

Q10. Attempt *any one* of the following questions in 125-150 words : (7)

How did the children's presence and behaviour during the crisis affect the narrator? ("We're not afraid to die ...")

OR

What stratagem (plan) did Einstein devise to stay away from school? How far did he succeed? (Albert Einstein at School)

Q11. Monuments, buildings, tombs connect us to the past and its glories. People do visit these places but only to enjoy. They do not bother about preserving the beauty of the building, thus spoiling it, writing on it, scribbling, turning the premises into a garbage bin. Write an article for a newspaper highlighting the need to care about and preserve the precious historical monuments (word limit – 100 words). (5)

SECTION-D (LONG READING TEXT)

Q12. What did Mr. Otis find at the place where the gypsies had pitched their tents? Where were the gypsies finally found? Did they know about the whereabouts of Virginia? (8)

Q13. Write a pen-portrait of Sir Simon, the ghost. (7)

XI

AE-F 2/2013

SUBJECT : ENGLISH (SET-II)

Time : 3 Hrs. **M.M.: 80**

General Instructions :

1. ***This paper is divided into four sections, A, B, C and D. All the sections are compulsory.***
2. ***Separate instructions are given with each section and question, wherever necessary. Read the instructions carefully and follow them meticulously.***
3. ***Do not exceed the prescribed word limit while answering the questions***

SECTION-A (READING)

Q1. Read the passage given below and answer the questions that follow : (8 marks)

1. It was a great shock for me to discover that I had motor neuron disease. I could hardly ever well co-ordinate physically as a child and wasn't even good at ball games. May be for this reason, I didn't care much for sports or physical activities. My handwriting was the despair of my teachers. But things seemed to change when I went to Oxford, at the age of 17, where I took up coxing and rowing. Though I was not of Boat Race standard, but I got by the level of inter-college competition.

2. In my third year at Oxford, however, I noticed that I seemed to be getting more clumsy and fell over once or twice for no apparent reason. But it was not until I was at Cambridge, in the following year, that my father noticed and took me to the family doctor. He referred to me a specialist and shortly after my 21st birthday I went into hospital for tests. Although, there was a cloud hanging over my future yet I found, to my surprise, that I was enjoying life in the present more than before. I began to make progress with my research and I got engaged to a girl named Jane Wilde whom I had met just about the time my condition was diagnosed. That engagement changed my life. It gave me something to live for. But it also meant that I had to get a job if we were to get married. I, therefore, applied for a research fellowship at Gonville and Cains College, Cambridge. To my great surprise I got the fellowship. My ability to feed myself and get in and out of bed lasted until I caught pneumonia, in 1985, as a consequence of which I had to have a tracheotomy operation.

3. Before the operation my speech had been getting so slurred that only few people who knew me well could understand me. But at least I could communicate. I wrote scientific papers by dictating to a secretary and I gave seminars through an interpreter who repeated my words more clearly. However, the tracheotomy operation removed my ability to speak altogether. For some time, the only way I could communicate was to spell out words letter by letter by raising my eyebrows when someone pointed to the right letter on a spelling card. It was pretty difficult to carry on a conversation like that, let alone write a scientific paper. However, a computer expert in California, named Walt Woltosz, heard of my plight. He sent me a computer programme, called Equalizer, he had written. This allowed me to select words from a series of menus on the screen. It could be easily done by pressing a switch in my hand. The programme could also be controlled by a switch operated by head or eye movement. When I had built up what I wanted to say, I could send it to a speech synthesizer. At first, I just ran the Equalizer programme on a desktop computer.

4. However, David Manson, of Cambridge Adaptive Communication, fitted a small portable computer and a speech synthesizer to my wheel chair. This system allowed me to communicate much better than I could before. I could manage upto 15 words a minute. I could either speak what I had written or save it to disk. I could then print it out, or call it back and speak it sentence by sentence. Using this system I had written a book and dozens of scientific papers. I had also given many scientific and popular talks which had been well received. I think that was in a large part due to the quality of the speech synthesizer which was made by Speech Plus.

"One's voice is very important. If you have a slurred voice, people are likely to treat you as mentally deficient." This synthesizer was the best I had ever heard of because it varied intonation. The only trouble was that it gave me an American accent.

5. I had had motor neuron disease for practically all my adult life. Yet it never prevented me from having a very attractive family and being successful in my work. For this I am grateful to the help I had received from Jane, my children and a large number of people and organisations. I had been lucky that my condition progressed more slowly than is often the case. But this shows that one need not lose hope.

(Adapted from Stephen Hawking's Autobiography)

(a) On the basis of your reading of the above passage, answer the given questions :

(i) What symptoms of the disease were obvious during the early period of Stephen Hawking's life? (1)

(ii) What was the major side effect of tracheotomy operation? How did he try to overcome it? (2)

(iii) How did Hawking's engagement to Jane change his life? (1)

(iv) How did the Equalizer help Stephen Hawking in better communication? (1)

(b) Pick out the words from the passage which mean the opposite of : (3)

(i) hope (para 1)

(ii) smooth and clear (para 3)

(iii) cumbersome (para 4)

Q2. Read the passage given below : (7 marks)

The whole movement of man's life is towards greater freedom. As a child grows up, his dependence upon his parents and family progressively diminishes, while his freedom and self-reliance increases all the time. The goal of life seems to be headed in direction of complete liberty. But what do we understand by the word Freedom? Freedom only means the capability of self-Government. For the highest function of freedom is to make us capable of governing ourselves. Nietzche says, "He who cannot obey himself will be commanded". Freedom does not mean liberty to do anything that one pleases. Freedom has no meaning without responsibility, for only the responsible can be truly free.

All development is a process whereby we learn how to make the right choices. Hence it won't be far from truth to say that all values are created in freedom. And what, one may ask, is the purpose of freedom? The purpose of freedom is only one – it is perfection. The entire process of time and development is from the less to be more perfect whether it be in moral, ethical, physical or spiritual perfection. Freedom is the necessary condition in which the ideals of perfection may be realised. Complete freedom of choice means complete freedom to do what you want to do – and is the only means of self-realisation. The fully realised being is the highest ideal, not only because he fulfills himself but also because being fully realised, he helps others to achieve their true potential.

Freedom, rather than meaning unrestricted licence, means total self-discipline for discipline alone gives us freedom. Discipline is the means of achieving that which a free mind has evolved. It is not an obstruction to freedom but a passage to it. Discipline means order while freedom may exist in chaos and nothing worthwhile can be achieved where there is disorder and anarchy. So give up all ideas you have that freedom means doing anything that you fancy, for if you fancy disorder you are not free but bound. Know that only he has liberty who has control, only he has speed who has brakes, only he must fly who can land, only he must start who can stop. Liberty without control is a car without brakes. It will crash.

(A) On the basis of your reading of the above passage, make notes on it using headings and sub-headings. Use recognizable abbreviations wherever necessary. Supply a suitable title to the notes. (5)

(B) Write the summary of the above passage in about 80 words. (2)

SECTION-B (WRITING)

Q3. You are Pradeep/Asha. As President of the Dramatics Club of your school you have organized an inter-school competition in one-act plays on the occasion of the Silver Jubilee Celebrations of your school. Write a notice in about 50 words, informing the students of your school about the proposed event. (4)

OR

RKD Financial Services Ltd, 91, Nehru Place urgently requires a Company Secretary for its corporate office. Write out an advertisement for a walk-in-interview to be published in the classified columns of a local newspaper.

Q4. You are a press reporter. Recently Delhi reeled under heavy fog for 22 days. This resulted in cancellation of many trains and flights. Passengers were stranded at the Indira Gandhi International Airport. Write a report for a National Daily in 100-125 words highlighting the plight of the stranded passengers. (6)

OR

You went on a trip to a hill station with your friends during summer vacation. Describe your experience of hiking and trekking in about 100-125 words.

Q5. You are Akhil/Karishma of 119, Mall Road, Shimla. You are interested in doing a short-term course in computer programming during your summer vacation. Write a letter to the Director of Computer World, Sector-22, Chandigarh enquiring about the duration of such a course and the terms and conditions for admission. (7)

OR

Draft an application for the post of an accountant in Pioneers Co. Pvt. Ltd., Hyderabad in response to their advertisement that appeared in The Times of India. Prepare a biodata to be enclosed. You are Nipun/Aparna.

Q6. Meenakshi, a student of Class XI feels highly disturbed when she reads about the hike in the prices of essential commodities like gas, pulses, vegetables etc. Write an article on 'Price-hike of Essential Commodities' for publication in a local daily, suggesting certain steps to curb this menace. (8)

OR

The Information Technology has provided new avenues to the students for knowledge, creativity, discovery as well as job opportunities at home and abroad. Computers have brought in silent revolution. Write an article in about 150 words showing how information technology has provided the younger generation new opportunities, joys of discovery and thrill of creativity. You are Madhu/Mudit.

SECTION-C (TEXT BOOKS)

Q7. Read the lines given below and answer the questions that follow : (3)

"See Betty
And Dolly," she'd say, "and look how they
Dressed us for the beach." The sea holiday
Was her past, mine is her laughter.

(a) How did the mother respond whenever she looked at the snapshot? (1)

(b) Explain : "The sea holiday was her past". (1)

(c) Why is the mother's laughter 'past' for the narrator? (1)

OR

Yet have I killed
The seed I spent or sown it where
The land is his and none of mine?
We speak like strangers, there's no sign
Of understanding in the air.
This child is built to my design
Yet what he loves I cannot share.

(a) Explain : 'Yet have I killed the seed I spent.' (1)

(b) Why do you think 'they' behave and speak like strangers? (1)

(c) What do you understand by 'This child is built to my design'? (1)

Q8. Answer the following questions in about 30-40 words each : (2x2=4)

(a) Why does the poet criticise the adults in the poem 'Childhood'?

(b) How do the rain and the song achieve fulfilment? (The Voice of the Rain)

Q9. Answer any three questions from the questions given below : (2x3=6)

(a) Who was King Tut? What made him a matter of discussion among the historians and archeologists?

(b) What did the narrator, of the story 'We're not Afraid to Die...', do to prepare himself for the long sea voyage?

(c) What did Mrs. Fitzgerald and Mrs. Pearson decide to do? Why?

(d) How was the History teacher's opinion about Albert different from the Maths teacher?

Q10. Answer any one of the following questions in 125-150 words : (7)

How has the world population grown during the last three centuries? How does this problem threaten the survival of mankind? (Ailing Planet ...)

OR

Why did the narrator of the story "The Address" want to forget the address?

Q11. "For the first time in human history, there is a growing worldwide consciousness that the earth itself is a living organism having its own metabolic needs and vital processes that need to be respected and preserved." In the light of the above statement write a letter to the Editor highlighting how a new world vision has ushered in the Era of Responsibility on the inhabitants of the planet. Also talk about the preventive measures which could be taken to stabalise its deteriorating health. (5)

SECTION-D (LONG READING TEXT)

Q12. Why did Mr. Otis request Lord Canterville to accept the jewels? What was Lord Canterville's reply? (150 words) (8)

Q13. Describe the character traits of Virginia. (150 words) (7)

AE-F 15/2/2013

SUBJECT : PHYSICAL EDUCATION

Time : 3 hrs. **M.M.: 70**

General Instructions :

(1) All questions are compulsory.

(2) Question paper carries A & B two parts.

(3) Answer to question carrying 1 mark should be in approximately 30 words.

(4) Answer to question carrying 2 mark should be in approximately 60 words.

(5) Answer to question carrying 3 mark should be in approximately 100 words.

(6) Answer to question carrying 5 mark should be in approximately 150-200 words.

PART-A

Q1. Define Physical Education. (1)

Q2. What is Friction? (1)

Q3. What do you mean by Professional ethics? (1)

Q4. What do you mean by stress? (1)

Q5. What is Olympic Motto? (1)

Q6. Define Sports Sociology. (1)

Q7. What do you mean by Force? (1)

Q8. What do you mean by occupational health hazards? (1)

Q9. Name any four disciplines of physical education and explain any one of them. (2)

Q10. Discuss in brief about health related careers. (2)

Q11. Discuss any two official agencies working in the field of community health programmes. (2)

Q12. Elucidate the objective of modern Olympic games. (2)

Q13. Write a short note on "Games and Sports" as man's cultural heritage. (2)

Q14. Explain the qualities of a leader in the field of physical education. (3)

Q15. Discuss the administration of AAPHERD youth physical fitness test. (3)

Q16. Discuss the functions of circulatory system. (3)

Q17. Explain any six principles of adapted physical education. (3)

Q18. Discuss the effects of exercises on muscular system. (5)

Q19. Enlist the factors affecting physical fitness and explain any eight factors. (5)

Q20. Explain any five ethical values which are required by professionals of physical education. (5)

Q21. Explain the effects of Alcohol, Tobacco and Drugs on sports performance. (5)

OR

What do you mean by BMI? Calculate the BMI if the individual's body weight is 70 kgs and his height is 160 cms.

PART-B

Answer the questions 22-24 from one game/sport only.

Q22. Explain any four important tournament of the game/sport of your choice. (2)

Q23. Explain any three fundamental skills of the game/sports. (3)

Q24. Draw a neat and clean diagram of the field/court/table of the game with all its measurements and specifications. (5)

Q25. Explain about soft-tissue injuries. (3)

Q26. Name the important National Sports Awards and explain any two of them. (4)

Q27. What are the aim and objectives of CBSE sports? (3)

XI Feb.

AE-F 29/2013

SUBJECT : ACCOUNTANCY (SET-I)

Time : 3 Hrs. **M.M.: 90**

Instructions :

(i) This question paper contains 25 questions.

(ii) Marks for each question are indicated against it.

(iii) Show the working notes wherever required.

(iv) All parts of a question should be attempted at one place.

Q1. Define Accrual Basis of Accounting. (1)

Q2. State one qualitative characteristic of accounting information. (1)

Q3. Explain Readymade Software. (1)

Q4. Rahul, the proprietor of M/s R.K. & Co. purchased an air conditioner and installed it at his residence. The payment was made by issuing a cheque from the account of M/s R.K. and Co. The accountant debited the drawings account with amount whereas Rahul is of view that it should be debited to the Fixed Assets. In your view, who is correct and why? Mention the value followed or violated in case above. (1)

Q5. If depreciation reduces profits, value of assets and also reduces capital of proprietor, then why do enterprises provide for depreciation? Which value is followed by enterprises in doing so? (1)

Q6. Briefly explain the causes of depreciation. (2)

Q7. Distinguish between Capital and Revenue Expenditure. (2)

Q8. Why are following parties interested in Accounting information (a) Investors (b) Government. (2)

Q9. Opening Stock ₹15,000, sales ₹48,000, carriage inward ₹3,000, sales return ₹3,000, gross profit ₹18,000, purchases ₹30,000, purchase return ₹2,700. Calculate the closing stock and the cost of goods sold. (2)

Q10. On the 28th March 2011 stocks worth ₹80,000 were destroyed by fire. The stock was insured and the insuran company admitted a claim of ₹60,000 only. Give the necessary journal entries and show how it will be treated in Final Accounts. (3)

Q11. Define International Financial Reporting Standards. Enumerate objectives of International Accounting Standard Board. (3)

Q12. Journalise the following transactions :

(a) Goods worth ₹500 given as charity.

(b) Interest charged on drawings @10% p.a. when total drawings were ₹20,000.

(c) Supplied goods costing ₹600 to Shakuntala. Issued invoice at 10% above cost less 5% Trade discount. (3)

Q13. Distinguish between manual and computerised accounting software. (3)

Q14. From the following information, calculate the amount of subscriptions outstanding as on 31st March 2009.

A club has 250 members each paying an annual subscription of ₹1,000. The Receipts and Payments Account for the year showed a sum of ₹2,65,000 received as Subscription. The following additional information is provided.

	₹
Subscription outstanding on 31st March 2008	40,000
Subscription received in advance on 31st March 2009	30,000
Subscription received in advance on 31st March 2008	12,000

(3)

Q15. Briefly explain the following :

(a) Business entity concept

(b) Money measurement concept (4)

Q16. Differentiate between Bill of Exchange and Promissory Note. (4)

Q17. Rama keeps his books under single entry system. His assets and liabilities were as under :

	31.3.2010	31.3.2011
Cash	1,000	900
Sundry Debtors	39,000	45,000
Stock	34,000	32,000
Plant and Machinery	60,000	80,000
Sundry Creditors	15,000	14,900
Bills Payable	–	5,000

During 2010-11, he introduced ₹10,000 as new capital. He withdrew ₹3,000 every month for his household expenses. Ascertain his profit for the year ended 31st March 2011. Charge Depreciation on Plant and machinery @10% p.a. assuming plant and machinery was purchased on 1.4.2010. (4)

Q18. Enter the following transactions in Purchase Book of Pawan Electric Store, New Delhi :

2011

Jan. 2 Purchased goods from Surya Electric Store, Chandni Chowk on credit (Invoice no. 480) :
200 Tubelights @ ₹50 each
50 Tables Fans @ ₹400 each
Trade Discount @ 15%

Jan. 10 Bought goods from New Light Traders, C.P. on credit (Invoice no. 2310)
20 Table fans @ ₹500 each
40 Ceiling fans @ ₹600 each
Trade Discount @ 20%

Jan. 20 Purchased goods from Ravindra Electric Co. Patel Nagar on credit (Invoice No. 1508)
120 dozen Bulbs @ ₹80 per dozen
20 Water heaters @ ₹120 each
Trade Discount @ 10%

Jan. 22 Bought from Sunny Lamp, Lajpat Nagar, for cash (Invoice no. 705)
5 Electric fans @ ₹175 each

Jan. 28 Bought from Fashion Furniture Co. Chitra Gupta Road, on credit (Invoice no. 3450)
12 Chairs @ ₹200 each
2 Tables @ ₹1,000 each

Q19. Enter the following transactions in a Cash Book with Ca and Bank columns :

2011		(₹)
Jan. 1	Bank overdraft	12,000
	Cash in hand	2,300
" 7	Cheque received from Ram	1,000
	Discount allowed	200
" 9	Cheque received from Ram deposited in Bank	
" 12	Cheque paid to Radha	2,500
" 15	Ram's cheque dishonoured	
" 20	Money withdrawn from Bank for office use	3,400
" 23	Fees of children paid by cheque	75
" 25	Cheque received from Hira and endorsed it to Sunita on 27th Jan.	4,500
" 27	Bank charges	20
" 31	Paid into Bank the entire Balance after retaining ₹100 at office	

Q20. Rohini Cement Limited purchased on 1st January 2001 plant for ₹80,000. On 1st April 2002 it purchased additior plant costing ₹48,000. On 1st September 2003 the pla purchased on 1st January 2001 was sold off for ₹42,0(and on the same date, fresh plant was purchased at tl cost of ₹75,000. Depreciation is provided at 10% per annu on the Diminishing Balance Method every year. Accoun are closed each year on 31st December. Show the Pla account for 3 years.

Q21. From the following particulars prepare a Bank Reconciliation Statement in the books of Sh. J.P. Kansal as on 30th June 2011 :

1. Balance as per Pass Book on 30th June 2011 ₹6,000.
2. Out of total cheques amounting to ₹37,500 drawn by Sh. Kansal, cheques aggregating ₹5,000 were encashed in June 2011, cheques aggregating ₹4,000 were encashed in July 2011 and the rest have not been presented at all.
3. Out of total cheques amounting to ₹12,000 deposited, cheques aggregating ₹7,500 were credited in June 2011, cheques aggregating ₹2,000 were credited in July 2011 and the rest have not been collected at all.
4. Bank has charged ₹27 as its commission for collecting outstation cheques and has allowed interest ₹330 on his bank balance.
5. A cheque of ₹1,200 was entered in Cash Book in June 2011 but was sent to the Bank in July 2011.
6. A cheque of ₹13,300 paid into the Bank was returned dishonoured but no information was received from the bank till 30th June 2011. (6)

Q22. Pass Journal entries to rectify the following errors :

(a) Goods amounting to ₹660 sold to W, were correctly entered in Sales Book but posted to W's Account as ₹760.

(b) Wages paid for the construction of office, debited to wages account ₹13,000.

(c) A cheque for ₹500 received from Ashok was dishonoured and has been posted to debit of Sales Return Account.

(d) Goods worth ₹130 returned by G, were entered in the Sales Book and posted therefrom to the credit of G's personal account.

(e) A sum of ₹370 owed by Ravi has been included in list of Sundry Creditors.

(f) An item of ₹500 relating to Prepaid Insurance Account was omitted to be brought forward from the previous year's books. (6)

Q23. From the following Trial Balance of M/s Arjun and Sons as on 31st Dec. 2008, prepare Trading and Profit and Loss Account and Balance Sheet.

Name of Accounts	Dv. (₹)	Cr. (₹)
Drawing and Capital	18,000	80,000
Purchases and Sales	82,600	1,55,000
Stock (1.1.2008)	42,000	
Return Outward		1,600
Carriage	1,200	
Wages	4,000	
Power	6,000	
Machinery	50,000	
Furniture	14,000	
Rent	22,000	
Salary	15,000	
Insurance	3,600	
8% Bank Loan		25,000
Debtors	20,600	
Creditors		18,900
Cash in hand	1,500	
	280,500	280,500

Adjustments :

(a) Closing stock was valued at ₹64,000.

(b) Wages outstanding ₹2,400.

(c) Bad debts ₹600 and provision for bad and doubtful debts to be 5% on debtors.

(d) Rent is paid for 11 months.

(e) Loan from bank was taken on 1st July 2008.

(f) Provide depreciation on machinery @10% p.a. (8)

Q24. Following is the Receipts and Payments Account of Modern Club, New Delhi for the year ending 31st December 2010.

Receipts & Payment Account

Receipts	₹	Payments	₹
To Balance b/d (on 1.1.2010)	2,300	By Match expenses	6,800
		By Rent	9,600
To Subscriptions	56,400	By Salaries	24,000
To Interest	300	By Sundry expenses	3,600
To Donation	6,000	By Investments Purchased	30,000
To Donations for Building Fund	50,000	By Newspaper	750
To Match fund	10,000	By Sorts equipment	32,000
To Miscellaneous receipts	430	By Balance c/d (on 31.12.2010)	18,780
To Sale of Grass	100		
	125,530		125,530

Subscriptions outstanding at the end of 2009 were ₹4,000 and at the end of 2010 were ₹6,000. Salaries outstanding on 31st December 2009 and on 31st December 2010 were ₹2,000 and ₹2,500 respectively.

On 31st December 2009, the club had Investments worth ₹12,000; Furniture ₹10,000 and Sports equipments valued at ₹20,000.

Prepare Income and Expenditure A/c for the year ended 31st Dec. 2010 and a Balance Sheet as on that date. (8)

Q25. On 1st January 2009, A received ₹25,000 in cash and two bills for ₹45,000 and ₹30,000 for 2 months each from B, duly accepted by the latter against sale proceeds. The first bill was endorsed to C in settlement of his account ₹45,500 and the second bill discounted from Bank @ 12% p.a. on the date of acceptance of bills. Both the bills were dishonoured on the due date. C has paid ₹100 and bank has paid ₹80 as noting charges. B paid ₹20,000 and noting charges in cash and accepted a new bill for balance at 3 months. The interest on balance @ 18% p.a. was paid in cash. On the due date of new bill, B became insolvent and nothing was recovered from his estate. Pass entries in books of Drawer. (8)

SUBJECT : ECONOMICS [SET-I]

Time : 3 hrs. **M.M. : 95**

General Instructions :

(i) All questions are compulsory.

(ii) Questions 1 to 5 and 16 to 20 are very short answer questions of 1 mark each. Answer to each of these should be written in one sentence.

(iii) Questions 6 to 9 and 21 to 25 are short answer type questions of 3 marks each. Answer to each of these should not exceed 60 words.

(iv) Questions 10 to 13 and 26 to 28 are also short answer questions of 4 marks each. Answer to each of these should not exceed 70 words.

(v) Questions 14 to 15 and 29 to 31 are long answer questions of 6 marks each. Answer to each of these should not exceed 100 words.

(vi) Attempt all parts of a question at one place.

SECTION-A (Statistics for Economics)

Q1. Which average will be suitable in the following cases: (1)

(a) When average size of readymade garments is to be determined.

(b) When average production in a factory per unit is to be determined.

Q2. List any one point of difference between primary data and secondary data. (1)

Q3. State any one mathematical property of arithmetic mean. (1)

Q4. Calculate coefficient of range if value of largest item is 30 and value of smallest item is 20. (1)

Q5. Give one point of difference between exclusive and inclusive method of classifying data. (1)

Q6. Tabulate the given data:

Town A : Males were 60%, Total tea drinks were 45% and Male non-tea drinkers were 20%.

Town B : Males were 55%, Female tea drinkers were 15% and Male non-tea drinkers were 30%. (3)

OR

Present the distribution of Indian population by their working status in the form of a pie diagram, using the data given below : (3)

Status :	Marginal worker	Main worker	Non worker
Population (in crore) :	25	50	25

Q7. Calculate mode from the following data :

Less than	c.f.
Less than 20	3
Less than 30	9
Less than 40	10
Less than 50	25
Less than 60	29
Less than 70	30

(3)

Q8. Discuss the features of statistics in plural sense. (3)

Q9. What are the advantages of sampling method? (3)

Q10. Explain any four problems in construction of index numbers. (4)

Q11. Calculate median graphically from the following data : (4)

C.I. :	10-20	20-30	30-40	40-50	50-60
Frequency :	20	5	3	2	10

OR

Locate mode graphically : (4)

C.I. :	30-40	40-50	50-60	60-70	70-80
Frequency :	3	5	8	4	5

Q12. Calculate first quartile and third quartile from the following data: (4)

C.I. :	20-40	40-60	60-80	80-100	100-120	120-140
Frequency :	15	20	10	25	20	10

Q13. Calculate Mean Deviation from median from the following data: (4)

Wages (in ₹) :	5	10	15	20	25
No. of workers :	4	6	8	10	12

Q14. Calculate the coefficient of rank correlation from the following data. Also interpret the result : (6)

X :	15	10	20	28	12	10	16	18
Y :	16	14	10	12	11	15	18	12

OR

Calculate Karl Pearson's coefficient of correlation (Take assumed mean of X series 15 and Y series 8). Also interpret the result.

X :	5	10	15	20	25
Y :	12	10	8	4	2

(6)

Q15. Calculate the arithmetic mean and standard deviation from the following data (Take A =45) : (6)

Class :	10-20	20-30	30-40	40-50	50-60	60-70
Frequency :	20	30	35	50	35	30

SECTION-B (Indian Economic Development)

Q16. Define globalisation. (1)

Q17. Define carrying capacity of environment. (1)

Q18. State an example of self-employment programme in rural areas. (1)

Q19. Define 'Global Burden of Diseases'. (1)

Q20. List one point of difference between direct tax and indirect tax. (1)

Q21. Though public sector is very essential for industries, many public sector undertakings incur huge losses and are a drain on economy's resources. Discuss the usefulness of public sector undertakings in the light of this fact. (3)

Q22. What was the two fold motive behind the systematic de-industrialisation effected by the British in pre-independent India? (3)

Q23. Explain "Minimum Basic Amenities Approach" to remove poverty. (3)

Q24. Discuss various types of unemployment in India. (3)

Q25. Differentiate between human capital and physical capital. (3)

OR

How does investment in human capital contributes to g[illegible]vth? (3)

Q26. What do you mean by inflation? Discuss any two monetary instruments to control inflation. (4)

Q27. "Agricultural subsidy policy is necessary to provide an incentive for adoption of new HYV technology by farmers". Comment. (4)

OR

What is Green Revolution? How did it benefit the farmers, consumers and government? (4)

Q28. The Central Pollution Board of India has declared Gujrat as the most polluted state in India. According to a report by Central Government, Gujrat accounted for 29% of 6.2 million tones of hazardous waste. Suggest some adequate remedial measures to tackle this problem. (4)

Q29. Briefly explain the steps taken by the government to liberalise the Indian economy after 1991. (6)

Q30. (a) What similar development strategies have been adopted by India and Pakistan for their respective developmental paths?

(b) Evaluate the various factors that led to the rapid growth in economic development in China. (3+3=6)

Q31. (a) Mention some obstacles that hinder the mechanism of agricultural marketing.

(b) Briefly comment on the state of health infrastructure in India. (3+3=6)

OR

(a) Explain briefly the measures taken by the government to improve agricultural marketing system in India.

(b) What problems are being faced by the power sector in India? (3+3=6)