D.A.V. CENTRE FOR ACADEMIC EXCELLENCE

D.A.V. COLLEGE MANAGING COMMITTEE

Chitra Gupta Road, Paharganj, New Delhi-110055

SESSION : 2018 - 19

CLASS - XI

SAMPLE QUESTION PAPERS

WITH

SCHEME OF MARKING

(COMMERCE STREAM)

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FOREWORD

Evaluation is a very important and integral part of an Educational System. Just as teaching, learning is a continuous process, so is the Evaluation. Evaluation helps us to identify the shortcomings in teaching-learning process, thus enabling us to bring about the much needed changes in the methodology of teaching. Evaluation process does not limit us to evaluate only the students, but it encompasses teachers, syllabus and carriculum as well.

Written Examination (Pen and Paper Test) is one technique which helps us in the process of evaluation. Question papers play a vital role in this process. It is, therefore, absolutely essential that the question papers are student friendly, catering to the needs of different strata of students i.e. briliant, average and below average students. The question papers have to be balanced so that these effectively test the learning outcomes specified for different subjects.

The common examination of students of Class XI in all DAV Public Schools was started in the academic session 2010-2011 and it has proved a great success. As a consequence, the academic standards of our schools at the Secondary stage are bound to improve further.

In order to enable the teachers and students to prepare well for the Annual Examination at the end of the academic session 2018-19, the DAV Centre for Academic Excellence is providing Sample Question Papers. It is hoped that these sample question papers will certainly help the classroom transaction of the subject in our schools. These Sample Question Papers have been prepared by practicing teachers of DAV Public Schools under the guidance of experienced resource persons in workshops conducted by the DAV Education Board.

I express my gratitude to Mr. S. K. Sharma, OSD, DAVCAE and all the experts who very ably guided our teachers in the workshops organised by the Board. I would also thank the staff of DAV CAE for condicting & hosting these workshops.

I am confident that the students and teachers will use these Sample Question Papers in teaching-learning process and thus help the students to do well in the Annual Examination in February-March 2019.

Punam Suri
Chairman
DAV Centre for Academic Excellence

PREFACE

The DAV Centre for Academic Excellence decided to conduct common examination for students of Class XI in all DAV Public Schools. There were the following reasons for doing so :

(a) The students would be appearing for an Annual External Examination for the first time in Class XII and so, such a move would give them some training for appearing in the Annual External Examination.

(b) There would be uniform standard of teaching-learning in all DAV Schools.

(c) The syllabus of Class XI would be fully covered by all the teachers and students, thus, helping the students in their preparation for competitive examinations at the end of Class XII because quite a sizeable portion of the question papers in the competitive examinations would be relevant to the portions of the subjects covered in Class XI.

The DAV Centre for Academic Excellence has been providing Sample Question Ppaers in different subjects to all the students and teachers, alongwith the solutions and marking scheme, ever since.

It gives me immense pleasure to state that this effort has been a great success and has helped in improving the class room transaction in our schools, and the overall performance of the students in CBSE class XII. Once again, we are happy to provide to the students and teachers of all DAV Public Schools Sample Question Papers of different subjets for Class XI.

These sample question papers are the outcome of a lot of effort put in by practising teachers of DAV Public Schools under the able guidance of experienced resource persons.

We take this opportunity to thank all the experts and participants who worked tirelessly to develop these sample question papers.

I am confident that the publication will be of immense use and great helpto the students and teachers as well.

No publication is the last word on the subject. And therefore we invite suggestions for further improvement in furture.

VICE-PRESIDENT

INTRODUCTION

The DAV Centre for Academic Excellence has been making all efforts to achieve the objectives laid out for the centre. One of the objective is to bring about a uniformity in the standard of education in DAV Public Schools spread throughout the length and breadth of India. We know that our Public Schools, situated as they are, cater to the needs of different strata of society and it is, therefore a difficult task to maintain the same standard of teaching in all these institutions. However, one such activity that has helped us in bringing about some uniformity in the standard of education is the system of common examination.

Since the session (2010-11), the DAV Education Board gives common question papers for Class XI in the DAV Public Schools.For understanding the format of CBSE question papers, students are provided with sample papers. These sample question papers are a great help for the preparation of annual examination. This booklet is an assortment of sample papers for different subjects. Examination is held in all the schools as per the date sheet issued by DAV Centre for Academic Excellence.

The main tool in the written examination is the Question Paper. If the question paper is not designed properly, the test will give a totally incorrect conclusion. And in this whole process the casualty will only be the student. It has been observed that the question papers in general suffer from the following infirmities :

- The questions mostly require recall of information and as such encourage memorisation.
- Abilities like understanding and application of knowledge are seldom tested.
- The questions are vaguely worded. As a result the student is not clear about the quality of answer required.

- Question paper does not cover the whole course.
- Options are provided in the question paper which provide scope for the students to pick and choose.

In order to remove the above infirmities and administer a good and balanced question paper to the students, efforts are made to incorporate the following in the questions paper :

(i) The question measures a single learning outcome.

(ii) Incorporating some test tasks as would test all the abilities like knowledge understanding, application & skill appropriately.

(iii) Including questions that -
(a) are within the scope of syllabus.
(b) are within the comprehension level of points.
(c) can be solved within a reasonable length of time.
(d) are worded in a clear, simple and unambiguous language.
(e) use appropriate directional words.

Hence for setting a good question paper, a great deal of planning prior to the actual writing of questions is required. The major steps in the planning/ preparation of a good and balanced question paper are :

(i) **Preparation of the design :** it lays down the chief dimensions of the question paper. Weightage to learning objectives, weightage to content, weightage to form of questions, weightage to difficulty level-all are decided under the head 'design'. Moreover through written examination it is the cognitive domain, representing the intellectual area of the pupils, that gets evaluated. This domain involves the development of the abilities of knowledge, understanding (comprehension), application (expression) and skill. The paper setter assigns marks to each in view of its importance.

In order to cover maximum course content the paper setter has to prepare a

large number of questions of various types. These types include Very Short Answer Questions, Short Answer Questions and Long Answer Questions.

(ii) **Preparation of blue print :** The design is then followed by the preparation of a blue print. It reveals the actual picture of the question paper. The blue print gives the placement of questions in respect of :

(a) the objective to be tested by each.

(b) the content area to be covered by each.

(c) the form of question suitable for testing.

It may be noted that blue print of each question paper is unique and should be carefully prepared however design of question paper is static.

(iii) **Preparation of questions :** Preparation of an appropriate questions is an art and requires knowledge of objectives and their specifications, a mastery over the subject matter and the skill of framing questions. The paper setter, while framing a question should keep in mind that -

(a) It is based on a well defined specific objective.

(b) It is related to a specific content area.

(c) It is at the desired level of the difficulty.

(d) It is well worded so as to be within the comprehension of the students and can be done within a reasonable length of time.

(e) Its language is clear, simple and unambiguous.

(f) It uses appropriate directional words.

(iv) **Editing the question paper :** The editing and assembling of a question paper is of crucial importance. The arrangement of question in a question paper should be from easy to difficult. Similarly Very Short Answer type questions should appear first to be followed by Short Answer Type and Long Answer Type questions.

(v) **Preparation of marking scheme/hints to solution :** This is very essential as it (a) reduces the subjectivity in scoring. (b) ensures uniformity in scoring when

a number of evaluators are involved and (c) gives the paper setter a clear idea of how the pupils will react while answering the questions. However, all teachers must understand that Marking Scheme is just a guideline to bring uniformity in evaluation.

(vi) **Preparation of question-wise analysis :** It helps the paper setter to know the strength and weakness of his/her question paper. It also enables the paper setter to reconcile the question paper with the blue print. The questions are, therefore, analysed in terms of :

(a) objectives tested by the questions.

(b) specification on which the question is based.

(c) topic covered by the questions.

(d) form of the questions.

(e) estimated difficulty level.

SAMPLE QUESTION PAPERS

Use of Sample Question Papers by students :

The Sample Question Papers indicate the pattern of the question papers which the pupils will have to face in the forthcoming examinations. These will also help the students to know how to answer a question. Understanding a question and then answering it, is a technique which students need to know.

Use of Sample Question Papers by the teachers :

The material presented herein may provide sufficient help to the teachers in bringing improvement in the techniques and tools of evaluation. It will help the teachers in :

- understanding the objective of teaching a particular course.
- teaching various topics keeping in mind the learning objectives.
- framing appropriate questions.

- developing appropriate marking schemes for the question papers.

The Sample Question Papers along with guidelines for their evaluation printed herein were designed and developed in the workshops, held at the DAV College Managing Committee. Subject experts help and guide the participating teachers in developing these question papers. It is the matter of great satisfaction that small number of teachers participated in these workshops from Schools, worked intensively & enthusiasticaly to form Sample Question Paper in time.

I convey my thanks to all the resource persons for their able guidance without which preparation of a good balanced Sample Question Paper in a particular subject would not have been possible. My thanks are also due to the Mr. S. K. Sharma, OSD, DAVCAE & staff working in the DAV Centre of Academic Excellence for their devoted and dedicated work.

Director (Academics)
DAV Centre for Academic Excellence

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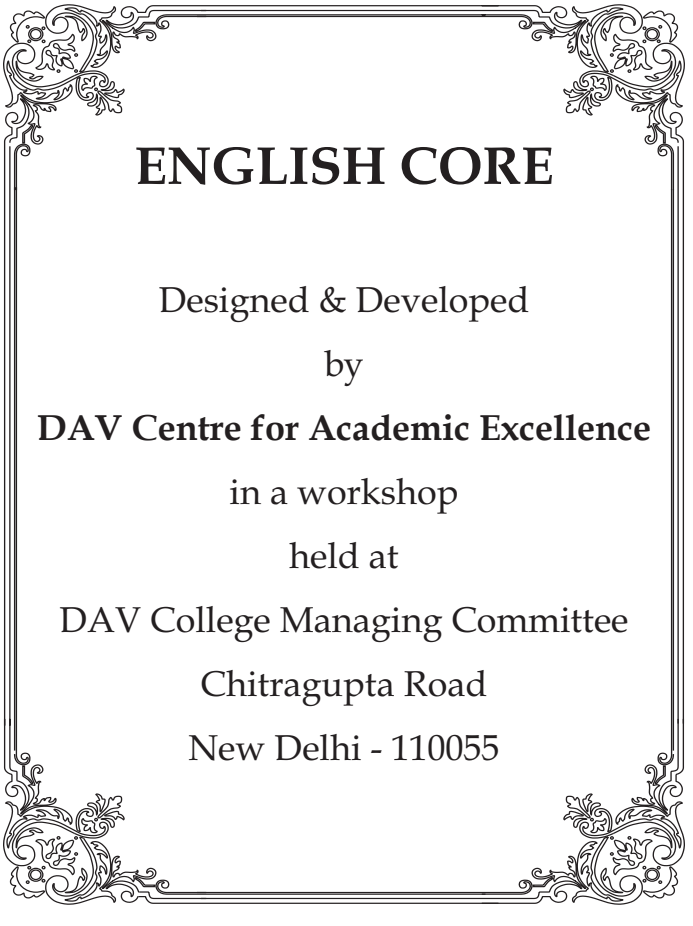


ENGLISH CORE

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

ENGLISH CORE

Time Allowed : 3 Hours | Maximum Marks : 80

General Instructions :

i) This paper consists of 3 sections - A, B and C.
ii) Attempt all questions.
iii) Do not write anything on the question paper.
iv) All the answers must be correctly numbered as in the question paper and written in the answer sheet provided.
v) Ensure that questions of each section are answered together.
vi) Read each question carefully and follow the instructions.
vii) Strictly adhere to the word limit given with each question.

SECTION - A (READING SKILLS)

Typology	Reading Skills	Conceptual Understanding, Decoding, Analysing, Inferring, Interpreting, Summarising & Using Appropriate Formats

1. Read the following passage very carefully:

'Content' is the one word that best defines what the internet and digital media are all about today. In the present evolving digital landscape, content isn't mere information; it is information curated for and presented creatively to a specific group of people on a channel, like the television or social media platforms such as YouTube or Facebook.

Much like how Google democratised the access to information, social media and video sharing, a common person too can share her/his perspective on events that impact them and others and build strong communities of like-minded people. Over the past decade, the media landscape has been in a constant state of flux, with each new development making the previous one obsolete. The applications of emerging technologies are evolving

ceaselessly at breakneck speed, and everyone involved in the production of creative content knows that with new-age digital media channels, nothing is as it once was.

Today, social media channels are the most effective vehicles for sharing user-generated content in any form- images, text, audio, video, or the most amusing of internet phenomena. GIFs. A quote attributed to the Greek philosopher Plato says, 'Those who tell the stories rule society.' In the global digital landscape, we, the people have the power to tell stories the way we want, through any of these media, and share them with the world at large.

The impact of these media on digital platforms is extremely high, and its influence on individual behaviour is also far greater than that of the television, which until the advent of the internet was the most powerful medium to send and receive information. Hence, the popularity of digital and social media channels has heralded a phenomenon that can be best described as the arrival of *television 2.0.* (modern day smart TV)

While the sharing of knowledge has unquestionably been democratised in the internet-enabled information boom. its most significant impact has been that knowledge has enabled us to be far more critical and analytical.

Such social media platforms are also increasingly becoming a source of interactive educational content which today's technology-savvy students are leveraging extensively to help them in their academics. With the help of innovative social media tools, students can also effectively organise the course content, save, curate and share resources using online storage media like Google Drive. Social media platforms are also emerging as a source for students or professionals to search for job opportunities. More and more companies and recruiters today are using various social media platforms

to source new hires. Therefore, if leveraged in the right manner, social media platforms can be a great place for candidates to share their skills, accomplishments, and experience, and reach out to recruiters.

Smaller localised content sharing networks are finding their own niche, and growing into channels with substantial value, for the brands and sellers who want to reach out to local markets without resorting to expensive advertising and promotional tools that may or may not effectively target their ideal segments. Hence, while Instagram, Snapchat. or any other large social networking platforms out there are vastly popular vehicles for global content sharing, the demand for localised digital channels is increasing rapidly and is set to have significant implications for brand communications as well as social media and digital influencers, as it offers them the opportunity to capture a large audience in an emerging social network paradigm.

(a) On the basis of your reading of the above passage, make notes using headings and sub-headings. Use recognisable abbreviations wherever necessary. Suggest a suitable title for the passage. 5

(b) Write a summary of the above passage in not more than 80 words using the notes made by you. 3

2. Read the following passage carefully :

1. As students, whether in school or college, you need to realise the enormous importance of the present year as the preparation for your work in the world. With the natural impatience of youth, you are passionately eager to be acting; but do you understand, do you at all realise, that among the youths now struggling with their books are, as in every other country,

the future leaders of the nation, the ministers, the statesmen, the generals, the admirals and the judges.

2. The nation of tomorrow is in the schools and colleges of today, and on the knowledge that you are there acquiring, on the characters that you are there building. on the bodies that you are there developing, depends the India of the new era. For India is changing with extraordinary rapidity, as all the world acknowledges, and you have the splendid karma of being born in the dawn of her renovated life.

3. The responsibilities of power will fall upon your shoulders; you will have to guard your land from external attack and from internal disorder; you will have to develop her arts, her manufacturers, her trade, her commerce, her agriculture, to shape her political destiny and to guide her forward evolution. How shall you discharge your mighty task unless you use well this time of preparation, this priceless time, which wasted, cannot be regained. All your life long you will go limping if you waste these years of your adolescence ...

4. Another thing you should learn in your school and college days is the joy of service. Help those around you and seek opportunities to help... Sometimes a school or college can start and support a night school or a school for the submerged classes; you can, in terms visit the hospitals. write letters for patients, carry messages for them. You can start a little co-operative credit society, and help the poor to become free from debt.

5. And one thing you should all do, if are living at home; you should share your education with the ladies of your families. Teach your sisters to read and write. and any others who are willing to learn. Talk with them of

public matters and discuss what you read. You will soon find the charm of an educated home, of sympathy in all your interests, the sharing of your hopes and aspirations.

2. (A) On the basis of your reading of the passage, answer the following questions by choosing the best of the given options : 1×6=6

(a) The Nation of tomorrow is
(i) in the natural impatience of youth
(ii) in the schools and colleges of today
(iii) in the hands of politicians
(iv) in internal disorder

(b) According to the author, the youth is -
(i) patient
(ii) irresponsible
(iii) passionately eager to be acting
(iv) lethargic

(c) An educated home can be achieved by
(i) imparting education to the ladies of the family
(ii) educating children only
(iii) educating the boys only
(iv) unwilling learners

(d) As students, one needs to learn-
(i) the joys of the past
(ii) the joy of service
(iii) to respect politicians
(iv) to think of only individual needs

(e) Choose the correct synonym for the word 'renovated' from the options

(i) constructed

(ii) destroyed

(iii) repaired

(iv) reused

(f) Find the antonym of the word enormous from the options given below

(i) huge

(ii) gigantic

(iii) miniscule

(iv) vestigial

2. (B) Answer the following questions : 1×6=6

(a) Why is the present very important to a student?

(b) How can a student experience the Joy of Service?

(c) What are the duties of the youth? (Mention any two)

(d) How can students help the poor get rid of debt?

(e) Which word in paragraph 3 means the same as 'gradual development'?

(f) Which phrase in paragraph 4 is the same as 'deprived people'?

SECTION - B (WRITING SKILLS & GRAMMAR)

Typology	Writing Skills & Grammar	Reasoning, Knowledge, Comprehension, Appropriacy of Style and Tone, Using Appropriate Format and Fluency, Analysis, Evaluation, Creativity and Synthesis

3. You are HR Manager of TCS Mumbai which requires posh Bungalows on company lease, as guest houses. Draft an advertisement in not more than 50 words under classified columns to be published in a national daily. 4

OR

On the occasion of World Heritage Day, design a poster in about 50 words highlighting the need to preserve the monuments of our country. You are Karan/Khushi, the President of Heritage Club of Sunshine Public School, New Delhi.

4. You have been a witness to the sale of adulterated and fake spices, milk products and chemically treated vegetables and fruits in the markets openly. Write a letter to the Health Minister of your state expressing your concern about this and requesting him for personal supervision to tackle the issue. You are Ravi / Radha, a resident of Sector-3, Chandigarh. (120.150 words) 6

OR

You are Rahul / Reena of D-I, VSS Nagar, Bhubaneswar. Recently you bought a mobile phone from the Phone Point, Satya Nagar, Bhubaneswar. The handset has developed a problem within a month of purchase. Write a letter to the dealer giving details of the nature of the problem and seeking an early replacement or repair of the handset. (120-150 words)

5. You have observed that the younger generation goes on increasing its academic qualification without proper direction. Many of them do not get any employment giving rise to the issue of the educated unemployed. As such many of them drift into anti-social activities. As Naman/Neeta of class XI write a speech to be delivered in the morning assembly on the problem

of the Educated Unemployed, suggesting some of the available options. (150-200 words) 10

OR

You participated in a career counselling workshop organized by 'Make Your Future'. You had the opportunity of listening to experts from various fields like Food Technology, Media Management, Fashion Technology, etc. Write a report for a local daily highlighting the details of the workshop in 150-200 words.

6. In the following passage one word has been omitted in each line. Write the missing word along with the words that come before and after it. 1×4=4

		Before	Missing Word	After
The life boxing legend	e.g.	life	of	boxing
Md. Ali to be given a musical	(a)	_____	_____	_____
makeover. Ali died 74 last year	(b)	_____	_____	_____
following illustrious career in the	(c)	_____	_____	_____
ring which he became the world	(d)	_____	_____	_____
champion three times.				

7. The following sentences are not in sequential order. Rearrange them in proper order to make a meaningful paragraph. 1×4=4

(a) Moreover, there is a separate section that traces the 35 centuries of glass, its discovery and evolution over the ages.

(b) The Corning Museum of Glass located in Corning, New York, is indeed a unique place.

(c) Some of these are more than thousand years old.

(d) Founded in 1951 by Corning Glass Works, the museum has more than 45.000 glass items on display.

8. Transform the sentences as directed : 1×2=2

(1) We have elected him the President of the club. (Change the voice)

(2) The boy is wearing a pink shirt. He is my cousin.(Join using a subordinate clause)

SECTION - C (LITERATURE)

Typology	Literature	Recalling, Reasoning, Appreciating Literary Conventions, Inference, Analysis, Evaluation, Creativity with Fluencv

9. Read the given extract carefully and answer the questions that follow (any three) : 1×3=3

It is the engine of her family.
She stokes it full, then flirts out to a branch-end
Showing her barred face identity mask

(a) Whom does 'it' refer to in the first line?

(b) Explain, 'barred face identity mask'.

(c) What does the poet imply by 'flirts out'.

(d) Identify the figure of speech in the extract.

OR

Silence surrounds us. I would have
Him prodigal, returning to
His father's house, the home he knew.

(a) Why does silence surround them?

(b) What does the father expect from his son?

(c) What does the poet allude to in 'have him prodigal'?

(d) Identify the literary device in the extract.

10. Answer any three of the following in 30-40 words each. 3×3=9

(a) What is the difference between the classical Chinese and the European form of painting? (Landscape of the Soul)

(b) Why does Frank envy Crocker Harris? (The Browning Version)

(c) How were Shahid's parents responsible for his secular views? (The Ghat of the Only World)

(d) Why were the residents happy to have melon as their king? (The Tale of Melon City)

11. Answer the following question in about 120-150 words.

'With grit and determination we can overcome all odds. Justify, with reference to _We're Not Afraid to Die if We Can All Be Together.' 6

OR

The Earth's principal biological systems are in a very pathetic state. Discuss with reference to 'The Ailing 'Planet'.

12. Answer the following question in about 120-150 words.

'Mother's Day' conveys a strong social message. Discuss with reference to the text. 6

OR

'The Address' is a story of human predicament that follows war. Comment.

13. Answer the following question in about 120-150 words. 6

How does the author's experience in Hor come as a stark contrast to accounts he had read of earlier travellers? (Silk Road)

OR

The author's grandmother had a strong persona. Illustrate from the text 'The Portrait of a Lady'.

ENGLISH CORE

Time Allowed : 3 Hours | Maximum Marks : 70

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given herein but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	SECTION - A (READING SKILLS)		
1.	(a) Note Making Suggested Notes Abbreviations/Symbols Title:— Arrival of Television 2.0/ Arrival of New Age Smart TV/ Power of New Age Media/ Digital Media (Any other suitable title)	1	
	Content 1. Facts regarding digital media 1.1. exploslve content/information curated and creatively presented 1.2. builds strong commn (like minded people) 1.3. evolving at breakneck speed 1.4. captures large audience 2. Advantages of social media platforms	3	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	2.1. sharing user genertd content 2.2. democratised, shared knowledge 2.3. enabled critical, analytical user behaviour 2.4. source ofjob opportunities and new hires 2.4.1. candidates' skills, accomp & experiences available 2.4.2. avoidance of expensive promotional tools by brands 3. Digital media and education 3.1. provides interactive educ. content 3.2. data saved and curated (Google Drive) Key to Abbreviations : 1. commn. – communication 2. genertd. – generated 3. accomp. – accomplishment 4. Educ. – educational (b) Summary : The summary should include all the important points given in the notes.	1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Content	2	8
	Expression	1	
2.	A. (a) (ii) in the schools and colleges of today	1	
	(b) (iii) passionately eager to be acting	1	
	(c) (i) imparting education to the ladies of the family	1	
	(d) (ii) the joy of service	1	
	(e) (iii) repaired	1	
	(f) (iii) miniscule	1	
	B. (a) preparation for their work in the world	1	
	(b) help those around, seek opportunities to help	1	
	(c) guard their land/prevent internal disorder /develop her arts/her manufacturers/her trade/ her commerce / her agriculture / to shape her political destiny / to guide her forward evolution (Any two)	1	
	(d) start co-operative credit society	1	
	(e) evolution	1	
	(f) submerged classes	1	12

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	SECTION - B (WRITING SKILLS & GRAMMAR)		
3.	Advertisement (Classified)		
	Format :	1	
	The format should include: Box, Heading, Contact details		
	Content	2	
	Expression	1	
	Value Points :-		
	Heading – WANTED/REQUIRED ACCOMMODATION		
	– Required as guest houses		
	– Specifications - location, facilities, features		
	– approximate rent		
	– contact details - name, telephone no.		
	– Any other relevant details		4
	OR		
	Poster		
	Content	2	
	Expression -	2	
	Value points -		
	– Any relevant slogan		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	– Importance of heritage – Do's and don'ts at the heritage sites – Suggested steps – Illustrations (optional) – Issuing authority		
4.	<u>Letter Writing</u>		
	Format	1	
	– Sender's address – Date – Receiver's address – Subject – Salutation – Body of letter – Complementary close. – Sender's name		
	Content	3	
	Expression	2	
	Value points : (Official Letter) – Purpose of writing		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	– Highlighting problems of adulteration with suitable examples – Hazards caused to the public – Suggested steps to curb it – Any other relevant details		6
	OR		
	Value points : (Letter of Complaint) – Purpose of Writing with purchase details – Details of the problem– performance, quality or any other – Highlighting the inconvenience – Requesting for replacement/repair – Any other relevant points		
5.	Speech		
	Format	1	
	Content	4	
	Expression – Grammatical accuracy, appropriate words, spellings	3	10

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	– Coherence and relevance of ideas and style. Value points – Striving for academic qualifications without purpose – Stress on earning certificates rather than on enhancing/acquiring skills – Consequences like cut throat competition, frustration, superiority complex but inability to perform – Inability to utilize qualifications for self-employment Suggestions- Proper Counselling – Skill development & its proper channelization – Mentoring by parents, teachers, experts – Encouraging entrepreneurs Any other relevant points **OR** Report Format	2 1	

S. No.	VALUE POINTS / KEY POINTS			Marks Allotted to each value Point/Key Point	Total Marks
	Content			4	
	Expression				
	– Grammatical accuracy, appropriate words, spellings			3	
	– Coherence and relevance of ideas and style.			2	
	Value points :				
	– Type of programme/name				
	– Occasion, date, time, venue				
	– Details of the career prospects and experts				
	– Welcome address and the proceedings of the programme				
	– Views and advice of the experts				
	– Students' response				
	– Suitable conclusion				
	– Any other relevant details				
6.		Before	Missing	After	
	a.	Ali	is	to	1
	b.	died	at	74	1
	c.	following	an	illustrious	1
	d.	ring	during/in	which	1	4

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
7.	b, d, c, a		
	b. The Corning Museum of Glass located in Corning New York, is indeed a unique place.	1	
	d. Founded in 1951 by Corning Glass Works, the museum has more than 45,000 glass items on display.	1	
	c. Some of these are more than thousand years old.	1	
	a. Moreover, there is a separate section that traces the 35 centuries of glass, its discovery and evolution over the ages.	1	4
8.	Transform the sentences as directed		
	a. He has been elected the President of the club (by us).	1	
	b. The boy who is wearing a pink shirt is my cousin.	1	2
	SECTION - C (LITERATURE)		
9.	Answer any three of the following :		
	(a) Tree	1	
	(b) Stripes on the face which are its identity/the shadow of the branches on its face that gives the image of the bird being caged.	1	
	(c) Flies out	1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	(d) Metaphor – Engine of her family (any other relevant answer)		3
	OR		
	(a) Lack of communication/ understanding	1	
	(b) To return to him like the prodigal son did	1	
	(c) It's a Biblical reference	1	
	(d) Alliteration- Silence surrounds us (any other relevant answer)		
10.	Answer any three of the following :		
	(a) Chinese— not meant to produce an actual view – doesn't choose a single view point – figurative European— actual view – wants us to see it as the artist sees it – illusionistic (any other relevant answer)	Content-2 Expression-1	
	(b) – Crocker Harris has good control on his class – Despite the fact that he is strict, Taplow doesn't hate him	Content-2 Expression-1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	– Whatever the reason, Crocker Harris is famous with the students (any other relevant answer)		
	(c) Mother bought him murtis and other religious articles – She helped him make a temple in his room (any other relevant ansWer)	Content-2 Expression-1	
	(d) Laissez Faire – Residents happy to be free – No accountability to the state – No interference from the king (any other relevant answer)	Content-2 Expression-1	9
11.	– Courage not to give up – Will to fight – Determination to win – Remain positive – Author thrown overboard by the storm – Ribs cracked – Mouth filled with blood and broken teeth – Fear of sinking – Deck smashed: full of water, told his wife to take the	Content-3 Expression-3	6

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	wheel – Larry and Herbie pumped water out like mad men – Author half swam, half crawled to children's room – He took canvas, hammer and screws to cover the gaping holes – Arranged for spare pumps – Children too didn't lose hope – Jon said he wasn't afraid of dying if they were all together – Sue made a card and didn't complain about her injuries and wounds **OR** – Fisheries, forests, croplands and grasslands form the basis – Supply food and raw material for industry – Human claims reaching an unsustainable level – Productivity impaired – Over-fishing in a protein hungry world – Forests decimated for firewood	Content-3 Expression-3	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
12.	– In the long run fisheries collapse, forests and grasslands replaced by barren lands – Women to be treated well and with respect – Their efforts to be recognised – Not to be taken for granted – Every0ne to help in household chores – Not to be restricted – Mrs. Pearson's children argue with her, take her for granted, want her to do their tasks, insult her by calling her barmy, don't like her exercising her freedom, they and her husband don't spend time with her, husband is angry with her as the children are upset without knowing her side of the story **OR** – Displacement – Losing loved ones – Mental, emotional and physical scars for a lifetime – Struggle for survival	Content-3 Expression-3 Content-3 Expression-3	6

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
13.	– Struggling with past memories – Major material loss – Loss of faith in humanity – Feeling of vacuum – Trying to find her identity in her past possessions – He thought it would be beautiful as it was on the shore of Mansarovar – Found it grim, miserable, with no vegetation – Dust and rocks with accumulated refuse – Any other relevant point. **OR** – Brought the narrator up singIe-handedly – Ingrained values in him through prayer and charity – Attended to his needs by imparting education to him – Adjusted well to their Changing relationship, to city life – Never complained – Allowed him to learn music and get western education in spite of reservations – Kept quiet, didn't indulge in conflicts.	Content-3 Expression-3 Content-3 Expression-3	6

MATHEMATICS

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

MATHEMATICS
XI

Time : 3 Hours **DESIGN** Max. Marks : 100

I. Weightage of learning objectives :

Objective	Remembering	Understanding	Application	Hots	Evaluation	Total
Marks	20	35	25	10	10	100

II. Weightage to form of questions :

Form of Questions	LA-II (6)	LA-I (4)	SA(2)	VSA(1)	Total
No. of Questions	6	11	8	4	29
Marks	36	44	16	4	100

III. Weightage to contents

S. No.	Name of Unit	Marks
1	Sets & Functions	29
2	Algebra	37
3	Coordinate Geometry	13
4	Calculus	06
5	Mathematical Reasoning	03
6	Statistics and Probability	12

IV. Scheme of Options :-

There is no overall choice. However, internal choice is given in three questions of 4 marks each and three questions of 6 marks each.

V. Scheme of Sections :-

Section A - 4 Questions of 1 Mark each
Section B - 8 Questions of 2 Marks each
Section C - 11 Questions of 4 Marks each
Section D - 6 Questions of 6 Marks each

VI. Weightage to difficulty level :

1. Difficult questions : 20%
2. Average questions : 60%
3. Easy questions : 20%

VII. Expected length of answers to different types of questions & time management :

Types of Question	Expected Length of Answer	Expected Time for each question
1. Long Answer Type (LA-II)	6-9 Steps	8-10 Min.
2. Long Answer (LA-I)	4-6 Steps	4-6 Min.
3. Short Answer (SA)	2-3 Steps	2-3 Min.
4. Very Short Answer (VSA)	1-2 Step	1 Min.

Important Note :

There can be many Blue Prints corresponding to this design of the question paper. The Blue Print of the sample paper may be different from the Blue Print of final question paper. The design, however, will be static in all the cases.

MATHEMATICS

Time Allowed : 3 Hours | Maximum Marks : 100

- Please check that this question paper contains 29 questions and 5 printed pages before attempting it.
- Write down the serial number of the question, before attempting it.
- 15 minutes have been allotted to read the question paper. During this time the student will read the question paper and will not write any answer on the answer script.

General Instructions :

1. Question paper consists of 29 questions divided into four sections A, B, C and D.
   Section A consists of 4 questions of 1 mark each.
   Section B consists of 8 questions of 2 marks each.
   Section C consists of 11 questions of 4 marks each.
   Section D consists of 6 questions of 6 marks each.
2. There is no overall choice. However, internal choices are provided in three questions of 4 marks each and three questions of 6 marks each. In these cases, you have to attempt one out of given two options.
3. Use of calculators is not permitted.

SECTION - A

1. Find the value of $2 \cos 45^0 \sin 15^0$. 1

2. Evaluate : i^{4n-3}, $n \in z$ where $i = \sqrt{-1}$. 1

3. At what point of the parabola $x^2 = 9y$, other than origin, is the abscissa three times that of the ordinate? 1

4. Write contrapositive of the statement :

   "x is an even number implies x is divisible by 4". 1

SECTION - B

5. Let P = $\left\{\frac{1}{x};\ x \in N,\ x < 7\right\}$ 2

and Q = $\left\{\frac{1}{2x};\ x \in N,\ x \leq 4\right\}$

Find P $\cap$ Q

6. Using properties of sets, prove that for all sets A and B. 2

(A $\cup$ B) – B = A – B

7. Draw the graph of : 2

$f(x) = x - [x], \qquad 1 \leq x < 2$

where $[x]$ denotes greatest integer less than equal to x.

8. Find the value of n if $(n + 1)! = 12\ (n - 1)!$ where n $\in$ N. 2

9. Find the coordinates of a point P on the line segment AB joining A (–2, 0, 6) and B (10, –6, –12) such that AP = $\frac{5}{6}$ AB. 2

10. If $y = x \sin x + \cos x$ find $\frac{dy}{dx}$ at $x = \frac{\pi}{2}$. 2

11. State whether the 'or' used in the statement "To open an account in the bank, you must have aadhar card or voter ID card" is inclusive or exclusive. Give reason for your answer. 2

12. The probability of happening of an event A is 0.5 and that of B is 0.3. If A and B are mutually exclusive events then find the probability of neither A nor B. 2

SECTION - C

13. If $3\tan\left(\theta-\frac{\pi}{12}\right)=\tan\left(\theta+\frac{\pi}{12}\right)$; $0<\theta<\frac{\pi}{2}$ find θ. 4

14. Prove that : $\tan 4x=\frac{4\tan x\left(1-\tan^2 x\right)}{1-6\tan^2 x+\tan^4 x}$. 4

15. During exam days, in a survey of 100 students, 30 students didn't bring ruler, 50 students didn't bring erasers and 10 students didn't bring any of the two. Using venn diagram, find how many of them have brought both the things. 4

16. Find the term independent of x in the binomial expansion of $\left(\sqrt{\frac{x}{3}}+\frac{3}{2x^2}\right)^{10}$. 4

17. In a job interview for 4 posts, 5 boys and 3 girls appeared. If selection of each candidate is equiprobable then find the probability that

    (i) 3 boys and 1 girl or 1 boy and 3 girls are selected.

    (ii) atmost 1 girl is selected. 4

18. Evaluate : $\lim_{x\to 0}\frac{1-\cos 2x}{x\left(e^{5x}-1\right)}$. 4

OR

Find derivative of $\sin\sqrt{x}$ w.r.t 'x' using first principle.

19. Find the square root of the complex number $z=2\left\{4\sin\frac{3\pi}{2}+3i\cos\pi\right\}$ 4

20. Find the number of words that can be formed using all the letters of the word 'MATHEMATICS' such that : 4

(i) all vowels are together

(ii) no two vowels are together

21. Find the equation of circle concentric with circle $x^2 + y^2 - 8x + 2y + 3 = 0$ and having radius twice the radius of given circle. 4

OR

Find the area of the triangle formed by the lines joning the vertex of the parabola $x^2 = 12y$ to the ends of its latus rectum.

22. Let A = $\{x : x = 3n, n \leq 6, n \in N\}$. Define a relation R from A to A by R = $\{(x, y) : y = 2x ; x, y \in A\}$. Write R in roster form 4

(i) Write its domain, co-domain and Range.

(ii) Also draw the arrow diagram of R.

OR

Find the domain and range of the function $f(x) = \sqrt{25 - x^2}$.

23. Find the sum to n terms of the series : 4

$3 \times 8 + 6 \times 11 + 9 \times 14 \times$ .....

SECTION - D

24. If $x \cos\theta = y \cos\left(\theta + \frac{2\pi}{3}\right) = z \cos\left(\theta + \frac{4\pi}{3}\right)$ then find the value of 6

$xy + yz + zx$.

OR

Solve the equation : $\sin 3x + \sin 5x + \sin 7x = 0$, for $\frac{\pi}{2} < x < \pi$.

25. Find the solution region for the following inequalities : 6

$x - y \leq 0$

$2x - y \leq 0$

$y \leq 2$

$x, y \geq 0$.

Also find the coordinates of the vertices of the solution region.

26. If a and b are the roots of $x^2 - 3x + p = 0$ and c, d are the roots of 6

$x^2 - 12x + q = 0$, where a, b, c, d form a G.P.

Prove that $(q + p) : (q - p) = 17 : 15$.

OR

Between 5 and 35, m numbers have been inserted in such a way that the resulting sequence is an A.P. and the ratio of 3rd and $(m - 2)$th numbers is 7 : 13. Find the value of m.

27. Using principle of mathematical induction, prove that $4^n + 15n - 1$ is divisible by 9, for all $n \in N$. 6

28. If the lines $y = 3x + 1$ and $2y = x + 3$ are equally inclined to the line $y = mx + 4$, find the value of m. 6

OR

The points (1, 3) and (5, 1) are two opposite vertices of a rectangle. The other two vertices lie on the line $y = 2x + c$. Find c and the remaining vertices.

29. Calculate mean, variance and standard deviation for the following frequency distribution. 6

Classes	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Frequency	3	7	12	15	8	3	2

MATHEMATICS

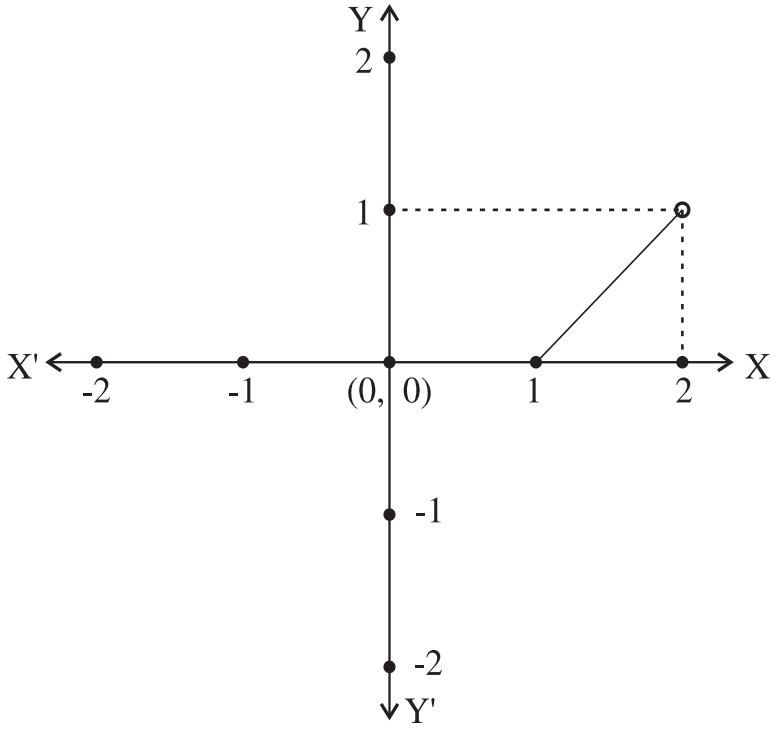
Time Allowed : 3 Hours | Maximum Marks : 100

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given herein but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
1.	$2 \cos A \sin B = \sin (A + B) - \sin (A - B)$		
	$2 \cos 45^0 \sin 15^0 = \sin 60^0 - \sin 30^0$	½	
	$= \frac{\sqrt{3}}{2} - \frac{1}{2} = \frac{\sqrt{3}-1}{2}$	½	1
2.	$i^{4n-3} = i^{4n-4}.i$		
	$= i^{4(n-1)}.i$	½	
	$= 1.i = i$	½	1
3.	$x^2 = 9y$		
	$x = 3y$ (given)		
	$\Rightarrow \quad (3y)^2 = 9y$		
	$9y^2 = 9y$		
	$\Rightarrow \quad y(y-1) = 0$	½	
	$\Rightarrow \quad y = 0 \quad$ or $\quad 1$		
	$\Rightarrow \quad x = 0 \quad$ or $\quad x = 3$		
	point other than origin is (3, 1)	½	1

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
4.	If x is not divisible by 4 then x is not an even number.	1	1
5.	$P = \left\{\frac{1}{x};\ x \in N,\ x < 7\right\}$		
	$= \left\{1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}\right\}$	½	
	$Q = \left\{\frac{1}{2x};\ x \in N,\ x \le 4\right\}$	½	
	$\left\{\frac{1}{2}, \frac{1}{4}, \frac{1}{6}, \frac{1}{8}\right\}$		
	$P \cap Q = \left\{\frac{1}{2}, \frac{1}{4}, \frac{1}{6}\right\}$	1	
	or $\left\{\frac{1}{2x}; x \in N, x \le 3\right\}$		2
6.	$(A \cup B) - B = (A \cup B) \cap B'$	½	
	$= (A \cap B') \cup (B \cap B')$ (distrubutive law)	½	
	$= (A \cap B') \cup \phi$ $(B \cap B' = \phi)$		
	$= A \cap B'$	½	
	$= A - B$	½	2
7.	For $1 \le x < 2$, $[x] = 1$		
	Thus $f(x) = x - 1,\ 1 \le x < 2$	½	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
		1½	2
8.	$(n+1)! = 12(n-1)!$		
	$\Rightarrow (n+1)n(n-1)! = 12(n-1)!$	1	
	$\Rightarrow (n+1)n = 12$		
	$\Rightarrow n^2+n-12 = 0$		
	$\Rightarrow n^2+4n-3n-12 = 0$		
	$\Rightarrow (n+4)(n-3) = 0$		
	$\Rightarrow n = -4, 3$		
	$n = -4$ rejected so $n=3$	1	2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
9.	A(–2, 0, 6) B(10, –6, –12)		
	Given : AP = $\frac{5}{6}$ AB		
	$\Rightarrow$ P divides AB in the ratio 5 : 1	½	
	P(x) = $\frac{mx_2 + nx_1}{m+n}$, P(y) = $\frac{my_2 + ny_1}{m+n}$		
	P(z) = $\frac{mz_2 + nz_1}{m+n}$		
	P(x) = $\frac{5\times10+1\times(-2)}{5+1} = \frac{50-2}{6} = \frac{48}{6} = 8$	½	
	P(y) = $\frac{5\times(-6)+1\times0}{5+1} = \frac{-30}{6} = -5$	½	
	P(z) = $\frac{5\times(-12)+1\times6}{5+1} = \frac{-60+6}{6} = \frac{-54}{6} = -9$	½	2
	So coordinates of P are (8, –5, –9)		
10.	$y = x \sin x + \cos x$		
	$\frac{dy}{dx} = x\cos x + \sin x - \sin x$		
	$= x\cos x$	1	
	$\frac{dy}{dx} = \frac{\pi}{2}\times\cos\frac{\pi}{2} = 0$	1	2
11.	'OR' used here is inclusive because a person can	1	
	have both documents to open an account in the bank.	1	2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
12.	Given that P(A) = 0.5 of P(B) = 0.3		
	A & B are mutually exclusive events		
	$A \cap B = \phi$	1	
	$\Rightarrow P(A \cap B) = 0$		
	so P(neither A nor B)		
	$= P(A' \cap B')$ $= P(A \cup B)'$		
	$= 1 - P(A \cup B)$		
	$= 1 - \{P(A) + P(B)\}$		
	$= 1 - 0.8$		
	$= 0.2$	1	2
13.	Given $3 \tan\left(\theta - \frac{\pi}{12}\right) = \tan\left(\theta + \frac{\pi}{12}\right)$		
	$\Rightarrow \frac{\tan\left(\theta + \frac{\pi}{12}\right)}{\tan\left(\theta - \frac{\pi}{12}\right)} = \frac{3}{1}$		
	$\Rightarrow \frac{\tan\left(\theta + \frac{\pi}{12}\right) + \tan\left(\theta - \frac{\pi}{12}\right)}{\tan\left(\theta + \frac{\pi}{12}\right) + \tan\left(\theta - \frac{\pi}{12}\right)} = \frac{3+1}{3-1}$	1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$\Rightarrow \dfrac{\sin\left(\theta+\frac{\pi}{12}\right)\cos\left(\theta-\frac{\pi}{12}\right)+\cos\left(\theta+\frac{\pi}{12}\right)\sin\left(\theta-\frac{\pi}{12}\right)}{\sin\left(\theta+\frac{\pi}{12}\right)\cos\left(\theta-\frac{\pi}{12}\right)-\sin\left(\theta-\frac{\pi}{12}\right)\cos\left(\theta+\frac{\pi}{12}\right)} = \dfrac{4}{2}$		
	$\Rightarrow \dfrac{\sin\left(\theta+\frac{\pi}{12}+\theta-\frac{\pi}{12}\right)}{\sin\left(\theta+\frac{\pi}{12}-\theta+\frac{\pi}{12}\right)} = 2$	1	
	$\Rightarrow \dfrac{\sin 2\theta}{\sin\frac{\pi}{6}} = 2$		
	$\Rightarrow \sin 2\theta = 2\sin\dfrac{\pi}{6}$	1	
	$\Rightarrow \sin 2\theta = 1$		
	$\Rightarrow 2\theta = \dfrac{\pi}{2}$		
	$\Rightarrow \theta = \dfrac{\pi}{4}$	1	4
14.	Taking LHS		
	$\tan 4x$	½	
	$= \tan 2\,(2x)$		
	$= \dfrac{2\tan 2x}{1-\tan^2 2x}$	½	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$= \dfrac{2\left(\dfrac{2\tan x}{1-\tan^2 x}\right)}{1-\left(\dfrac{2\tan x}{1-\tan^2 x}\right)^2}$	1	
	$= \dfrac{\dfrac{4\tan x}{1-\tan^2 x}}{\dfrac{\left(1-\tan^2 x\right)^2-4\tan^2 x}{\left(1-\tan^2 x\right)^2}}$	1	
	$= \dfrac{4\tan x\left(1-\tan^2 x\right)}{1-6\tan^2 x+\tan^4 x}$	1	4
15.	Let R be the set of students who didn't bring ruler and E be the set of students who didn't bring eraser.	1	
	Using venn diagram,		
	a + c = 30 b + c = 50 c = 10 ⇒ a = 20 b = 40		
	So n(R∪E) = 20 + 10 + 40 = 70	2	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Required number of students = 100 – 70		
	= 30	1	4
16.	We know,		
	$T_{r+1} = {}^{n}C_r x^{n-r} y^r$		
	Given expression is $\left(\sqrt{\frac{x}{3}} + \frac{3}{2x^2}\right)^{10}$		
	$\therefore T_{r+1} = {}^{10}C_r \left(\sqrt{\frac{x}{3}}\right)^{10-r} \left(\frac{3}{2x^2}\right)^r$	1	
	$= {}^{10}C_r \left(\frac{1}{\sqrt{3}}\right)^{10-r} x^{\frac{10-r}{2}} \left(\frac{3}{2}\right)^r x^{-2r}$		
	$= {}^{10}C_r \left(\frac{1}{\sqrt{3}}\right)^{10-r} x^{\frac{10-5r}{2}} \left(\frac{3}{2}\right)^r$	1	
	For term independent of x, we have		
	$\frac{10-5r}{2} = 0$		
	$\Rightarrow$ 10 – 5r = 0		
	$\Rightarrow$ r = 2	1	
	Hence, the term independent of x is T_3 i.e. 3rd term		

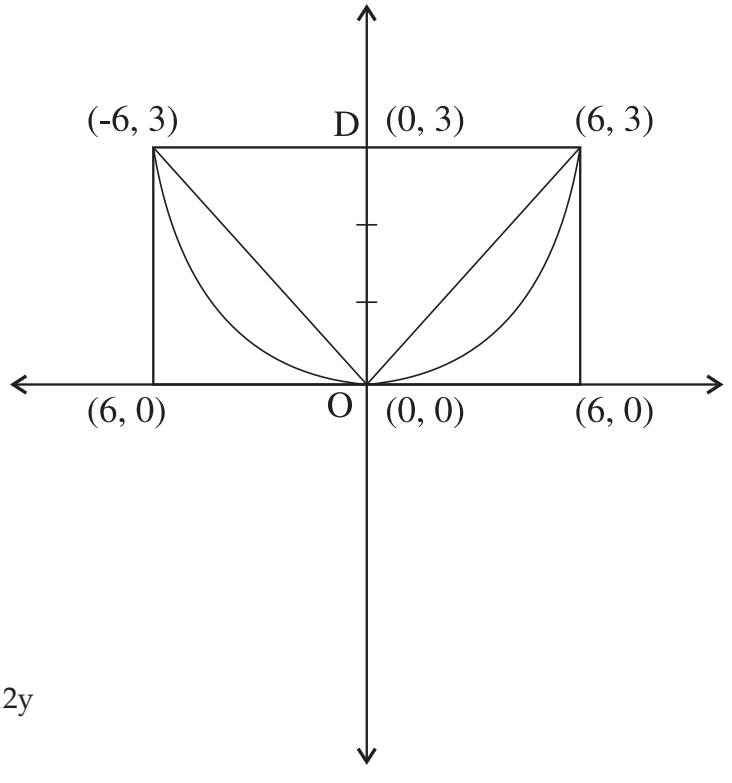
S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$\Rightarrow T_3 = {}^{10}C_2 \frac{1}{3^4} \frac{3^2}{2^2}$		
	$= 45\left(\frac{1}{36}\right) = 5/4$	1	4
17.	(i) Required probability $= \frac{{}^5C_3 \times {}^3C_1 + {}^5C_1 \times {}^3C_3}{{}^8C_4}$	1	
	$= \frac{10\times 3 + 5\times 1}{70}$		
	$= \frac{1}{2}$	1	
	(ii) Required Probability $= \frac{{}^3C_0 \times {}^5C_4 + {}^3C_1 \times {}^5C_3}{{}^8C_4}$	1	
	$= \frac{1\times 5 + 3\times 10}{70} \quad = \frac{1}{2}$	1	4
18.	$\underset{x\to 0}{Lim} \frac{1-\cos 2x}{x\left(e^{5x}-1\right)}$		
	$= \underset{x\to 0}{Lim} \frac{2\sin^2 x}{5x\left(\frac{e^{5x}-1}{5}\right)}$	1	
	$= \underset{x\to 0}{Lim} 2\left(\frac{\sin^2 x}{x^2}\right)\left(\frac{1}{\frac{e^{5x}-1}{5x}}\right)\times\frac{1}{5}$	1½	

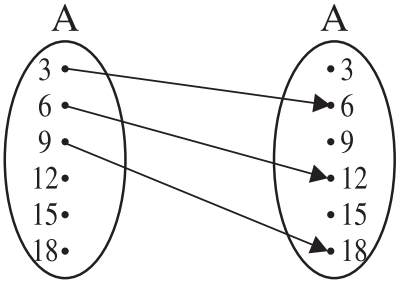
S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Using $\underset{x\to 0}{Lim}\frac{\sin x}{x}=1$ and $\underset{x\to 0}{Lim}\left(\frac{e^x-1}{x}\right)=1$	½+½	
	$= 2(1)^2(1)\times\frac{1}{5}$		
	$= 2/5$	½	4
	OR		
	Let $f(x) = \sin\sqrt{x}$		
	$f'(x) = \lim_{h\to 0}\frac{f(x+h)-f(x)}{h}$		
	$= \lim_{h\to 0}\frac{\sin\sqrt{x+h}-\sin\sqrt{x}}{h}$	1	
	$= \lim_{h\to 0}\frac{2\cos\left(\frac{\sqrt{x+h}+\sqrt{x}}{2}\right)\sin\left(\frac{\sqrt{x+h}-\sqrt{x}}{2}\right)}{h}$	½	
	$= \lim_{h\to 0}\frac{2\cos\left(\frac{\sqrt{x+h}+\sqrt{x}}{2}\right)\sin\left(\frac{\sqrt{x+h}-\sqrt{x}}{2}\times\frac{\sqrt{x+h}+\sqrt{x}}{\sqrt{x+h}+\sqrt{x}}\right)}{h}$	½	
	$= \lim_{h\to 0}\frac{2\cos\left(\frac{\sqrt{x+h}+\sqrt{x}}{2}\right)\sin\left(\frac{x+h-x}{2\left(\sqrt{x+h}+\sqrt{x}\right)}\right)}{h}$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$= \lim_{h\to 0} \dfrac{2\cos\left(\dfrac{\sqrt{x+h}+\sqrt{x}}{2}\right)\sin\left(\dfrac{h}{2\left(\sqrt{x+h}+\sqrt{x}\right)}\right)}{\dfrac{h}{2\left(\sqrt{x+h}+\sqrt{x}\right)}\times 2\left(\sqrt{x+h}+\sqrt{x}\right)}$	1	
	$= \dfrac{\cos\left(\dfrac{2\sqrt{x}}{2}\right)}{\sqrt{x}+\sqrt{x}}$	½	
	$= \dfrac{\cos\sqrt{x}}{2\sqrt{x}}$	½	
19.	$Z = 2\left\{4\sin\dfrac{3\pi}{2}+3i\cos\pi\right\}$		
	$= 2\{-4-3i\}$		
	$= -8-6i$	1	
	Let square root of $Z = x+iy$		
	$\Rightarrow \sqrt{-8-6i} = x+iy$	½	
	Squaring both sides, we get		
	$-8-6i = x^2 - y^2 + 2xyi$		
	$\Rightarrow \quad x^2 - y^2 = -8$ _____(i) and $2xy = -6$	½	
	Now, $(x^2+y^2)^2 = (x^2-y^2)^2 + (2xy)^2$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$= 64 + 36$		
	$= 100$		
	$\Rightarrow \quad x^2 + y^2 = 10$ _____(ii)	1	
	using (i) & (ii), we get		
	$x^2 = 1$ or $x = \pm 1$		
	When $x = 1$, $y = -3$		
	When $x = -1$, $y = 3$		
	$\therefore$ Square roots of z are $1 - 3i$ and $-1 + 3i$.	1	4
20.	(i) There are 4 vowels A, E, A, I		
	and 7 consonent M, T, H, M, T, C, S		
	consider all vowels as one object		
	(A,E,A,I) M, T, H, M, T, C S	½	
	The possible arrangement are $\frac{8!}{2!2!} \times \frac{4!}{2!}$		
	Thus, required no. of words formed = $\frac{8! \times 4!}{2!2!2!}$	1	
	$= 120960$	½	
	(ii) 4 vowels namely A, E, A, I		
	7 consonants M, T, H, ~~M, T, C~~, S		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	* M * T * H * M * T * C * S *		
	Consonants can be arranged in $\frac{7!}{2!2!}$ ways	½	
	& vowels can be placed at *marked places		
	which can be done in $\frac{{}^8P_4}{2!}$ ways	½	
	Thus, No. of words in which no two vowels		
	are together = $\frac{7!}{2!2!} \times \frac{{}^8P_4}{2!}$	½	
	= 1058400	½	4
21.	$x^2 + y^2 - 8x + 2y + 3 = 0$		
	$x^2 - 8x + 16 + y^2 + 2y + 1 - 14 = 0$	1	
	$(x - 4)^2 + (y + 1)^2 = 14$		
	(4, –1), $r = \sqrt{14}$	1	
	Circle having twice the radius of given circle has		
	centre (4, –1) and radius = $2\sqrt{14}$	1	
	$x^2 - 8x + 16 + y^2 + 2y + 1 = 56$		
	$x^2 + y^2 - 8x + 2y - 39 = 0$	1	4
	OR		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
		(Fig) 1	
	$x^2 = 12y$		
	$a = 3$	1	
	$x^2 = 36$		
	$x = \pm 6$	½	
	Now ar of $\Delta L'OL = \frac{1}{2} LL' \times OD$		
	$= \frac{1}{2} 12 \times 3$		
	= 18 sq. units	1½	
22.	A = {3, 6, 9, 12, 15, 18}	½	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	R = {(3, 6), (6, 12), (9, 18)}	1	
	Domain of R = {3, 6, 9}	½	
	Range of R = {6, 12, 18}	½	
	Co-domain of R = A	½	
	Arrow diagram : 	1	4
	OR		
	$f(x) = \sqrt{25 - x^2}$		
	Domain : $f(x)$ will assume real value		
	if and only if $25 - x^2 \geq 0$	1	
	$\Leftrightarrow x^2 \leq 25$		
	$\Leftrightarrow -5 \leq x \leq 5$		
	$\therefore$ Domain of $f = [-5, 5]$	1	
	Range : Let $f(x) = y$		
	$\Rightarrow \sqrt{25 - x^2} = y$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$\Rightarrow 25 - x^2 = y^2$		
	$\Rightarrow x^2 = 25 - y^2$		
	$\Rightarrow x = \pm \sqrt{25 - y^2}$	½	
	Clearly x is real $\Leftrightarrow 25 - y^2 \geq 0$		
	$\Leftrightarrow -5 \leq y \leq 5$ _____(i)	½	
	Also, $y = \sqrt{25 - x^2} \geq 0$ for $x \in [-5, 5]$ _____ (ii)	½	
	using (i) & (ii)		
	$0 \leq y \leq 5$		
	Thus range of $f = [0, 5]$	½	
23.	3, 6, 9, ...		
	$a_n = 3n$		
	8, 11, 14, ...		
	$b_n = 3n + 5$		
	t_n of the given series is $3n (3n + 5)$		
	$= 9n^2 + 15n$	1	
	$S_n = 9 \sum_{K=1}^{n} K^2 + 15 \sum_{K=1}^{n} K$	½	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$= \frac{9(n)(n+1)(2n+1)}{6} + \frac{15(n+1)}{2}$ n	1	
	$= \frac{9n(2n+1)(n+1)+45n(n+1)}{6}$		
	$= \frac{9n(n+1)[(2n+1)+5]}{6}$	½	
	$= \frac{3n(n+1)(2n+6)}{2}$		
	$= 3n(n+1)(n+3)$	1	4
24.	Note that $xy + yz + zx = xyz\left(\frac{1}{x}+\frac{1}{y}+\frac{1}{z}\right)$	½	
	Put $x\cos\theta = y\cos\left(\theta+\frac{2\pi}{3}\right) = z\cos\left(\theta+\frac{4\pi}{3}\right) = K$		
	Then, $x = \frac{K}{\cos\theta}$, $y = \frac{K}{\cos\left(\theta+\frac{2\pi}{3}\right)}$ and $z = \frac{K}{\cos\left(\theta+\frac{4\pi}{3}\right)}$	1	
	So that,		
	$\frac{1}{x}+\frac{1}{y}+\frac{1}{z} = \frac{1}{K}\left[\cos\theta+\cos\left(\theta+\frac{2\pi}{3}\right)+\cos\left(\theta+\frac{4\pi}{3}\right)\right]$	½	
	$= \frac{1}{K}\left[\cos\theta+\cos\theta\cos\frac{2\pi}{3}-\sin\theta\sin\frac{2\pi}{3}+\cos\theta\frac{4\pi}{3}-\sin\theta\sin\frac{4\pi}{3}\right]$	1+1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$= \frac{1}{K}\left[\cos\theta + \cos\theta\left(\frac{-1}{2}\right) - \frac{\sqrt{3}}{2}\sin\theta - \frac{1}{2}\cos\theta + \frac{\sqrt{3}}{2}\sin\theta\right]$	1½	
	$= \frac{1}{K} \times 0 = 0$		
	Hence xy + yz + zx = 0	½	6
	OR		
	The given equation can be written as :-		
	sin 7x + sin 3x + sin 5x = 0	1	
	or 2sin 5x cos2x + sin 5x = 0	½	
	or sin5x (2 cos2x + 1) = 0		
	∴ sin 5x = 0 or 2cos2x + 1 = 0		
	5x = nπ or cos 2x = –½		
	$x = \frac{n\pi}{5}$ or $\cos 2x = \cos\frac{2\pi}{3}$; n ∈ z		
	or $2x = 2n\pi \pm \frac{2\pi}{3}$; n ∈ z		
	or $x = 2n\pi \pm \frac{\pi}{3}$; n ∈ z	1½+2	
	Now,		
	given $\frac{\pi}{2} < x < \pi$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	So required values of x are		
	$\frac{3\pi}{5}, \frac{4\pi}{5}$	½	
	& $\frac{2\pi}{3}$	½	
25.	The given equations are :		
	$x - y \leq 0$; $2x + y \leq 6$; $y \leq 2$; $x, y \leq 0$		
	consider		
	$x - y = 0$ _____ (i)		

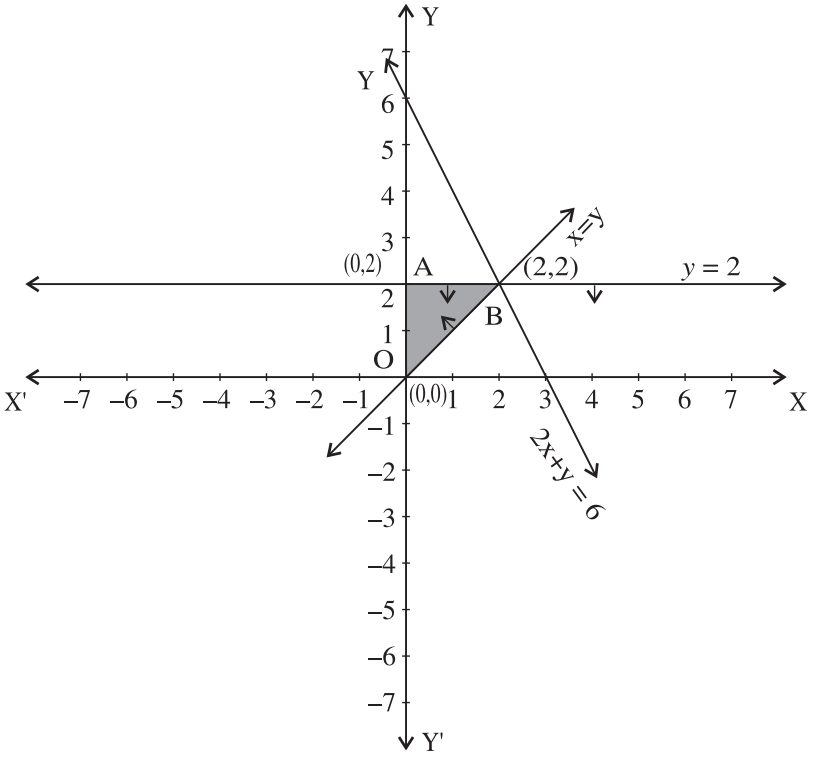
x	0	1	2
y	0	1	2

$2x + y = 6$ _____ (ii)

x	0	3
y	6	0

$y = 2$ _____ (iii)

For correct graph of line (i) & line (ii) 1½×2=3 m	3	
for correct graph of line (iii) ½m	½	
For correct shading of region 1m	1	
Thus, the required points are		
O(0, 0), A (0, 2) & B(2, 2) 1½m	1½	

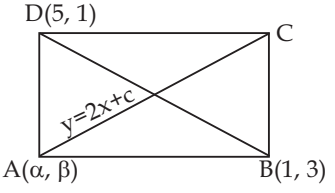
S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
			6
26.	Given that a & b are the roots of the equation		
	$x^2 - 3x + p = 0$		
	$\therefore$ a + b = 3 , ab = p _____ (i)	½	
	Also c, d are the roots of the eqn $x^2 - 12x + q = 0$	½	
	$\therefore$ c + d = 12 , cd = q _____ (ii)		
	Given that a, b, c d are in G.P.		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Let $b = ar$, $c = ar^2$, $d = ar^3$	½	
	from (i) & (ii)		
	$a + ar = 3 \quad \Rightarrow \quad a(1 + r) = 3$		
	& $ar^2 + ar^3 = 12 \quad \Rightarrow \quad ar^2(1 + r) = 12$		
	On dividing, we get		
	$\frac{ar^2(1+r)}{a(1+r)} = \frac{12}{3}$		
	$\Rightarrow \quad r^2 = 4$	2	
	Since $ab = p$ & $cd = q$		
	$\therefore \quad \frac{q+p}{q-p} = \frac{cd+ab}{cd-ab}$	½	
	$= \frac{ar^2.ar^3 + a.ar}{ar^2.ar^3 - a.ar}$		
	$= \frac{a^2r(r^4+1)}{a^2r(r^4-1)}$	1	
	$= \frac{16+1}{16-1} = \frac{17}{15}$	1	6
	Thus $(q + p) : (q - p) = 17 : 15$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	OR		
	Let $A_1, A_2, A_3, \ldots\ldots, A_m$ be the m numbers between		
	5 and 35 such that 5, $A_1, A_2, A_3 \ldots\ldots, A_m$, 35 are in A.P.	½	
	Hence $a_4 = 5$, $a_{m+2} = 35$		
	$d = \frac{30}{m+1}$	1½	
	Given $\frac{A_3}{A_{m-2}} = \frac{7}{13}$	½	
	$\frac{5+3d}{5+(m-2)d} = \frac{7}{13}$	1	
	$35 + 39d = 35 + 7(m - 2)d$		
	$30 = (7m - 53)\ \frac{30}{m+1}$	1½	
	$m + 1 = 7m - 53$		
	$6m = 54$		
	$m = 9$	1	
27.	Let the given statement be denoted by P(n), i.e.		6
	$P(n) : 4^n+15n–1$ is divisible by 9.		
	For n = 1, we have		
	P(1) : 4+15–1 is divisible by 9.		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	18 is divisible by 9, which is true.		
	Thus, P(1) is true.	1	
	We assume that P(k) is true for some natural no. k, i.e.,		
	P(k) : $4^K + 15k - 1$ is divisible by 9.		
	$\Rightarrow 4^K + 15k - 1 = 9m$, for some integer m _____(1)	1	
	We shall now show that P(k+1) is also true,		
	P(k+1) : $4^{K+1} + 15(k+1) - 1$ is divisible by 9.	1	
	Consider,		
	$4^{K+1} + 15(k+1) - 1$		
	$= 4(4^K) + 15k + 14$		
	$= 4(9m - 15k + 1) + 15k + 14$ {using (1)}		
	$= 36m - 45k + 18$		
	$= 9(4m - 5k+2)$, which is divisible by 9.	2	
	Thus, P(k+1) is true, whenever P(k) is true.		
	By the principle of mathematical induction,		
	the statement P(n) is true for all $n \in N$.	1	
28.	Given lines are :		6
	$y = 3x + 1$ and $2y = x + 3$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	slope = 3 slope = ½	1	
	∵ Gives lines are equally inclined with the line y = mx + 4		
	$\therefore \left\lvert\frac{m-3}{1+3m}\right\rvert = \left\lvert\frac{m-1/2}{1+m/2}\right\rvert$	1	
	$\Rightarrow \frac{m-3}{1+3m} = \pm\frac{m-1/2}{1+m/2}$	1	
	$\Rightarrow \frac{m-3}{1+3m} = \frac{2m-1}{2+m}$ and $\frac{m-3}{1+3m} = -\frac{2m-1}{2+m}$		
	$\Rightarrow 2m + m^2 - 6 - 3m$		
	$= 2m - 1 + 6m^2 - 3m$, $m^2 - m - 6 = -6m^2 + m + 1$		
	$\Rightarrow 5m^2 = -5$ or $7m^2 - 2m - 7 = 0$		
	$\Rightarrow m^2 = -1$ or $m = \frac{2 \pm \sqrt{4-4(7)(-7)}}{2.7}$		
	No solution $\Rightarrow m = \frac{2 \pm 10\sqrt{2}}{14}$		
	or $m = \frac{1 \pm 5\sqrt{2}}{7}$	2	
	Thus possible values of m are		
	$\frac{1+5\sqrt{2}}{7}$ and $\frac{1-5\sqrt{2}}{7}$	1	
	OR		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Let ABCD be the rectangle with B (1, 3) and D(5, 1) then		
	mid-point of BD is (3, 2) 		
	It lies on $y = 2x + c$		
	$\Rightarrow$ $c = -4$	1	
	so that equation of AC is $y = 2x - 4$		
	Let A be (α , β) then $\beta = 2\alpha - 4$ _____ (i)		
	Since $AB \perp AD$		
	$\therefore \quad \frac{\beta - 3}{\alpha - 1} \times \frac{\beta - 1}{\alpha - 5} = -1$	1	
	or $(\beta - 3)(\beta - 1) + (\alpha - 1)(\alpha - 5) = 0$		
	$\Rightarrow \quad \alpha^2 + \beta^2 - 6\alpha - 4\beta + 8 = 0$ _____ (ii)	1	
	from (i) & (ii), we get		
	$\alpha^2 + (2\alpha - 4)^2 - 6\alpha - 4(2\alpha - 4) + 8 = 0$		
	$\Rightarrow \quad 5\alpha^2 - 30\alpha + 40 = 0$		
	or $\alpha^2 - 6\alpha + 8 = 0$		
	$\Rightarrow \quad \alpha = 2, 4$	2	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	from (i), when $\alpha = 2, \beta = 0$ and when $\alpha = 4, \beta = 4$ Hence the remaining vertices are A (2, 0) and (4, 4)	1	
29.	Let the assumed mean be A = 65. Here h = 10		6

Classes	frequency (f)	Mid point (xi)	$yi = \frac{xi - 65}{10}$	fiyi	fi yi^2
30-40	3	35	–3	–9	27
40-50	7	45	–2	–14	28
50-60	12	55	–1	–12	12
60-70	15	65	0	0	0
70-80	8	75	1	8	8
80-90	3	85	2	6	12
10-100	2	95	3	6	18
	N=50			–15	105

Table : xi	½
$\Sigma fiyi$	1
$\Sigma fiyi^2$	1
$\therefore \bar{x} = A + \frac{\Sigma fiyi}{50} \times h = 65 - \frac{15}{50} \times 10 = 62$	1

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Variance $\sigma^2 = \frac{h^2}{N^2}\left[N\sum fiyi^2 - \left(\sum fiyi\right)^2\right]$		
	$= \frac{(10)^2}{(50)^2}\left[50\times105 - (-15)^2\right]$		
	$= \frac{1}{25}[5250 - 225]$	1½	
	$= 201$		
	Standard diviation (σ) = $\sqrt{201}$ = 14.18	1	

PHYSICAL EDUCATION

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

PHYSICAL EDUCATION
XI

Time : 3 Hours **DESIGN** Max. Marks : 70

I. Weightage of learning objectives :

Objective	Remembring	Understanding	Application	Creative	Hot	Total
% of Marks	27.14	11.5	30	4.3	27.1	100
Marks	19	08	21	03	19	70

II. Weightage to form of questions :

Type of Questions	LA	SA	VS	Total
No. of Questions	07	08	11	26
Marks	35	24	11	70

III. Weightage to Content :

S. No.	Name of Unit
1	Changing Trends & Career in Physical Education
2	Olympic Movement
3	Physical Fitness, Wellness and lifestyle
4	Physical Education & Sports for children with special need.
5	Yoga
6	Physical activity and leadership training
7	Test measurement and Evaluation
8	Fundamentals of Anatomy and Physiology
9	Kinesiology, Biomechanics & Sports
10	Psychology and Sports
11	Training in Sports
12	Doping

IV. Weightage to difficulty level :

1. Difficult questions : 30% 2. Average questions : 50%
3. Easy questions : 20%

V. Expected length of answers to different types of questions & time management :

S. No.	Types of Questions	Expected length of Answers.	Expected time for each question
1	Long Answer (LA)	75-100	11 Min. Approx
2	Short Answer (SA)	30-50	07 Mins.
3	Very Short Answer (VSA)	10-20	02 Mins

PHYSICAL EDUCATION

Time Allowed : 3 Hours | Maximum Marks : 70

General Instructions :

1. All question are compulsory.
2. Question paper consists of 26 questions.
3. 01 mark questions must be answered in 10-20 words.
4. 03 mark questions must be answered in 30-50 words.
5. 05 marks question must be answered in 75-100 words.

SECTION - A (READING SKILLS)

1.	What do you understand by Physical Education?	1
2.	Briefly explain the meaning of positive lifestyle.	1
3.	Give the aim of adaptive physical education.	1
4.	What do you mean by deaflympics?	1
5.	Briefly explain the term 'Pratyahara'.	1
6.	Which Somato body type is suitable for strength dominating sports?	1
7.	Enlist any two properties of muscles.	1
8.	Name two ball and socket joints.	1
9.	Write any two muscles which are found around the shoulder region.	1
10.	Define sports psychology.	1
11.	Recovery is an essential part of sports training. Justify your answer.	1
12.	Give a brief account of the Ancient Olympic Games.	3
13.	Write the main functions of IOC. (Give any six)	3

14. Discuss the role of physical education teacher for children with special need in detail. 3

15. Describe any three objectives of adventure sports in detail. 3

16. Discuss the process of creating leaders through physical education. (Write any three) 3

17. Explain the mechanism of respiration. 3

18. Discuss the harmful effects of prohibited substances. (Write any six) 3

19. What are athletes responsibilities for doping control? 3

20. What do you mean by soft skills? Discuss any four soft skill which are required for the career in the field of physical education. 1+4=5

21. How can health threats be prevented through lifestyle change? Discuss in detail. 5

22. What are yogic kriyas? Explain any two kriyas in detail. 1+4=5

23. What is the procedure to measure the following anthropomatric measurements : 5
    (a) Height Measurement.
    (b) Weight measurement.

24. Most of our body movements are produced with the help of levers formed by the bones. Describe the different types of levers employed by the body while playing with suitalbe examples. 2+3=5

25. Elaborate the developmental characteristics during infancy and childhoood. 5

26. Explain the role of free play in the development of motor components. 5

PHYSICAL EDUCATION

Time Allowed : 3 Hours | Maximum Marks : 70

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given herein but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
1.	Physical education is an education through physical activities for the overall development of human personality.	1	1
2.	Positive life style means practicing of healthy habbits, which keeps us away from diseases, stress and improve quality of life.	1	1
3.	The aim of adaptive physical education is to help or aid children with special need to achieve physical mental, emotional and social growth.	1	1
4.	Deaflymipics is to provide opportunities to persons with hearing disability to participate in elite sports.	1	1
5.	Pratyahara is a process of self-control in which an individual is able to exercise control over his/her senses.	1	1
6.	Endomorph body type is most suitable for strength dominating sports.	1	1
7.	1. Excitability		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	2. Contractitity 3. Elasticity 4. Extensibility (any two)	½+½	1
8.	1. Shoulder joint 2. Hip joint	½+½	1
9.	1. Biceps 2. Triceps 3. Deltold 4. Trapezius 5. Pectoralis major and minor (any two)	½+½	1
10.	According to 'Singer' sports psychology explores one's behaviour in athletics". **OR** According to John Luther, "Sports psychology is the scientific study of persons and their behaviours in sports contexts and the practical application of that knowledge."	1	1
11.	Recovery is an essential part of sports training as it helps in regaining what we lost during training and prepare for the next task.	1	1
12.	The origin of Olympic Games belongs to Greece. The records say that the first historic mentioning of games occured in the		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	year 776 BC. These games were played in the state of Athens near the valley of Appheur river at olympiad. The games were held with religious customs in the honour of their God; Zeus: The ceremony of olympic games begins from the new moon day in July after four years. The events of olympic continued for five days. The prize given to winners were made from olive leaves. Ancient Olympic games came to a sudden end when the Roman emperior Theodosius banned these games in the year 394 A.D.	3	3
13.	Main functions of IOC are discribed below :- 1. The place where the Olympic will be organised is decided by this committee. 2. It takes action in order to strengthen the unity and to protect the independence of the Olympic movement. 3. It acts against any form of discrimination affecting the Olympic movement. 4. It encourages and supports the promotion of women in sports at all levels. 5. It leads the fight against doping in sports. 6. It opposes any political or commericial abuse of sports and athletes.	½×6	3

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
14.	Physical Education Teacher help children with special need to develop physical ability and healthy habits, that can last for their lives. P.E.T. modify sports activities and allow the special need children to get the cardiovascular, flexibility and strength training benifits that allows children to stay healthy. He also provide such physical activities which help in reducing anxiety and stress.	3	3
15.	1. To develop self confidence : - It is one of the main objectives of adventure sports. In fact, the individuals who engage in adventure sports compete with themselves and threfore have a greater sense of achivement when they achieve their goal. 2. To have bonding with nature : - Most of the adventure sports are outdoor activities which give participants ample opportunities to experience nature. The participants come closer to the nature. They have bonding with the nature. 3. Proper use of abundant energy : - Adventure sports provide the participants a positive and healthy channelisation for their abunant energy and enthusiasm. Indeed, it can be said that the use of		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	abundant energy and enthusiasm in such a way is beneficial for the participants for their harmonious development.	1×3	3
16.	1. Provide them some leadership courses and course leads to an application of knowledge, skill and understanding in valuable context. 2. Give them opportunities to continue developing their skills. 3. To have faith and confidence in students. 4. Give them some reward for improvement and give more responsibility to successful student. 5. Offer the students a range of leadership roles such as supervising and managing sports activities. 6. Recognise the leaders by giving them a cap, badge or uniform. This will be force of motivation for other students. (any three)	3	3
17.	The mechanism of respiration is the process of inspiration and expiration during inspiration the intercostal muscles, elivates the ribcage and the diaphragm is pushed down words. Thus forcing the atmospheric air to enter into the lungs and gas exchange take place. During expiration the intercostal		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	muscles and the diaphragm return to its original position and force the lungs to expire the air out.	3	3
18.	There are many side effects of prohibited substance. The side effects are like :- 1. Dehydration and decreased circulation. 2. Complications like stroke, cardiac arrhythmias, Psychosis and even death. 3. Increased heart rate and blood pressure. 4. Sexual Dysfunction 5. Masculinization (features like male) in females. 6. Physical and Psychological dependence leading to many problems associated with addiction and withdrawal. 7. Enlargement of the prostate gland.	½×6	3
19.	There are various responsibilities of athletes with regard to the anti-doping policies and rules of WADA. There should not be any violation of these codes. The responsibilities of athletes are stated below :- 1. Be knowledgeable of an comply with all applicable anti-doping policies and rules. 2. Be available for the sample collection at all times.		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	3. Take the responsibility in the context of anti doping, for what they ingest and use. 4. Inform medical personnel of their obligation not to use prohibited subsances and prohibited methods and to take the responsibility to make sure that any medical treatment received does not violate anti-doping policies. 5. Report immediately to the doping control station for testing unless delayed for valid reasons. 6. Maintain control of one's sample until it is sealed. (any three)	1×3	3
20.	Soft skills are combination of interpersonal skills, communication skills, character traits, attitudes and carrier attributes that enable a person to navigate their environment effectively.	1	
	(a) Communication skills : - The ability to read, write, and speak clearly and effectively. (b) Team work : - Working with a team spirit to face challanges and reacting to a common goal is called a good team work. (c) Interpersonal Relations : - The most important qualities are the willingness to share, the ability to listen others and be patient with others as one work with others.		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	(d) Leadership skills : - Ability to lead a team effectively in the field of Physical Education as it involves keeping a team in such a way that they are motivated and inspired.	1×4	5
21.	(a) Healthy eating habits : - The quantity and quality of food you eat can effect the well being of individuals. Choose nutritious foods which have vitamins, minerals, fiber and other nutrients. (b) Manage chronic conditions : If you have high cholestrol or high blood pressur, follow the doctors advice and recommendations. (c) Manage stress : Take steps to reduce stress or learn to deal with stress in a healthy way. (d) Include Physical Activity in your daily routine : Choose sports or other activities which you enjoy, Aerobics, brisk walking and other activities for 30 min a day for five days a week to keep Physically active everyday. (e) Don't smoke : Do not smoke or use other tabacco products as it may lead to cancer. (f) Preventing injury. (g) Limiting amount of Alcohol.	1×5	5

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
22.	Yogi Kriyas help the individual to clean the internal and external organs of the body.	1	
	(I) NETI KRIYA - It is done in many ways jalneti, sutraneti, dhritneti, telneti and dugdhneti. Water or the above mentioned substance is powered into a bowl having a spout. From the spout it is put inside one of the nostrils. It comes out of the other nostril. But the nostril out of which the water or other substance has to come, should be kept low. These Kriyas should be done under the able guidance of some expert.	2	
	(II) NAULI KRIYA - In this Kriya one bends forward and breathes out. The stomach is shrunk so that the front muscles of the stomach may meet its back muscles. Afterwards, the muscles of stomach facing the head should be exposed. Keeping the hands on the thighs rotate the muscles clockwise and anti-clockwise. This Kriya is helpful in the treatment of aciidity, constipation and other diseases related to the entertines.		
	• Dhoti Kriya • Bhasti Kriya • Tratak Kriya • Kapalbhati Kriya	2	5

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
23.	Height Measurements : The procedure to measure anthropomatric measurement is as follow : (i) Participants are asked to remove their shoes, heavy outer garments, and ornaments. (ii) The participant is asked to stand with his / her back to the height rule. The back of the Lead, back, buttocks, calves and heels should be touching the upright, feet together. The partipant asked to look straight. (iii) The head piece of stadiometer or the sliding part of the measuring rod is lowered so that the hair (if present) is pressed flat. (iv) Height is recorded to the resolution of the height rule to the nearest centimetre. WEIGHT MEASUREMENT (i) Partipants are asked to remove their heavy outer garments and shoes. The participant stand in the centre of the platform, weight distribuled evenly to both feet. Standing off-centre may affect measurement. (ii) The weight is recorded to the resolution of the scale to the nearest Kg.	2½ 2½	5
24.	There are three types of levers which play a vital role in		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	sports and physical activity. A- Class I Lever B - Class II Lever C - Class III Lever Class-I Lever - Have the fulcrum between the effort (force) and load. (Resistence) Example - Seated dumblles triceps extension and hand grip. Class-II Lever - Have the load (Resistence) between the efforts (force) and fulerum. Example - Lever includes push-ups, Leg lifts Class-III-Lever - Lever have the effort (force) between the load (Resistence) and fulcrum. Example - Holding the Tennis Racket and base ball bat.	2 3	5
25.	1. Infancy and Baby hood stage (Brith to 3 year) During this stage of body the growth and development occour in progressive manner. Individual gains considerable weight and height. The cognitive development starts as child tries to balance his body. 2. Childhood Stage (3 years to 12 years) The child hood stage begain from the 3rd year and ends	2½	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	by the 12th year. In this stage we can see the following changes in child. • Enough control on their muscles. • Neuro-muscular coordination becomes more efficient. • Concentration power increases. • Thinking ability, memory logic and decision making ability increases. • Children develop control over their emotions, and improve social qualities.	2½	5
26.	Free play refers to the spontaneous and unstructured activities that engage the motor components of the individual. The development of motor skill involves the control and co-ordination of arms and legs, fingers and toes. Playing on see-saw help children to understand about the balancing and develop lower body strength. (i) Bodyawareness : Activities like jumping, skipping a rope, playing a hop scotch, involve co-ordination of the body parts and certain changes in body postures. (ii) Spatial awareness : Crawling tunnels and obstacle races help children to understand how to move with a		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	restricted space, as they go over, under, around and through objects, playing with blocks, with instructions to build different structures also enhances spatial awareness. (iii) Awareness of directions : Playing like dodge ball, in which children try to avoid getting hit by a sponge ball, helps to learn about position of objects with respect their body parts. (iv) Hand - eye co-ordination - Activities like tossing, catching, dribbling and aiming with a ball develops hand - eye co-ordination, attention and timing skills. (v) Development of fine motor skills : - Refers to the control of small muscles of hands and feet. Playing with sand, beads and strings improve the co-ordination of muscles.	1×5	5

ACCOUNTANCY

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

ACCOUNTANCY
XI

Time : 3 Hours **DESIGN** Max. Marks : 90

I. Weightage of learning objectives :

Objective	Knowledge	Understanding	Hots	Application	Total
% of Marks	28%	13%	16%	43%	100%
Marks	25	12	14	39	90

II. Weightage to form of questions :

Type of Questions	LA-I (6)	LA-I (8)	SA-I(3)	SA-II(4)	VSA(1)	Total
No. of Questions	5	2	6	5	6	24
Marks	30	16	18	20	6	90

III. Weightage to contents

S. No.	Name of Unit	Marks
	PART - A	
1.	UNIT-I : Theoretical framework	15
2.	UNIT-II : Accounting process	40
	PART - B	
3.	UNIT-III : Financial Statement of Sole proprietorship from complete and Incomplete Records	25
4.	UNIT-IV : Computers in Accounting	10
	Total	90

IV. Scheme of Options :- Internal choice in Q 14 and Q 24 (8 marks each)

V. Scheme of Sections :- Part A & B as per curriculum only.

VI. Weightage to difficulty level :

1. Difficult questions
2. Average questions
3. Easy questions

VSA (Very Short Answer Type)	1 mark
SA-I (Short Answer Type)	3 marks
SA-II (Short Answer type)	4 marks
LA-I (Long Answer)	6 marks
LA-II (Long Answer)	8 marks

	Marks	%
Difficult - A	12	13%
Average - B	57	63%
Easy - C	21	24%

VII. Expected length of answers to different types of questions & time management :

Types of Question	**Expected Length of Answer**	**Expected Time for each question**
1. Long Answer Type (LA-I)	8-9 Pages	60 Mins.
1. Long Answer (LA-II)	2 Pages per question	32 Mins.
2. Short Answer (SA-I)	6 Pages	36 Mins.
2. Short Answer (SA-II)	5-6 Pages	40 Mins.
3. Very Short Answer (VSA)	2 Pages	12 Mins.

ACCOUNTANCY

Time Allowed : 3 Hours | Maximum Marks : 90

General Instructions :

1. Question paper is divided into two parts. 'Part A' carrying 55 marks and 'Part B' carrying 35 marks.
2. Both parts are compulsory.
3. All parts of questions should be attempted at one place.
4. 25% marks are to be deducted for not using the correct formats and working notes.

PART - A

1. Atul is a furniture dealer. He has purchased furniture for ₹ 4,50,000 and paid ₹ 30,000 as cartage. $^1/_3$ rd of the furniture purchased was to be used in furnishing the office. Calculate the amount of capital expenditure and Revenue expenditure. 1

2. State any two characteristics of Goods and Service Tax (GST). 1

3. Define Transfer Voucher. 1

4. Name the Bill of Exchange which is drawn and accepted for the mutual help. 1

5. Briefly state and explain any three qualitative characteristics of Accounting Information. 3

6. Highlight the meaning and utility of Accounting Standards in preparation of financial records. 4

7. From the following information of M/s Delhi Stationers, Nai Sarak, Delhi, prepare the purchases Book for the month of February 2018 :

2018	Purchased from M/s Arora traders, Kolkata on credit
February 1	5 gross pencils @ ₹ 100 per dozen
	2 dozen registers @ ₹ 500 per dozen
	Less : Trade discount @ 10%
February 2	Purchased for cash from Vij Stationery Mart :
	10 dozen ledger books @ ₹ 3600 per gross.
February 3	Purchased computer printer for office use from M/s Bansal computers on credit for ₹ 20,000.
February 4	Purchased on credit from Haryana traders, Delhi
	8 reams of white paper @ ₹ 500 per ream.
	10 reams of ruled paper @ ₹ 600 per ream
	Less : Trade discount @ ₹ 10%
February 5	Purchased 80 Rorito pens @ ₹ 5each from M/s Rohan Bros., Delhi on credit.

Note : CGST and SGST is levied @2.5% each and IGST is levied @5%

1 Gross = 12 Dozen 4

8. (a) Subin commenced business on 01.0417 with a capital of ₹ 90,000 and a loan of ₹ 30,000. He introduced additional capital of ₹ 15,000 and withdrew ₹ 8,000 for his personal use. He earmed a profit of ₹ 10,000 for the year ended 31.3.18. Calculate the Capital and Total Assets of Subin as on 31.3.18. 2

(b) Mention any one example of each of the following :

(i) Increase in the asset and increase in the liability.

(ii) Increase in the liability and decrease in the liability. 2

9. (a) Differentiate between General reserve and Specific reserve. 2

(b) Interprete the meaning of 'Imprest' or 'Float' as a system of Petty cash with example. 2

10. (a) Amantex Ltd. purchased 50 blakets @ ₹ 1,000 per blanket. During the year they sold 30 blankets @ ₹ 1,500 per blanket. The total amount paid by Amantex Ltd. was ₹ 50,000 and revenue earned was ₹ 45,000. He decided to show the net deficit of ₹ 5,000 and revenue earned was ₹ 45,000. He decided to show the net dificit of ₹ 5,000 as loss.
Are they correct in doing so? Highlight the concept involved in it and also explain it. 3

(b) An investment company has Securities as Current Assets having market value subsequently lower than the cost price. The company continues to show them at cost. Which concept is being followed / voilated? Give reasons in support of your answer. 3

11. Kajal sold goods to Radhika on 01.04.18 of list price ₹ 1,00,000, trade discount 20%. Radhika paid ₹ 20,000 in cash and accepted two bills of ₹ 20,000 and ₹ 40,000 payable after 3 months and 4 months respectively. On 02.04.18 Kajal endorsed the first bill to Arjun in full settlement of her debt of the same amount. On 04.05.18, the second bill was discounted with the bank @ 12% p.a. On due date the first bill was dully met. On the due date of second bill, Radhika failed to honour the bill and noting charges of ₹ 500 were paid. On 10.08.18, Radhika paid ₹ 11,000 in cash and accepted another 3 months bill of ₹ 30,000. One month before maturity, Radhika retired the bill under a rebate of 12% p.a. pass necessary Journal entries in the books of drawer only. 6

12. Shinchan Ltd. depreciates its machines @ 10% p.a. on reducing balance method. They provide you with the following informations :

Machinery as on 1.04.18	₹ 5,00,000
Provision for depreciation as on 01.04.18	₹ 95,000

On 01.10.2018, a machine purchased on 01.04.16 became absolete and sold at a loss of ₹ 26,950. Immediately another machinery was purchased for ₹ 2,00,000.

Prepare Machinery Account and Provision for depreciation account for the year ended 31.03.19. 6

13. (i) The Pass book of Akansh showed a debit balance of ₹ 55,000. But on the same date his cash book showed a different balance. After scrutinizing, he found the following discrepencies :
    (a) In the month of April 2018, he had issued cheques of ₹ 37,000 of which only ₹ 20,000 had been presented for payment.
    (b) The bank has paid club fees ₹ 2,000 as per his standing instructions. This transaction was not recorded in the cash book.
    (c) A cheque of ₹ 5,000 received from Akshara was sent to the bank and duly credited by the bank but it was recorded in cash column of cash book. 4

    (ii) Prepare a bank reconciliation statement. Pass rectifying Journal entries in the following cases :-
    (a) Goods of ₹ 50,000 purchased from Rohan were received and included instock but no entry was passed.
    (b) Machinery Purchased for ₹ 1,00,000 from Rajat Machinery and Tools Ltd. was recorded in Purchase Book as ₹ 10,000 2

14. The following balances brought forward in the books of Mr. Bheem on 01.04.18 :
    (a) Cash ₹ 50,000
    Stock ₹ 1,00,000
    Creditors ₹ 30,000
    Outstanding salary ₹ 20,000
    (b) On 02.04.18 he sold goods to Chutki costing ₹ 80,000 at a profit of 25% on cost and allowed 10% trade discount and 5% cash discount. $^1/_3$rd amount was received in cash immediately.
    (c) Paid ₹ 10,000 for outstanding salary.
    (d) In the first week of April 2018, there was a dispute between workers

union and management resulting in strike and there was an expected revenue loss of ₹ 50,000.

(e) Chutki became insolvent and only 50% could be recovered from her.

Pass necessary Journal entries, post them into ledger and prepare Trial Balance for the accounting period 01.04.2018 to 30.04.2018. 8

OR

On 01.04.2018, the following balances were brought forward in the books of Aksh stores. :

	₹	
Cash	50,000	
Bank	20,000	
Rohit	15,000	(Dr.)
Furniture	35,000	
Salary Outstanding	20,000	

02.04.2018	Received a cheque from Rohit after allowing cash discount of 5%
03.04.2018	Deposited Rohit's cheque in Bank.
10.04.2018	Purchased goods of list price ₹ 50,000 from Mohit @20% trade discount and 5% cash discount. Paid 50% amount immediately.
30.04.2018	Paid ₹ 20,000 for outstanding salary

Prepare Cash book, post them into ledger and prepare Trial Balance.

PART - B

15. "Cost of obtaining licence to carry out business" is what kind of expenditure? Give reason. 1

16. The owner of a toy manufacturing firm maintains the accounts under Single Entry System. Identify the accounting principle ignored by him. 1

17. On 1st April 2017. X started a business with ₹ 40,000 as his capital. On 31st March 2018, his position was as follows :- 3

Particulars	Amt. (₹)
Creditors	30,000
Bills payable	10,000
Bank	10,000
Debtors	50,000
Stock	40,000
Plant	68,000
Furniture	12,000

During the year 2017-18, X withdrew ₹ 6000 per quarter. On 1st October 2017, be sold his personal Investment worth ₹ 20,000 at a premium of 10%. Half amount has Invested in the business. You are required to ascertain profit or loss made by him during the year 2017-18 after considering the following adjustments :-

(a) Plant is to be depreciated at 10%

(b) A provision of 5% is to be made against Debtors.

18.

Sales (Gross)	₹ 6,10,000
Sales Return	₹ 10,000
Gross profit	20% on Cost of Goods sold
Stock in the beginning	₹ 20,000
Stock at end	₹ 40,000
Wages	₹ 30,000
Carriage Inward	₹ 20,000
Carriage Outward	₹ 25,000

Calculate Purchases. 3

19. (a) Explain the difference between Trial Balance and Balance Sheet on the basis of

(a) Object (b) Adjustments

(b) State the meaning of Octroi. 2+1=3

20. Give journal entries for the following adjustments in final accounts.
    (a) Goods costing ₹ 20000 (Market value ₹ 21000) were taken by the proprietor for personal use.
    (b) ₹ 2000 received for rent is related to the next accounting period.
    (c) Outstanding salaries ₹ 20,000. 3

21. Explain any two features and one limitation of incomplete records. 3

22. What is Humanware? Explain 3 types of computer software. 1+3

23. Explain the various stages in automation of accounting process. 6

24. From the following adjjustments and with the help of Trial balance prepare a Trading A/c, Profit and loss A/c and Balance Sheet of Shri Krishna Trading Co. as at 31/3/2018. 8

Dr. Balances		₹	Cr. Balances	₹
Insurance Charges		4,800	Capital	3,40,000
Salaries & Wages		38,800	Creditors	40,000
Cash in hand		400	Sales	2,40,000
Cash at Axis Bank		53,000	Returns Outwards	2,400
Trade Exp.		800	Provision for Doutbful debts	800
Telecom Services Exp.		1,600	Discount	1,600
Drawings		12,000	Rent of Premises	2,400
Office Equipment				
Balance				
1/4/17	2,40,000			
Addition	10,000	2,50,000		
1/10/17				
Stock 1/4/17		30,000		
Purchases		1,64,000		
Returns Inward		4,000		
Debtors		41,600		
Furniture & Fixtures		10,000		
Freight & Duty		4000		
Carriage Outwards		1000		
Rent Rates & Taxes		9200		
Printing & Stationery		2000		
		6,27,200		6,27,200

Adjustments -

(1) Stock on 31st March 17 was valued at ₹ 48000 and its market value is ₹ 70,000.

(2) The provision for doubtful debts is to be maintained at 6% on Debtors.

(3) Create a provision for discount on debtors at 2% also write off ₹ 1600 as bad debts.

(4) Provide depreciation on office equipment @ 10% p.a.

(5) A fire occured on 25 March 2017 in the Godown and stock of the value of ₹ 12000 was destroyed. It was insured and insurance co. admitted a claim of ₹ 8000.

OR

Fill in the missing figures in the following :

TRADING AND PROFIT & LOSS ACCOUNT
FOR THE YEAR ENDING 31ST MARCH 2018

Dr. Cr.

Particulars	Amount	Particulars	Amount
To Opening Stock	24,000	By Sales 2,40,000	
To purchases 1,06,750		Less :- Return -	---
Less :- Transferred to		Inward	
machinery 10,000		By Closing Stock	26,000
Less :- Return			
outward 2750	---		
To wages	---		
To Factory Lighting			
and Heating 400			
Add : Outstanding -	--		
To Gross Profit C/d	67,800		
	2,61,350		---
To Salary	7,000	By Gross profit b/d	---
To Rent	3,000	By Discount	1,850
To Insurance	3,150		

To General Exp.	500		
To Bad-debt 1,250			
Add:- Further			
Bad debt - ---			
Add :- New			
Provision ---			
Less :- Old			
Provision 1,250	---		
To provision for			
discount on Debtors	420		
To Discount	3,250		
To Depreciation on			
furniture	---		
To net profit			
transferred to			
Capital A/c	---		
	---		---

BALANCE SHEET

as at 31st March 2018

Liabilities	Amount	Assets		Amount
Bill Payable	2,800	Cash in Hand		---
Sundary Creditors		Cash at Bank		3,250
Outstanding factors		Bills Receivable		3,600
Lighting and treating	150	Sundary Debtors	22,850	
Capital 20,000		Less :- Further		
Add:- Net		Bad Debts	350	
Profit		Less :- New provision for		
Less :		doubtful debt	1500	
Drawings 3,500	----	Loss :- Provision for		
		discount	---	---
		Closing stock		---
		furniture	1300	
		Less:- Depreciation	65	---
		Plant & Machinery		
		Add	25000	
		transferred	---	---
		from purchase		
	95,868			6,27,200

ACCOUNTANCY

Time Allowed : 3 Hours | Maximum Marks : 90

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given herein but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
1.	Total cost of furniture purchased ₹ 4,50,000 + ₹ 30,000 = ₹ 4,80,000 used in furnishing the office $\frac{1}{3}$ × 4,80,000 = ₹ 1,60,000 (Capital expenditure) (Asset) Treated as stock $\frac{2}{3}$ × 4,80,000 = ₹ 3,20,000 (Revenue expenditure) (Purchases)	½ ½	1
2.	Characteristics of GST (a) GST is a comprensive indirect tax. (b) GST is a value added tax. (c) GST paid is not cost (d) Uniform GST rates on goods and services accros all states. ½ mark each for any 2 points [½+½]		1
3.	Transfer Voucher Transfer Voucher refers to the vouchers prepared for the transactions not involvong cash. Example - Debit note and credit note		1
4.	Accommodation Bill		1
5.	Qualitative characteristics of Accounting Information : (a) Reliability - Reliability of information means it is verifiable, free from bias and material error.		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	(b) Releavance - Information is relevant if it meets the needs of the users in decision - making. (c) Understandability - Information provided through the financial statements must be presented in a manner that the users are able to understand it. (d) Comparability - The user should be able to compare the accounting information of an enterprise of the period either as intro-firm comparison or as inter-firm comparison.		3
6.	Kohler has defined accounting standards as, "a code of conduct imposed on an accountant by custom, law and a professional body." Utility of Accounting Standards : (a) AS provide the norms on the basis of which financial statements should be prepared. (b) AS ensures uniformity in the preparation and presentation of financial statements by removing the effect of diverse accounting practices. (c) AS create a sense of confidence among the users of accounting information. (d) AS help auditors in auditing the accounts.		4
7.	PURCHASE BOOK		

Date	Particulars	I. No	L F	Details ₹	Cost ₹	Input CGST ₹	Input SGST ₹	Input IGST ₹	Total ₹
2018 Feb 1	M/s Arora traders Kolkata								
	5 gross pencils @ ₹100 per dozen			6000					
	2 dozen registers @ ₹500 per dozen			1000					
				7000					
	Less : trade discount @10%			(700)					
				6300					
	Add : IGST @5%			315					
				6615	6300	-	-	315	6615

1½

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

Feb 4	Haryana Traders Delhi 8 reams white paper @₹500 each 10 reams ruled paper @₹ 600 each Less trade discount @10% Add CGST@2.5% SGST@2.5%			4000 6000 10000 1000 9000 225 225						
				9450	9000	225	225	-	9450	1½
Feb 5	M/s Rohan Bros Delhi 80 Rorito pens @ ₹5 each Add CGST@2.5% SGST @ 2.5%			400 10 10						
				420	400	10	10	-	420	1
Feb20					15700	235	235	315	16485	4

8. (a) Closing capital = opening capital + Additional capital + Profit – Drawings

= ₹ 90,000 + ₹ 15,000 + ₹ 18,000 – ₹ 8,000

= ₹ 1,15,000 — 1

Total assets = closing capital + Liabilities

= ₹ 1,15,000 + ₹ 30,000

= ₹ 1,45,000 — 1 — 2

(b) (i) Goods purchased on credit and loan taken — 1

(ii) Bills payable dishonoured and Bills payable accepted. — 1 — 2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
9.	(a) Difference between General reserve and specific reserve.		

Basis of Difference	General Reserve	Specific Reserve	
Meaning	It is the reserve created out of profit not for any specific purpose.	It is the reserve set aside for a specific purpose. Which can be utilised only for that purpose.	1
Example	Contingency reserve, general reserve,	Debenture redemption reserve, workmen compessation reserve	1
			2

	(b) <u>Imprest System</u> According to this system, a fixed amount (based on past experience) is advanced to the petty cashier at the beginning of the period by the head cashier.	1	
	<u>Example</u> Suppose, petty cashier is given an advance of ₹ 1,000 on 1st June. The petty cashier will make payments for petty expenses out of this imprest amount. If he spends ₹ 700 by the end of June, he will be rembursed ₹ 700 by the Head cashier. As a result, Petty cashier will again restart with he original amount of ₹ 1,000 on the first day of July.	1	2
10.	No Amntex Ltd. is not correct	½	
	(a) <u>Matching Principle</u> According to this concept, the expenses for an accounting period are matched against related revenues, rather than cash received and cash paid.	½ 2	3

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	(b) The company has violated the concept of Prudence.	1	
	It should bring down the value of current assets to its market value because the financial statements will otherwise show a better picture than what it actually is.	2	3
11.	**JOURNAL OF KAJAL**		

Date	Particulars	LF	Debit (₹)	Credit (₹)	
1.4.18	Radhika Dr. To Sales A/c (being goods sold to Radhika)		80,000	80,000	½
1.4.18	Cash A/c Dr. Bills Receivable 1 Dr. Bills Receivable 2 A/c Dr. To Radhika (Cash and Bills receival from Radhika)		20,000 20,000 40,000	80,000	1
2.4.18	Arjun Dr. To Bills Receivable 1 (Bill endorsed to Arjun)		20,000	20,000	½
4.5.18	Bank A/c Dr. Discounting charges A/c Dr. To Bills Receivable 2 (Bill discounted from bank)		38,800 1200	40,000	1
4.8.18	Radhika Dr. To Bank A/c (Discounted bill dishonoured and noting charges paid)		40,500	40,500	½

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

10.8.18	Cash A/c Dr. To Radhika (Cash received from Radhika)		11000	11000	½
10.8.18	Radhika Dr. To Interest A/c (Interest due from Radhika)		500	500	½
10.8.18	Bills Receivable A/c Dr. To Radhika (New bill drawn on Radhika)		30000	30000	½
13.10.18	Cash A/c Dr. Rebate A/c Dr. To bills receivable (Bill retired by Radhika 1 month before maturity)		29700 300	30000	1

Working Notes

Discounting charges = $40{,}000 \times \frac{12}{100} \times \frac{3}{12}$

= ₹ 1,200

Rebate = $30{,}000 \times \frac{12}{100} \times \frac{1}{12}$

= ₹ 300

6

12.

Machinery A/c

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
1.4.18	To Balancd B/d		500000	1.10.18	By Provision for		
1.10.18	To Bank A/c		200000	1.10.18	Depreciation A/c		23050
				1.10.18	By Bank A/c		50000
				31.3.19	By Loss on sale of		
					Machinery A/c		26950
					By Balance c/d		600000
			700000				700000
1.4.19	To Balance b/d		600000				

2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

Provision for Depreciation A/c

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
1.10.18	To Machinery A/c		23050	1.4.18	By Balance b/d		95000
31.3.19	To Balance c/d		118400	1.10.18	By Depreciation a/c		4050
				31.3.19	By Depreciation A/c		42400
			141450				141450
				1.4.19	By Balance b/d		118400

2

Working Note

(i) Calculation of Sale price of Machinery

1.4.16		Cost	1,10,000
31.3.17	(–)	Depreciation	(10,000)
1.4.17		Book Value	90,000
31.3.18	(–)	Depreciation	(9,000)
1.4.18		Book Value	81,000
1.10.18	(–)	Depreciation	(4,050)
1.10.18		Book Value	76,950
1.10.18	(–)	Loss on sale of Machinery	(26,950)
1.10.18		Sale Price	50,000

1

(ii) Total Depreciation on 1.4.10 = 45,000

(–) Depreciation on machinery sold = (19,000)

31.3.17 10,000

31.3.18 9,000

Balance of Machinery left = 76,000

Book value of machinery left

= 5,00,000 – 1,00,000 – 76,000

= 3,24,000

Depreciation to be provided = $3,24,000 \times \frac{10}{100} = 32,400$

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Depreciation on new Machinery = 2,00,000 × $\frac{10}{100}$ × $\frac{6}{12}$ = 10,000	1	6
13.	(i) **BANK RECONCILIATION STATEMENT AS ON 30.4.18**		

Particulars	Plus (+) (₹)	Minus (–) (₹)	
Debit balance as per Pass book		55000	½
(a) cheques issued but not presented for payment.		17000	1
(b) Bank has paid club fees as per standing institutions	2000		1
(c) Cheque received and sent to bank but recorded in cash column of cash book.		5000	1
Credit Balance as per cash book.	75000		½ 4
	77000	77000	

(ii) **JOURNAL (RECTIFYING)**

Date	Particulars	LF	Debit (₹)	Credit (₹)		
(a)	Purchase A/c Dr. To Rohan (Goods Purchased from Rohan not recorded earlier, now recorded)		50,000 ----	 50,000	1	
(b)	Machinery A/c Dr. To purchase A/c To Rajat Machinery and Tools Ltd. (Machinery Purchased but wrongly recorded in purchase book by wrong amount now rectified)		1,00,000 ---- ----	---- 10,000 90,000	1	2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

14.

JOURNAL

2018	Particulars	LF	Debit (₹)	Credit (₹)
April 1	Cash A/c Dr. Stock A/c Dr. To Creditors To outstanding Salary To Capital (Balancing fig.) (Balances brought forward)		50000 100000	 30000 20000 100000
April 2	Chutki Dr. To Sales (Goods sold to chutki)		60000	 60000
April 2	Cash A/c Dr. Discount Allowed A/c Dr. To Sales (½ Amt. Received from chutki & 2% cash discount allowed))		28500 1500	 30000
April 15	Outstanding Salary A/c Dr. To Cash A/c (Payment made for outstanding Salary)		10000	 10000
April 30	Cash A/c Dr. Bad-debts A/c Dr. To chutki (Chutki became Insolvent and 50% amount Received)		30000 30000	 60000

½ ½ ½ ½ ½

CASH A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
2018							
April 1	To Balance B/d		50000	April 15	By outstanding Salary		10000
2	To Sales		28500	April 30	By Balance c/d		98500
30	To chutki		30000				
			108500				108500
May1	To Balance b/d		98500				

½

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

STOCK A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
2018							
April 1	To Balance B/d		100000	April 30	By Balance c/d		100000
			100000				100000
May1	To Balance b/d		100000				

½

CREDITORS A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
				2018			
April 30	To Balance c/d		30000	April 1	By Balance b/d		30000
			30000				30000
				May 1	By Balance b/d		30000

½

OUTSTANDING SALARY A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
				2018			
April 15	To cash A/c		10000	April 1	By Balance b/d		20000
April 30	To Balance c/d		10000				
			20000				20000
				May 1	By Balance b/d		10000

½

8

CAPITAL A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
2018				2018			
April 30	To Balance c/d		100000	April 1	By Balance b/d		100000
			100000				100000
				May 1	By Balance b/d		100000

½

CHUTKI A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
2018				2018			
April 2	To Sales		60000	April 30	By Cash A/c		30000
				30	By Bad-debts A/c		30000
			60000				60000

½

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

SALES A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
2018				2018			
April 30	To Balance c/d		90000	April 2	By Chutki		60000
				2	By Cash		28500
				2	By Discount		1500
			90000				90000
				May 1	By Balanced b/d		90000

½

DISCOUNT ALLOWED A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
April 2	To Sales A/c		1500	April 30	By Balance c/d		1500
			1500				1500
May 1	To Balance b/d		1500				

½

BAD DEBTS A/C

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
April 30	To chutki A/c		30000	April 30	By Balance c/d		30000
			30000				30000
May 1	To Balance b/d		30000				

½

TRIAL BALANCE AS ON 30TH APRIL 2018

Particulars	Amt. (₹)	Amt. (₹)
Cash A/c	98500	
Stock A/c	100000	
Creditors A/c		30000
Outstanding Salary A/c		10000
Capital A/c		100000
Sales A/c		90000
Discount Allowed A/c	1500	
Bad-debts A/c	30000	
Total	230000	230000

1

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

OR

IN THE BOOK OF AKSH STORES

CASH BOOK

Dr. Cr.

Date	Particulars	J F	Cash (₹)	Bank (₹)	Date	Particulars	J F	Cash (₹)	Bank (₹)
1.4.18	To Balance				10.4.18	By purchase			
3.4.18	B/d		50000	20000		a/c		19000	-
	To cheque in				30.4.18	By o/s Salary			
	hand		-	14250		a/c		20000	-
			50000	34250	30.4.18	By balance			
	To balance					c/d		11000	34250
	b/d		11000	34250				50000	34250

1½

JOURNAL PROPER

2018	Particulars	LF	Debit (₹)	Credit (₹)	
1.4.18	Cash A/c Dr.		50000		
	Bank A/c Dr.		20000		
	Rohit Dr.		15000		½
	Furniture A/c Dr.		35000		
	To o/s Salary a/c			20000	
	To Capital a/c			100000	
	(Opening balance brought forward)				
2.4.18	Cheque in hand a/c Dr.		14250		
	Discount A/c Dr.		750		
	To Rohit			15000	½
	(Cheque received and discount allowed to Rohit)				
10.4.18	Purchases A/c Dr.		21000		
	To Mohit			20000	
	To Discount received A/c			1000	½
	(Goods purchased and discount received)				

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

ROHIT

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
1.4.18	To Balance b/d		15000	2.4.18	By Cheque in hand A/c		14250
				2.4.18	By discount allowed A/c		750
			15000				15000

½

FURNITURE A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
1.4.18	To Balance b/d		35000	30.4.18	By Balanced c/d		35000
			35000				35000
1.5.18	To Balance b/d		35000				

½

O/S SALARY A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
30.4.18	To Cash A/c		20000	1.4.18	By Balanced b/d		20000
			20000				20000

½

DISCOUNT RECEIVED A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
				10.4.18	By purchases A/c		1000

½

DISCOUNT ALLOWED A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
2.4.18	To Rohit		750				

½

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

MOHIT

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
30.4.18	To Balance c/d		20000	10.4.18	By Purchase a/c		20000
			20000				20000
				1.5.18	By Balance b/d		20000

½

PURCHASE A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
10.4.18	To Mohit		20000				
10.4.18	To Discount						
10.4.18	received A/c		1000				
	To cash A/c		19000				
			40000				40000

½

CAPITAL A/C

Dr. Cr.

Date	Particulars	J F	Amount (₹)	Date	Particulars	J F	Amount (₹)
				1.4.18	By Balanced b/d		100000
30.4.18	To Balance c/d		100000				
			100000				100000
				1.5.18	By Balance b/d		100000

½

TRIAL BALANCE AS ON 30.4.2018

Particulars	Amt. (₹)	Amt. (₹)
Cash	11000	-
Bank	34250	-
Furniture	35000	-
Mohit	-	20000
Capital	-	100000
Discount received		1000
Discount allowed	750	-
Purchase	40000	-
Total	121000	121000

1

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
15.	Capital Expenditure because it is going to give benefit over a no. of years.	½+½	1
16.	Dual aspect concept is ignored by the owner.	1	1
17.	**STATEMENT OF AFFAIRS AS AT 31ST MARCH 2018**		

Particulars	Amount (₹)	Particulars	Amount (₹)
Creditors	30000	Bank	10000
Bils Payable	10000	Debtors	50000
Capital (Balancing figure)	140000	Stock	40000
		Plant	68000
		Furniture	12000
	180000		180000

1

STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED 31ST MARCH 2018

Capital as at 31st March		140000
Less Additional capital $\left[20000 \times \frac{110}{100} \times \frac{1}{2}\right]$		11000
		129000
Add. Drawings during the year (6000×4)		24000
Less Capital as at 1st April 2017		153000
		40000
Profit before Adjustments		113000
Less Provision for doubtful debts	(2500)	
Depreciation	(6800)	(9300)
Net Profit		103700

2 | 3

18.	Net Sales = 6,10,000 – 10,000 = ₹ 6,00,000 Cost of Goods sold = x	½	

<table>
<tr><th>S. No.</th><th>VALUE POINTS / KEY POINTS</th><th>Marks Allotted to each value Point/Key Point</th><th>Total Marks</th></tr>
<tr><td></td><td>
G.P. = 20% of x = $\frac{x}{5}$
Net sales = cost of goods sold + G.P.
600000 = x + $\frac{x}{5}$
600000 = $\frac{6x}{5}$
x = 600000 × $\frac{5}{6}$ = 500000
Cost of Goods Sold = Opening stock + purchases + wages + carriage Inward closing stock
5,00,000 = 20,000 + Purchases + 30,000 + 20,000 – 40,000
Purchases = ₹ 470,000
</td><td>1
½
1</td><td>3</td></tr>
<tr><td>19.</td><td>(a)
<table>
<tr><th>Basis</th><th>Trial Balance</th><th>Balance Sheet</th></tr>
<tr><td>Object</td><td>It is prepared to check the arithmetical accuracy of the books of accounts.</td><td>It is the prepared to know the true financial position of the firm.</td></tr>
<tr><td>Adjustments</td><td>It can be prepared without making adjustments for outstanding expenses, prepaid expenses, accrued incomes etc.</td><td>It can not be prepared without making adjustments for outstanding expenses, prepaid expenses, accured incomes etc.</td></tr>
</table>
(b) Octroi - This is levied by the Municipal committee when the goods enter the city and hence debited to Trading account.</td><td>1
1

1</td><td>2

1</td></tr>
</table>

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
20.	JOURNAL		

S. No.	Particulars	J F	Amount (₹)	Amount (₹)	Marks Allotted to each value Point/Key Point	Total Marks
1	Drawings A/c Dr. To Purchases A/c (Goods taken by proprietor for personal use)		20000	20000	1	
2	Rent received A/c Dr. To Rent received in advance A/c (Rent received in advance accounted in the books)		2000	2000	1	
3	Salaries A/c Dr. To outstanding Salaries A/c (Outstanding salaries accounted in the books)		20000	20000	1	3

21. Features -

(1) Maintenance of personal accounts only - Only Personal accounts are prepared in the books and the Real and Nominal accounts are ignored.

(2) Maintenance of cash book - A cash book is maintained which usually mixes up business as well as private transactions of the owner.

(3) Lack of uniformity - There is no uniformity among the firms because the system is only an adjustment of double entry system according to the actual needs of the business houses.

(4) Suitability - It is suitable for single ownership or partnership firm. — 2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Limitations - (1) Preparation of Trial balance not possible (2) Unscientific system (3) True Profit & Loss cannot be ascertained. (4) Difficulty in preparing balance sheet. (5) No recognition by Fan autority. (6) Difficulty in comparative study. (7) Unsuitable for planning and control.	1	3
22.	Humanware - People interacting with the computer and executing the program or software are known as Huanware.	1	
	Accounting software can be divided into 3 categories		
	1. Operating Software - Operating software is a set of specialised programs that make interface between the user and computer hardware. Example. Windows Software	1	
	2. Utility Sofware - It is a set of computer used to perform supporting operations in a computer utility software operations in a computer utility software usually focuses on how the computer infrastructure operates. Example :- disk cleaners, Anti-virus etc.	1	
	3. Application Software :- It is the user oriented programme which is designed and developed for performing certain jobs, such as accounting, word processing and designing.	1	4

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	For example :- Tally, MY-SQL, Pagemaker etc.		
23.	The automotion process can be divided into six steps.		
	1. Planning - The term planning means making an assessment of the size of the entity, its requirement from the accounting process, estimated volume of transactions, automation has to be made. A near accurate planning and estimate is the first stage of automation of accounting process and a pre-requisite for estabilishing effective automated accuning process.	1	
	2. Selecting Appropriate Accounting Software :- Selection of computer software is the second stage of automation. Accounting software is selected on the basis of plans drawn by the entity and also the legal requirements for example. If the volume of transaction is very large and the selected accounting software is not capable of handling the volume, the software will not meet the requirement of the Entity.	1	
	3. Selecting Appropriate computer Hardware :- Selecting computer hardware is the third stage of automation. Computer hardware must be comptible with accounting software with appropriate configuration.	1	
	4. Chart of Accounts :- Chart of accounts will have to be prepared as the next step. It means listing the head		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	of accounts to which various transactions are to be debited and credited and also where these accounts will be reflected in the final accounts.	1	
	5. Grouping of Accounts : - In this step account heads are grouped in various sub-heads according to their nature and the final amount in the sub-group is shown in final accounts. eg. Salary, wages, staff welfare expenses and similar account heads may be grouped under establishment expenses.	1	
	6. Generation of Reports :- Generation of reports is the final stage of automated accounting process. Reports means generating reports from the system, including, ledger, cash book, journal book etc. In addition to above reports, an entity may generate other reports such as debtor report, creditors report etc.	1	6
24.	**TRADING AND PROFIT AND LOSS A/C FOR THE YEAR ENDING 31.3.2018**		

Dr. **Cr.**

Particulars	(₹)	Particulars	(₹)
To Stock	30000	By Sales 240000	
To Purchases		Less - Returns 4000	
164000		Inward	236000
Less - Returns 2400		By Closing Stock	48000
Outward			
161600			
Less - Loss by 12000			
Fire	149600		
To Freight & Duty	4000		
To Gross Profit c/d	100400		
	284000		284000

2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

To Insurance Charges	4800	By Gross Profit b/d	100400	
To Salaries & Wages	38800	By discount	1600	
To trade Exp.	800	By Rent of premises	2400	
to Telecom Services Exp.	1600			
To carriage outward	1000			
To rent rates & Taxes	9200			
To printing & Stationery	2000			
To bad debt 1600				
2400				
Add-New Provision				
Less - old Provision 800	3200			
for doubtful debt				
To Provision for discount on Debtor	752			
To Depreciation on office equipment	24500			
24000				
+500				
To Loss by fire	4000			
To Net Profit transferred to capital	13748			3½
	103200		103200	

BALANCE SHEET OF KRISHNA TRADING CO.

Liabilities		(₹)	Assets		(₹)		
Creditors		40000	Cash in hand		400		
Capital	340000	341748	Cash at Axis bank		53000		
add-Net Profit	13748		Debtors	41600			
	353748		Less- bad debt	1600			
Less-			Less- Provision for doubtful debts	2400			
Drawings	12000	341748	Less- provision for discount on Dr.	752	36848		
			Insurance Co (claim)		8000		
			Closing stock		48000		
			Furniture & Fixtures		10000		
			Office Equipment				
				250000			
			Less - Dep.	24500	225500	2½	8
		281748			381748		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

OR

TRADING AND PROFIT & LOSS ACCOUNT
FOR THE YEAR ENDING 31ST MARCH 2018

To opening stock		24000	By Sales	240000	
To purchases			Less- Return		
	106750		inward	4650	235350
Less- transferred to			By closing stock		26000
machinery	10000				
	96750				
Less- Return					
outward	2750	94000			
To wages		75000			
To factory lighting					
& Heating	400				
Add -					
Outstanding	150	550			
To Gross Profit c/d		67800			
		261350			261350
To Salary		7000	ByG.P. b/d		67800
To Rent		3000	By discount		1850
To Insurance		3150			
To General Exp.		500			
To Bad-debts	1250				
Add.- Further					
bad debts	350				
	1600				
Add- New					
Provision	1500				
	3100				
Less- Old	1250	1850			
To Provision for					
discount on Debtors		420			
To Discount		3250			
To Depreciation of					
furniture		65			
To Net profit					
transfering to					
capital A/c		50415			
		69650			69650

2

3

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

BALANCE SHEET AS AT 31ST MARCH 2018

Liabilities		Amount	Assets		Amount
Bills payable		2800	Cash in hand		6200
Sundary creditors		26000	Cash at bank		3250
O/s factory lighting & Heating		150	Bills Receivable		3600
			Sundary Debtors	22850	
Capital	20000		Less : Further Bad debts	350	
Add.- Net Profit	50415			22500	
	70415		Less- New Provision for Doubtful debt	1500	
Less - Drawings	3500	66915		21000	
			Less- Provision for discount	420	20580
			Closing stock		26000
			Furniture	1300	
			Less- Dep.	65	1235
			Plant & Machinery	25000	
			Add- Transferred from purchase	10000	35000
		95865			95865

3

ECONOMICS

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

ECONOMICS
CLASS - XI

Time : 3 Hours | Max. Marks : 80

I. Weightage of learning objectives :

Objectives	Knowledge	Understanding	Application	HOTS	Evaluation	Total
% of Marks	24	23	21	20	12	100
Marks	19	18	17	16	10	80

II. Weightage to form of questions :

Type of Questions	MCQ (1)	VSA (1)	SA - I (3)	SA - II (4)	LA (6)	Total
No. of Questions	1	7	4	6	6	24
Marks	1	7	12	24	36	80

III. Weightage to content

Unit No.	Name of Unit	Marks
Part A	Introductory Microeconomics	
	Introduction	4
	Consumer's Equilibrium and Demand	13
	Producer Behaviour & Supply	13
	Forms of Market & Price Determination under perfect competition with simple applications	10
		40
Part B	Statistics	
	1. Introduction	
	2. Collection, organisation & presentation of data	13
	3. Statistical Tools & Interpretation	27
		40
Part C	Project Work	20
	Total	100

IV. Scheme of Options : Internal choice in Question carrying 3, 4 and 6 marks in both the sections.
(3 Internal choices in each section)

V. Scheme of Sections :
2 Sections Part A : Introductory Micro Economics
Part B : Statistics

VI. Weightage to difficulty level
(a) Difficult Questions (A) 37%
(b) Average Questions (B) 42%
(c) Easy Questions (C) 21%

VII. Expected length of Answer to different types of questions and time management :

Type of Question	**Expected Length of answer**	**Expected Time for each question**
LA	100-120 words	10 Mins.
SA	60-70 words	5-6 Mins.
VSA	One sentence	1 Min.

ECONOMICS

Time Allowed : 3 Hours | Maximum Marks : 80

General Instructions :

1. Question paper is divided into two sections. Both are compulsory.
2. Questions carrying 1 mark may be answered in one word or one sentence.
3. Questions carrying 3 marks may be answered in 60 words.
4. Questions carrying 4 marks may be answered in 70 words.
5. Questions carrying 6 marks may be answered in 100-120 words.
6. Word limit does not apply to numerical questions.

PART - A

1. "Stringent laws against child labour would help the economy in its development". Giving reason identify the given statement as positive or normative. 1

2. When does the total Revenue rise if Marginal Revenue is falling. 1

3. State the law of supply. 1

4. For a firm selling all its units at a uniform price of ₹ 5 per unit calculate the value of Marginal Revenue at 10 units of output. 1

5. "A rational consumer reduces his demand for pizza when the price of pasta falls." Analyse the above statement using diagram. 3

6. An economy produces two goods using all its given resources and the state of technology. The following table summarises its production possibilities.

Calculate the marginal rate of transformation and explain the shape of the production possibilities curve. 3

Combination	Production (Units)	
	Good X	Good Y
A	0	90
B	1	80
C	2	68
D	3	52
E	4	34
F	5	10

OR

Why do the central problems arise in an economy? Explain the central problem of "for whom to produce".

7. A consumer demands 20 units of a good at its given price. If the elasticity of demand is (–)2 and there is a 10% fall in the price of the good, what will be the quantity demanded at the new price when consumer buys 20 units at the original price. 4

8. Explain the implication of the following market features :
   (a) Mutual Dependence of firms in oligopoly
   (b) Free entry and exit of firms in perfect competition. 2+2=4

9. Complete the following production schedule of a firm. Identify the production phase and give the reason behind it. 4

Units of variable input	Total Physical Production (TPP) in units	Marginal Physical Product (MPP) in units
1	50	-
2	-	52
3	156	-
4	-	55

OR

"Marginal cost equals Marginal Revenue is a necessary but not a sufficient condition of producer's equlibrium". Elaborate giving suitable reasons.

10. (a) Differentiate between Marginal rate of Substitution and Market rate of Exchange.

    (b) What would be the reaction of a rational consumer if marginal rate of substitution is

    (i) greater than the market rate of exchange,

    (ii) Smaller than the market rate of exchange,

    in the context of consumer's equlibrium? (2, 4)

11. (a) Justify the following statements :

    (i) When average variable cost is rising, the average total cost continues to fall.

    (ii) A farmer cultivating rice on his own farm incurs rent as cost.

    (b) A firm's Average fixed cost of producing 2 units of a good is ₹ 90. Calculate its Total variable cost and Marginal cost for each level of output in the cost schedule given below. 2×3

Output (units)	1	2
Total Cost (₹)	230	270

12. The market for a good is in equilibrium. Explain the chain of reactions that occur in the market as a result of technological upgradation in production. Use diagram. 6

OR

Compare the market forms of Monopolistic Competition and monopoly.

PART - B

13. A pie chart shows 144^0 representing the family spending on food items. Calculate the percentage of income spent on food items. 1

14. Histogram and Bar diagram are two different methods of presentation. Justify the statement. 1

15. Which of the statements is false : 1
    (a) The sum of deviations of items from median is zero.
    (b) Arithmetic mean is not a positional value.
    (c) Upper quartile is the lowest value of top 25% of items.
    (d) Arithmetic Mean is unduly affected by extreme observations.

16. If the coefficient of range of a set of numbers is 1 and highest value of the data is 10, Calculate the smallest value of data. 1

17. "Statistics is defined as the science which deals with the analysis of statistical data." Elaborate with example. 3

18. For a set of 100 observations, the sum of deviations from 4 cm is – 11cm and the sum of the squares of these deviations is 257 sq. cm. Find out mean and standard deviation. 3

OR

In a town, 25% of the persons earned more than ₹ 45000 wherease 75% earned more than ₹ 18000. Calculate the absolute and relative values of dispersion.

19. Calculate cost of living index for the following data, using Aggregative expenditure method. 4

Commodity	Price (in ₹)		Quantity (in units)
	2011	2016	2011
A	10	15	15
B	8	12	20
C	20	24	10
D	32	40	5

E	15	20	6
F	12	18	2
G	8	10	1

OR

Why do we need to use consumer price index and wholesale price index numbers?

20. "Statistical tables giving district wise birth and death rate (number of births and deaths per thousand of population) are collected and published by census of India 2011". Would you call these primary or seconday data and why? Also state one advantage of using secondary data for statistical enquiry. 4

21. In a trip organised by a college, there were 80 persons, on average each of whom paid ₹ 15.50. There were 60 students, each of whom paid ₹ 16. Members of teaching staff were charged at a higher rate, the number of servants (all males) was six, and they were not charged anything. The number of ladies was 20 percent of the total, and there was only one lady staff member. Tabulate this information. 4

22. Calculate standard deviation from the following data by using step deviation method : 6

Marks in English	No. of Student
0-10	4
0-20	7
0-30	13
0-40	17
0-50	19

23. State any six properties of coefficient of correlation. 6

OR

Calculate the correlation coefficient between the heights of fathers in inches (X) and their sons (Y) using assumed mean method.

X	Y
65	67
66	56
57	65
67	68
68	72
69	72
70	69
72	71

24. (a) The mean wages of all workers in a local factory is ₹ 3400. If the mean wages of the skilled workers is ₹ 4160 and that of the unskilled workers is ₹ 2450, determine the ratio of skilled and unskilled workers employed by the factory.

(b) How are mean and median affected when it is known that for a group of 10 students scoring an average of 60 marks, the best paper was wrongly marked 85 instead of 75?

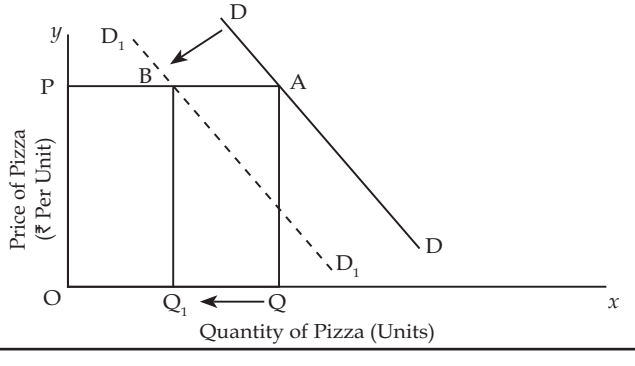
3+3=6

ECONOMICS

Time Allowed : 3 Hours | Maximum Marks : 80

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given herein but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	PART - A		
1.	It is normative statment as it explains what ought to be / is based on value judgement.	1	1
2.	When falling MR is greater than zero.	1	1
3.	These exists a positive relationship between price and quantity supplied of a good, other factors affecting supply remaining constant.	1	1
4.	Since price is constant in perfect competition, AR = MR & MR equals ₹ 5.	1	1
5.	As pasta and pizza are substitutes for each other, fall in the price of pasta reduces the demand for pizza because pasta has become relatively cheaper. Hence the rational consumer replaces / substitutes pizza with its comparatively cheaper substitute good namely pasta.	2	
		1	3

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
6.			

Combination	Production (Units)		Marginal rate of Transformation $\Delta Y : \Delta X$
	Good X	Good Y	
A	0	90	-
B	1	80	10 : 1
C	2	68	12 : 1
D	3	52	16 : 1
E	4	34	18 : 1
F	5	10	24 : 1

1

SHAPE :

- with the given state of technology and fixed resources which are fully and efficiently utilised, in order to increase the production of one good we have to decrease the production of other good. Hence, PPC is down ward sloping. — 1
- since the resources are not equally efficient for the production of both the goods, as they are shifted from the production of one good to other, their efficiency falls. Hence the rate of sacrifice (i.e. MRT) rises. This gives concave shape to PPC. — 1 — 3

OR

- The central problems arise because of unlimited wants and limited resources which have alternative uses. Thus the problem of choice arises. — 1
- The problem of for whom to produce relates to the distribution of produced goods and services among the

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	factors of production in the economy. Goods are produced for those people who have paying capacity, which depends upon their level of income. It means this problem is concerned with distribution of income among factors of production.	2	
7.	Given ed = – 2 % change in price = 10 Q = 20		
	$e_d = \frac{\%\ change\ in\ quantity\ demanded}{\%\ change\ in\ price}$	1	
	$-2 = \frac{\frac{\Delta Q}{20}\times 100}{-10}$	1	
	$\frac{\Delta Q}{20}\times 100 = (-2)\times(-10)$ $\Delta Q = \frac{20\times 20}{100}$		
	$\Delta Q = +4$	1	
	$\therefore Q_1 = 20 + 4 = 24$ units	1	4
8.	(a) There is a very high degree of interdependence among the competing firms with regard to their price and output policy. Price and output behaviour of one firm often leads to reaction by other firms in the market. Thus, a firm may not be willing to raise price of the product, fearing that the rival firms might not raise it, and the buyers would shift to the rivals. Likewise, a firm may not be willing to lower the price of its product, fearing that		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	the rival firms might lower it more, and the buyers would shift to the rivals. The firms may engage in non-price competition or form cartels.	2	
	(b) Freedom of entry and exit implies that there is no restriction on entry of new firms in the industry or exit of existing firms from the industry. Implication of "Freedom of entry and Exit'. is that all firms will earn only normal profit in the long run. A firm can earn abnormal profits or losses in the short run. In long run, any abnormal profits, induce new firms to enter the market. It increases the total supply and reduces the market price. This trend continues till the profits are reduced to normal. Similarly losses lead to exit of some of the existing firms, which reduces the total supply. It leads to rise in price till the losses are wiped out.	2	4
9.	Units of Variable input / TPP (in units) / MPP (in units) 1 — 50 — 50 2 — 102 — 52 3 — 156 — 54 4 — 211 — 55	2	
	Production Phase : I : - TPP is rising at increasing rate and MPP is rising.	1	
	Reason : - (i) Division of labour and specilisation (ii) Indivisibility of fixed factor. (any one)	1	4

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	OR		
	conditions of Producer's Equilibrium (i) MC = MR (ii) MC is greater than MR after MC = MR level of output.	1	
	MC = MR is a necessary condition, but not sufficient enough to ensure equilibrium. It is because MC = MR may occur at more than one level of output. However, out of these, only that output level is the equilibrium output where MC becomes greater than MR after the equilibrium. It is because if MC is greater than MR, then producing beyond MC = MR output, will reduce profits. On the other hand, if MC<MR, it is possible to add to profits by producing more. So, first condition must be supplemented with the second condition to attain the producer's equilibrium.	3	
10.	(a) MRS refers to the rate at which the consumer is willing to sacrifice units of one good to obtain additional unit of the other good.	1	
	MRE refers to the rate at which consumer has to sacrifice units of one good to obtain additional unit of the other good as required by the market. It is expressed in terms of price ratio $\left(\frac{Px}{Py}\right)$, where x is the good obtained & y is the good sacrified.	1	
	(b) • If $MRS_{xy} > \frac{Px}{Py}$, it means that to obtain one more unit of x, the consumer is willing to sacrifice more units of y as compared to what is required in the		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	market. It induces the consumer to buy more of X. As a result, MRS falls and this trend continues till MRS_{XY} becomes equal to MRE $\left(\frac{Px}{Py}\right)$ & the consumer attains equilibrium.	2	
	• If $MRS_{xy} < \frac{Px}{Py}$, it means that to obtain one more unit X, the consumer is willing to sacrifice less units of y as compared to what is required in the market. It induces the consumer to buy less of X and more of y. As a result, MRS rise till it becomes equal to MRE $\left(\frac{Px}{Py}\right)$ and the consumer attains equilibrium.	2	6
11.	(a) (i) The ATC is the sum total of AFC and AVC (ATC = AFC + AVC) AFC falls with rising output. When AVC starts rising, the fall in AFC is greater than the rise in AVC and hence ATC continues to fall.	2	
	(ii) Imputed value of rent is an implict cost i.e. the cost of self owned factor inputs, Which is added in the economic cost.	2	
	(b)		

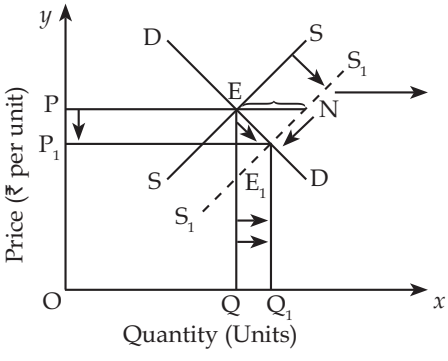
Output (Units)	TC (₹)	TVC (₹)	TFC (₹)	MC (₹)
1	230	50	180	50
2	270	90	180	40

TC = TVC + TFC

Where TFC = AFC × Q

= 90 × 2

= ₹ 180

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
12.	$MC_N = TC_N - TC_{N-1}$ or $TVC_N - TVC_{N-1}$	½×4=2	6
	 EN = Excess Supply causing a fall in price NE_1 = contraction in supply EE_1 = expansion in demand E_1 = new equilibrium	2	
	• Technological upgradation causes an increase in supply (supply curve shifts to the right)	½	
	• This increase in supply causes excess supply ('EN' in the diagram)	½	
	• The market price starts falling as a result of rising competition among sellers. (OP to OP_1)	1	
	• The quantity demanded rises (movement from E to E1) while quantity supplied falls (movement from N to E_1 on the supply curve)	1	
	• New equilibrium is established at price OP, where market demand equals market supply (OQ_1)	1	6
	OR		
	Monopolistic competition can be distingushed from the Monopoly on the following bases :		
	1. Number of Buyers and Sellers :		
	• In monopolistic competition, there is a large number of buyers and sellers		
	• In monopoly, there is single seller and a large		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	number of buyers.	1½	
	2. Availability of close substitutes :		
	• In monopolistic competition, all the firms are selling differentiated products which are close substitutes to each other.		
	• In monopoly there is a single seller of a product which has no close substitute available.	1½	
	3. Nature of Demand Curve :		
	• In monopolistic competition, a firm faces highly elastic demand curve.		
	• In monopoly, the firm faces an inelastic demand curve.	1½	
	4. Entry of new firms :		
	• In monopolistic competition, there is freedom at entry of new firms into the industry.		
	• In monopoly, there is restriction on entry of new firms into the Industry.	1½	
	Any other relevant point		
	• Degree of price control		
	• Selling cost		
	PART - B		
13.	Percentage of income spent on food		
	$= \frac{144^0}{360^0} \times 100$	½	
	= 40%	½	1
14.	Histogram is two dimensional diagram / graph whereas Bar diagram is one dimensional diagram.	1	1

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
15.	(a) The sum of deviations from Median is zero.	1	1
16.	$\frac{L-S}{L+S} = 1$		
	$\frac{10-S}{10+S} = 1$	½	
	$10 - S = 10 + S$		
	$S = 0$	½	1
17.	• statistics is defined as a science which deals with collection, presentation and interpretation of numerical data. • In singular sense, the term satistics means statistical methods of dealing with numerical facts. • To organise the large number of statistical data and to draw conclusion from them, some statistical methods are used such as methods regarding collection, presentation, analysis and interpretation of data. • For example in order to study the relationship between price and demand we shall analyse the data of prices and demand for various commodities. Statistical method are used to analyse cost of production, market demand.	2 1	3
18.	$\overline{X} = A + \frac{\Sigma dx}{N}$		
	$= 4 + \frac{-11}{100} = 3.89$	1	
	$\sigma = \sqrt{\frac{\Sigma dx^2}{N} - \left(\frac{\Sigma dx}{N}\right)^2}$		
	$= \sqrt{\frac{257}{100} - \left(\frac{-11}{100}\right)^2}$		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$= \sqrt{2.57 - 0.0121}$ $= \sqrt{2.55} = 1.596$	2	3
	OR		
	Q1 = 18,000 Q3 = 45,000 Quarile Deviation $= \frac{Q_3 - Q_1}{2}$ $= \frac{45000 - 18000}{2}$ $= \frac{27000}{2} = ₹ 13,500$	1½	
	Coefficient of Quartile Deviation $= \frac{Q_3 - Q_1}{Q_3 + Q_1}$ $= \frac{45000 - 18000}{45000 + 18000}$ $= \frac{27000}{63000} = 0.43$	1½	
19.			

Commodity	Price 2011 P_0	Price 2016 P_1	Quantity 2011 Q_0	P_0Q_0	P_1Q_0
A	10	15	15	150	225
B	8	12	20	160	240
C	20	24	10	200	240
D	32	40	5	160	200
E	15	20	6	90	120
F	12	18	2	24	36
G	8	10	1	8	10
				792 $=\sum P_0Q_0$	1071 $=\sum P_1Q_0$

2

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	Consumer Price Index = $\frac{\Sigma P_1 Q_0}{\Sigma P_0 Q_0} \times 100$		
	$= \frac{1071}{792} \times 100$	1½	
	$= 135.22$		
	Average Price has risen by 35.22%	½	4
	OR		
	• Consumer price Index measures the average change in retail prices. The CPI for industrial workers is considered the appropriate indicator of general inflation, which shows the most accurate impact of price rise on cost of living of common people.	2	
	• Wholesale price index indicates the change in general price level. It does not have any reference consumer category.	2	
20.	It would be primary data	1	
	Because these are based on first hand information and are in original form which is collected for specific objective of investigator. Such data are collected by conducting an enquiry or an investigation.	2	
	One of the advantage of using secondary data is that it saves time and cost.	1	4
21.	Total people × Average Contribution		
	80 × 15.50 = 1240		
	Students (60) Staff (14) (6) Servants		
	M F M F M F		
	45 15 13 1 6 –	½	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

22.

Table No -

Classification & Contribution of members of college trip

Gender → / Category ↓	No. of Members			Contribution (₹)	
	M	F	Total	Rate	Total
Students	45	15	60	16	960
Teaching Staff	13	1	14	20	280
Servants	6	-	6	-	-
	64	16	80	15.50	1240

1
1
1

Source : _____

Foot note : _____

½ 4

Marks	No. of Students	CI	F	MV	dx	d'x	Fd'x	$(d'x)^2$	$Fd'x^2$
0-10	4	0-10	4	5	–20	–2	–8	4	16
0-20	7	10-20	3	15	–10	–1	–3	1	3
0-30	13	20-30	6	25	0	0	0	0	0
0-40	17	30-40	4	35	10	1	4	1	4
0-50	19	40-50	2	45	20	2	4	4	8
						∑fd'x –3		∑fd'x² 31	

3

Standard deviation (σ) = $\sqrt{\frac{\Sigma fd'x^2}{\Sigma f} - \left(\frac{\Sigma fd'x}{\Sigma f}\right)^2} \times i$ 1

$= \sqrt{\frac{31}{19} - \left(\frac{3}{19}\right)^2} \times 10$

$= \sqrt{1.631 - 0.025} \times 10$

$= \sqrt{1.606} \times 10$ 2

$= 1.26 \times 10$

= 12.60 Marks 6

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
23.	Properties of coefficient of Correlation 1. It is a pure number. r has no unit of measurement, for instance, r between height in feet and weight in Kg may be 0.7.	1	
	2. It is independent of change of origin and scale of measurement.	1	
	3. It is a measure of linear relationship. A low value of r indicates weak linear relationship whereas high value of r indicate high linear relationship.	1	
	4. If r = 0, the two variables are not correlated i.e. there is no linear relationship between them.	1	
	5. The value of correlation co efficient lies between –1 and + 1 i.e. $-1 \le r \le 1$.	1	
	6. A negative value of r indicates inverse relation and positive value of r indicates that two variables move in same direction.	1	6

OR

A = 66 A = 65

X	dx (66)	dx^2	y	dy (65)	dy^2	dxdy
65	–1	1	67	+2	4	–2
66	0	0	56	–9	81	0
57	–9	81	65	0	0	0
67	+1	1	68	3	9	3
68	+2	4	72	7	49	14
69	+3	9	72	7	49	21
70	+4	16	69	4	16	16
72	+6	36	71	6	36	36
	6	148		20	244	88
	$=\sum dx$	$=\sum d^2x$		$=\sum dy$	$=\sum dy^2$	$=\sum dx.\sum dy$

2½

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$r = \dfrac{\Sigma dxdy - \dfrac{\Sigma dx.\Sigma dy}{N}}{\sqrt{\Sigma dx^2 - \dfrac{(\Sigma dx)^2}{N}}\sqrt{\Sigma dy^2 - \dfrac{(\Sigma dy)^2}{N}}}$	1	
	$= \dfrac{88 - \dfrac{6\times 20}{8}}{\sqrt{148 - \dfrac{(6)^2}{8}}\sqrt{244 - \dfrac{(20)^2}{8}}}$		
	$= \dfrac{88-15}{\sqrt{148-4.5}\sqrt{244-50}}$		
	$= \dfrac{73}{\sqrt{143.5}\sqrt{194}}$		
	$= \dfrac{73}{11.98\times 13.92} = \dfrac{73}{166.76} = 0.437$	2	
	There is positive correlation between height of fathers and sons.	½	
24.	(a) Let the ratio of skilled and unskilled workers be : $N_1 : N_2$		
	$\overline{X_{12}} = \dfrac{N_1\overline{X_1} + N_2\overline{X_2}}{N_1 + N_2}$	½	
	$3400 = \dfrac{N_1\times 4160 + N_2\times 2450}{N_1 + N_2}$		
	3400 (N1+N2) = 4160 N1 + 2450N2		
	3400 N1 + 3400N2 = 4160N1 + 2450N2		
	3400 N2 – 2450N2 = 4160N1 – 2400N1		
	950N2 = 760N1		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	$\frac{950}{760} = \frac{N_1}{N_2}$	1½	
	$\frac{5}{4} = \frac{N_1}{N_2}$ N1 : N2 = 5 : 4		
	Thus Ratio of skilled and unskilled worker is 5 : 4	1	
(b)	Incorrect $\sum X = 60 \times 10 = 600$		
	Correct $\sum X = 600 - 85 + 75$ $= 590$		
	Correct $\overline{X} = \frac{Correct\ \Sigma X}{N} = \frac{590}{10} = ₹\ 59$	2	
	Mean will have a changed value of ₹ 59.		
	There will be no change in Median as it does not get affected by extreme values.	1	6

BUSINESS STUDIES

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

BUSINESS STUDIES
XI

Time : 3 Hours **DESIGN** Max. Marks : 90

I. Weightage of learning objectives :

Objective	Remembering	Understanding	Application	Hots	Evaluation
% of Marks	17%	17%	32%	21%	13%
Marks	15	15	29	19	12

II. Weightage to form of questions :

Type of Questions	LA - I (6)	LA - II (5)	SA - I (4)	SA - II (3)	VSA (1)	Total
No. of Questions	4	4	5	6	8	27
Marks	24	20	20	18	8	90

III. Weightage to Content :

S. No.	Name of Unit	Marks
1 2	Nature & Purpose of Business Forms of Business Organisations	20
3 4	Public, Private & Global Enterprises Business Services	18
5 6	Emerging Modes of Business Social responsibility & Business Ethics	12
7 8	Sources of Business Finance Small Business	20
9 10	Internal Trade International Trade	20
	Total	90

IV. Weightage to difficulty level :

1. Difficult questions : 58%
2. Average questions : 27 %
3. Easy questions : 15%

VII. Expected length of answers to different types of questions & time management :

S. No.	Types of Questions	Expected length	Expected time
1	Long Answers (LA - I) (LA - II)	150-200 words	1 Hr. 40 Min.
2	Short Answers (SA-I) (SA-II)	50-150 words	57 Min.
3	Very Short Answers (VSA)	One word / One Sentence	08 Min.

BUSINESS STUDIES

Time Allowed : 3 Hours | Maximum Marks : 90

General Instructions :

1. Answer to questions carrying 1 mark may be in one word or one sentence.
2. Answer to questions carrying 3 marks may be from 50-75 words.
3. Answer to questions carrying 4-5 marks may be about 100-150 words
4. Answer to questions carrying 6 marks may be about 200 words.
5. Attempt all parts of a question together.

1. These days several enterprises are being set up through joint ventures. Point out any two of the influences of such enterprises on the business world. 1

2. How Life Insurance provides both protection and investment benefit? 1

3. Name the process by which the shares of a company are allowed to be traded on stock exchange. 1

4. Give the meaning of Entrepreurship Development. 1

5. Classify Micro, Medium amd small Enterprises under MSMED Act 2006. 1

6. There is such a source of business which requires no one to perform its activities. In it the customer themselves receives the goods and makes the payment. This source is generally used for soft drinks. Identify it. 1

7. Who is known as indigenous banker. 1

8. What is the purpose of RCMC. 1

9. Radha and Rachita decide to start a parmership firm together. Their common friend Rakshita tells them that it is advisable to have a written agreement as it constitutes an evidence of the conditions agreed upon in partnership and proves to be helpful in resolving any controversies which may arise in future.

In context of above case :

(a) Identify the document being referred by Rakshita.

(b) State any four aspects covered in this document. 3

10. With exponential growth seen in domestic air traffic requiring additional airport infrastructure, the government has decided to offer more airport to private parties for construction and operation. In India as many as 300 airports need to be revived and upgraded in coming years to support the double digit growth in the sector. In February 2018, government announced that airport infrastructure will be built under the PPP model in smaller cities and towns. Besides major airports in Delhi, Mumbai, Bangalore and Hyderabad had been handed out to private developers.

(a) State the conceptof PPP.

(b) Write any two benefits of PPP model. 3

11. "The Department of Posts of the Government of India provides service related to remmittance of money through money orders and postal orders". Explain any other three services provided by the Postal Department. 3

12. Outline the meaning and procedure of claiming ITC under the GST Act. 3

13. Mohit jewellers a large scale retailer has to pay a lot of attention on

advertisements as some other activities are ignored. One of the partners of the firm suggested if that the job of advertisements is handed over to some advertising company then they may get more time for other core activities. By doing it they will get the benefits of specilisation and their expenditure will be reduced also. The firm implemented this which prove positive also.

(a) Identify the emerging mode of business discussed above.

(b) Also explain the need of above concept. 3

14. Karan has aspired to start a Thai food restaurant from his childhood. On completing his education he shared his childhood dream with his father. His father's foremost concern was to raise finance for the business on his savings would be insufficient for starting and running this business. Therefore, the father son due decided to approach a nearby bank for obtaining a loan. On the basis of above :-

(a) Define the term Business finance.

(b) Why is it needed.

(c) State the different types of funds available for business finance. 3

15. Identify the characteristics of business in the following statements :

(a) Departmental stores purchasing goods from small manufacturers and selling under one roof.

(b) A car dealer buys and sells car on a regular basis.

(c) A furniture dealer buys office chairs at ₹500 each and sells them for ₹650 each. ₹150 per chair is the extra money earned to meet business expenses and for future growth.

(d) Workers at Maruti Udyog Ltd. went on strike for more than a month demanding raises in wages. The company suffered huge losses due to loss of production and sale. 4

16. Two years back Akshit had joined a branch of Bank of Baroda as Assistant manager in the term deposits division in Delhi. Whereas, his younger brother Rohan recently joined Axis Bank as Business Development Manager in Kolkata. While discussing about their job experiences, both the brothers realised that the working of the two banks varies primarily because they belong to different sectors of the economy. However, on certain parameters the approach of both the banks is similar like, offering a higher rate of interest on term deposits made by senior citizens, ensuring safety and security in netbanking, etc.

(a) Identify the two sectors being highlighted.

(b) State any three differences between the two sectors as identified in Part (a) of the question. 4

17. Yaman had started a sugar factory in Muradnagar 3 years back. He pays wages to the male workers at a rate which is much lower than the minimum wage rate prescribed by the government and he employs child labour also to further reduce the labour cost. Moreover the working conditions in the factory are inappropriate as there is lack of hygiene etc. His business has always faced the problem of labour since inception.

(a) Yaman has ignored his social responsibility towards which interest group.

(b) Why do you think it is important for a businessman to function in a socially responsible manner? Justify by giving 3 reasons. 4

18. Venus Ltd. has good growth prospects. So it is planning to expand their business. For this the company needs additional funds. The finance manager reports that the company is not in a position to bear extra burden of paying any fixed financial charges like interest or dividend. They do not want to bear any floatation costs even. Also, the equity share holders insist not to issue further shares as there is risk of dilution of control.

(a) Suggest the source of finance most suitable for Venus Ltd.

(b) State any two merits and one demerit of the source identified above. 4

19. 'Raman stores' in a famous shop selling all types of domestic goods. The owner of the store works on principle of 'High quality', reasonable price'. He operated his business on a large scale. The details of some transactions done at his shop on a particular day are as follows.

(a) Mr. Suresh bought goods of ₹10,000 on credit for the marriage of his sister. He promised to make the payment after one month.

(b) Rajiv stores had bought 200 items of a product each priced at ₹400 a few days ago. Out of these, 5 items were defective. Now they sent back these 5 items with a document.

(c) Raman stores accepted the returned goods and immediately issued a written document in favour of Rajiv Stores.

(d) Raman stores also supplies goods to Rajesh stores through a transporter. Transporter issued a receipt for goods accepted by it. Identify and explain the document used in each of above cases. 4

20. Arvind Enterprises Ltd. has been earning high profits over the years. As a result, its owner Mr. Arvind Sethi is leading a good standard of life. Moreover, he plans to open a new branch office in future.

In context of above

(a) Identify the different points highlighting the role of profit in business.

(b) 'Earning profit cannot be the only objective of business'. Justify giving reasons. 5

21. Laxman runs an online store which sells all kinds of organic products like spices, pickles, jams etc. These products are manufactured in his own automated manufacturing unit.

(a) Identify the concept which defines the scope of business activities undertaken by Laxman.

(b) Explains any 4 benefits of that concept. 5

22. Do you think that small business units can survive in a competitive Market? Explain any four facotrs, which make way for the scope of small business enterprises. 5

23. Vijay is wholesaler of all kinds of paper supplies in Delhi. He meets demands of retailers by procuring different kinds of paper from different manufacturers. He extensively undertakes advertisements and other sales promotinal activities for his products. He also sells goods on credit to his customers and provide guidance to the retailers about various aspect of marketing.

(a) Identify any three types of services Vijay is providing to the retailers by quoting the lines from above

(b) Also mention any two services that Vijay must be extending to the manufacturers as well. 5

24. Vanshika and Himanshi joined together and established a partnership firm dealing in electronic goods. Each one of them looks after one particular department. They had made it certain that every Saturday then would hold a meeting and share the information on the activities of their respective departments. In one of their meetings, they discuss about some key areas on which they should focus their attention. Vanshika says, we should focus on increasing number of products and profits."

Himanshi says, "We should keep clear of anti social activities like adulteration, hoarding and profiteering and contribute to the benefits of the society like opening charitable dispensary, educational institution etc. what are the objectives of business Vanshika and Himanshi focusing on. Explain. 6

25. (a) Enumerate the banking service in which the customer can conduct banking activities like managing, savings, checking accounts, applying loans etc over the internet.

(b) Write any five benefits of the service so identified. 6

26. Radha Sales Pvt. ltd., owns the agency of different food products, which sells goods of different brands to retailers after purchasing from several companies. It purchases almost all goods for cash while it all sales are

on credit of one month. So, the company keeps strugging with the short term finance. To overcome this problem, the company finance department held a meeting. The chairperson of the meeting asked the members to express their views on the solution of this problem. The first person said "we should use a source of finance which does not involve any bureaucracy and legal problems and also ensures secrecy". The second person's opinion was that the company needs cash credit and overdraft. Therefore the source of finance should be selected accordingly. The view of the third person was that the company should buy goods on credit.

Identify and explain the sources of finance suggested above. 6

27. Arvind is a leading manufacturer of kitchen appliances in India. His company is in the favour of selling quality goods with wide variety. He has recently produced an export order for these kitchen appliances and has obtained his IEC number.

(a) Discuss briefly, the various steps that Arvind has to complete before applying for the reservation of shipping space.

(b) Identify and explain the documents which will be issued by the shipping company, once his request for reservation of shipping space is accepted. 6

BUSINESS STUDIES

Time Allowed : 3 Hours | Maximum Marks : 90

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given here in but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
1.	(i) Decrease in the business risk (ii) Progress in the latest technology (iii) Decrease in investment (any two)	½ mark for each	1
2.	Life insurance provider both protection and investment benefit as a certain sum is returnable to the insured at the time of death or at the expiry of a certain period.		1
3.	Listing of shares.		1
4.	Entreprenership Development is the process of improving the skills and knowledge of entrepreneurs through various training and classroom programme.		1
5.	MSMED ACT 2006 Based on Turnover :- Micro enterprise : Turnover does not exceed 5 crore. Small Enterprise : - Turnover is more than 5 crore bid but does not exceed Rs. 75 crore Medium Enterprise - Turnover is more than 75 crore but does not exceed Rs. 250 crore.		1
6.	Automatic Vending Machine		1
7.	Indigenous banker is a person who grants loans to the needy out of their own funds and from the deposits collected from		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	the general pbulic. They are also known as financial interme diaries.		1
8.	Registration cum membership certificate is required for availing benefits to export firm from the Government.		1
9.	(a) Rakshita is referring to the Partnership deed. A partnership deed is a written agreement which specifies the terms and conditions that govern the partnership (b) A partnership deed generally includes the following aspects (i) Name of firm (ii) Duration of business (iii) Nature of business and location of business (iv) Investment made by each partner (v) Distribution of profits and losses (vi) Duties and obligations of the partners (Write any 4 aspect)	1 Mark for Identification + ½ mark for each aspect	3
10.	(a) A public private partnership is a co-operative arrangement between one or more public and private sectors normally of a long term nature. (b) The two ways in which the government is likely to be benefited by pursuing projects under a PPP model are (i) PPPs enable the government to take advantage of the expertise and efficiencies that the private sector can bring to the delivery of certain facilities and services traditionally procured and deliverd by the public sector	1 + 2	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	(ii) The collabration helps to reduce capital investment requirements of the government in various projects.		3
11.	Postal services		
	(1) under Postal certificate	(½ for heading + ½ for explanation)	
	(2) Registered Post		
	(3) Parcel		
	(4) Speed post		1+1+1
	(5) Courier (Any three)		3
12.	Input Tax credit		
	Credit would be permitted to be utilised in following manner.		
	(1) ITC of CGST allowed for the Payment of CGST& IGST in that order.		
	(2) ITC of SGST / UTGST allowed for the payment of SGST / UTGST & IGST		
	(3) ITC of IGST allowed for the Payment of IGST, CGST & SGST / UTGST in that order.		3
13.	(a) Outsourcing		
	company is taking the benefit of advertising [out sourcing]	1	
	(b) Need of outsourcing :-		
	(1) Focusing on attention		
	(2) Benefits of specialisation		
	(3) cost reduction		
	(4) Convenient & less investment		
	(5) Economic growth & development (Any two)	2	3

<table>
<tr><th>S. No.</th><th>VALUE POINTS / KEY POINTS</th><th>Marks Allotted to each value Point/Key Point</th><th>Total Marks</th></tr>
<tr><td>14.</td><td>(1) The funds required to carry out business activities by a business enterprise.
(2) The need for the funds arises from the stage when an enterpreneur makes a decision to start a business. Some funds are needed for purchasing of fixed assets and similarly some funds are required for day to day operations.
(3) Two types of funds
– Owners funds
– Borrowed funds</td><td>1
1
1</td><td>3</td></tr>
<tr><td>15.</td><td>(a) Production and Procurement of goods and services
(b) Dealing in goods and services on a regular basis
(c) Profit earning
(d) Element of risk</td><td>1
1
1
1</td><td>4</td></tr>
<tr><td>16.</td><td>(a) Private sector and public sector
(b) Differences between private sector and public sector
<table>
<tr><th>Basis</th><th>Private Sector</th><th>Public Sector</th></tr>
<tr><td>1. Meaning</td><td>It Consists of those business organisations which are owned by individuals or a group of individuals.</td><td>It consists of those business organisations which are owned and managed by the government</td></tr>
<tr><td>2. Objective</td><td>Profit</td><td>Profit and Social welfare</td></tr>
<tr><td>3. Accountability</td><td>To the owners</td><td>To the general public</td></tr>
</table></td><td>1
1×3</td><td>4</td></tr>
<tr><td>17.</td><td>Yaman has ignored his social responsibility towards workers group .</td><td>1</td><td></td></tr>
</table>

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	– Importance of social responsibilities (1) Justifications for existence for growth (2) Long term interest (3) Avoidance of govt. regulations (4) Maintenance of society (Any 3 points with explanations.)	3	4
18.	(a) Retained Earning (b) Merits – Permanent source of funds available to a company – No cost in form of Interest, dividend or floatation costs. Demerits – It may cause dissatisfaction amongst equity shareholders because they would get lower dividends. – Uncertain source of funds because it is available only when profits are high. (or any other correct point)	1 Mark for Identification + 1 Mark each for stating (1×3)	4
19.	(a) Invoice :- Invoice is a document which shows details of credit transaction. (b) Debit Note : Debit note is a document which is sent by the buyer to the seller stating that his account has been debited on account of goods retained. (c) Credit Note : Credit note is sent by the seller to the buyer stating that his account has been credited on account of sales return. (d) Lorry receipt :- It refers to a receipt issued by the	½ Mark for Identification + ½ Mark for explanation	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	transport company for goods accepted by it for sending from one place to another.		4
20.	(i) The different points highlighting the role of profit in business being discussed in the above paragraph are :-		
	(a) It is a source of livelihood for the businessmen.	1	
	(b) It is an important source of finance for meeting expansion needs of business.	1	
	(ii) Yes, I agree with this statment that 'Earning profit' cannot be the only objective of business because a business seeks to create a balance between different needs and goals of different interest groups, like consumers, employees, society at large etc Therefore, it needs mutiple objectives rather than pursuing only the objective of profit maximization.	3	5
21.	(a) e-business	1	
	(b) Advantages / Benefits of e-business		
	(1) Ease of formation & lower investments		
	(2) convenience		
	(3) Speed		
	(4) Global reach		
	(5) Movements towards a paperless society		
	(6) Reduced cost		
	(7) Customer convenience & satisfaction	4	5
	(Any 4 headings with explanations)		
22.	Yes, despite the growth of large scale industies small business units can survive and progress. The following features of small		

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	business enterprises make way for their scope and survival in a competitive market (a) Personal touch (b) Limited Investment (c) Quick decision (d) Customised Production (or any other correct option)	1 Mark for reasoning + 1 Mark each for explanation	5
23.	(a) Services provided to retailers are (1) Availability of goods. "He meets ..... different manufacturer" (2) Marketing support "He extensively ..... promotional activities" (3) Grant of credit "He sells ..... customers" (b) Services to manufacturers are (1) Facilitating large scale production (2) Bearing risk (or any other relevant point)	½ Mark for Identification + ½ for quoting the lines 3 ½ Mark for Identification + ½ for explanation 2	5
24.	(a) Vanshika is focussing on Economic objectives (1) Growth (2) Profit earning (b) Himanshi is focussing on social objectives (1) Avoidance of anti-social and unfair trade practices. (2) Community service.	1+ 2 1+ 2	6
25.	(a) E-banking (b) The following are the benefits of e-banking :-	1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	e-banking are (1) It helps in accessing a bank from everywhere (2) It speeds up the transactions and reduces the chances of committing errors. (3) It helps in customer satisfaction by adding value to banking relationship. (4) Customer can get banking services any time as per thier own convenience. (5) Load on banks staff is reduced considerably as routine nature functions are performed by electronic devices.	5	6
26.	(a) Inter-Corporate Deposits (ICD) (b) Loan from commercial banks (c) Trade Credit (Explanation of the sources Identified above)	1 Mark each for Identification + 1 Mark each for explanation	6
27.	(1) Steps involved are :- (a) Obtaining Pre-shipment finance (b) Production or procurement of goods (c) Pre-shipment Inspection (d) Excise clearance (e) Obtaining certificate of orgin (2) Shipping order.	1 Mark each for heading + 1 Mark each for explanation 5+ 1 (½ for identification + ½ for explanation)	6

INFORMATICS PRACTICES

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

INFORMATICS PRACTICES
XI

Time : 3 Hours **DESIGN** Max. Marks : 70

I. Weightage of learning objectives :

Objective	Knowledge	Skill	Reasoning	Conceptual	Total
% of Marks	28.6%	25.7%	20%	25.7%	100
Marks	20	18	14	18	70

II. Weightage to form of questions :

Type of Questions	LA	SA - I	SA - II	VSA	Total
No. of Questions	3	12	4	12	31
Marks	18	24	16	12	70

III. Weightage to Content :

1	Introduction to Computer system	10
2	Introduction to Java Programming	25
3	Relational Database Management System	30
4	I.T. Applications	05

IV. Weightage to difficulty level : (in terms of marks)

1. Difficult questions : 19.3% 2. Average questions : 58%
3. Easy questions : 22.5%

VII. Expected length of answers to different types of questions & time management :

S. No.	Types of Questions	Expected Time for each Question
1	Long Answer (LA)	60 min
2	Short Answer (SA-I) (SA-II)	90 min
3	Very Short Answer (VSA)	15 min
4	Revision	15 min

INFORMATICS PRACTICES

Time Allowed : 3 Hours | Maximum Marks : 70

1. (a) (i) Identify the port which is used for connecting Telephone lines and has six wire conductor in it.

(ii) Name the program which was created to counter the effect of creeper.

(iii) Expand the following terms :

(1) ISCII (2) QR Code Reader

(iv) Why is it necessary to disable cookies while performing online transactions? 1×4=4

(b) How many megabytes are used to make 10 TB? 1

(c) Identify the type of software

(i) This software speeds up the system by rearranging fragmented files stored on a disc in contiguous locations in order to optimize the system performance.

(ii) It is the first set of instructions run by a computer when powered on. It initializes the system devices. 1+1=2

(d) (i) Ms. Namita wants to secure her school network by blocking unauthorized access and inspect network traffic. Suggest an appropriate security measure.

(ii) Riya wants to purchase a new mobile phone. She wants to know about the mobile operating systems. Suggest her any two latest mobile operating systems. 1+1=2

(e) Name the type of communication bus which is used to carry read or write signals and give the report about the status of the device. 1

2. (a) Ms. Indu wants text to be carried over to the next line so that it will

stay within a set of defined margins without breaking the words. Name the property of jTextArea control that she should use. 1

(b) Find the value of a, b after the execution of following code : 1

```
int a = 6, b= 7;
a++;
++a;
b = +a + ++b;
```

(c) What will be the output for the following code segment if value of choice is : 2

(i) 'P' (ii) 's'

Justify your answer.

```
switch(choice)
{
    case 'P': jTextField1.setText("One");
    case 'Q': jTextField1.setText("Two");
              break;
    case 'S': jTextField1.setText("Three");
              break;
    default: jTextField1.setText("Default");
}
```

(d) What are Exceptions? How they are handled in Java? 1

(e) Write a Java code that gets marks of two subjects from textfields(s) and display the higher marks in a third textfield. 2

(f) Find the output of the following code fragment : 2

```
int j=1, S=0;
while(j<10)
{
    jTextArea1.setText(jTextArea1.getText( )+j+"+");
    S=S+j;
    j=j+j%3:
```

}
jTextField1.setText("="+S);
Identify the type of loop (Entry-controlled or Exit-controlled)

(g) Name the method which is helpful in enterning data through a dialog box. 1

3. (a) Which of the following is NOT the function of DBMS? 1

(i) Store data in a structured way
(ii) Store and manipulate data
(iii) Add a component in a form
(iv) Query the database

(b) Identify the operators and there types in the following MySQL statement : 2

SELECT * FROM ITEM WHERE PRICE >= 5000 AND ITEM_NAME LIKE '%A';

(c) Identify the error(s) and write the correct SQL command 1

```
Create table Learner

( Roll No integer,
Name varchar(25)
)
```

(d) Mr. Pravesh has created the table "Admission" having following structure.

Table - Admission

Field	Type	Null	Key	Default	Extra
Admno	Integer	No	Pri	NULL	
Class	Integer	Yes		NULL	
Section	Varchar(1)	Yes		NULL	
Firstname	Varchar(10)	Yes		NULL	
Lastname	Char(20)	Yes		NULL	

Answer the following questions based on the above table :

(i) He wants to insert the first record of a student who has recently joined his school but her admission number is not known to him. Will he be able to insert her record? Justify? 1

(ii) He now inserted the record in the table "Admission" using the command: Insert into Admission (Admno,Firstname,Lastname) values (101,"Amrita", "Bhattacharya") 2

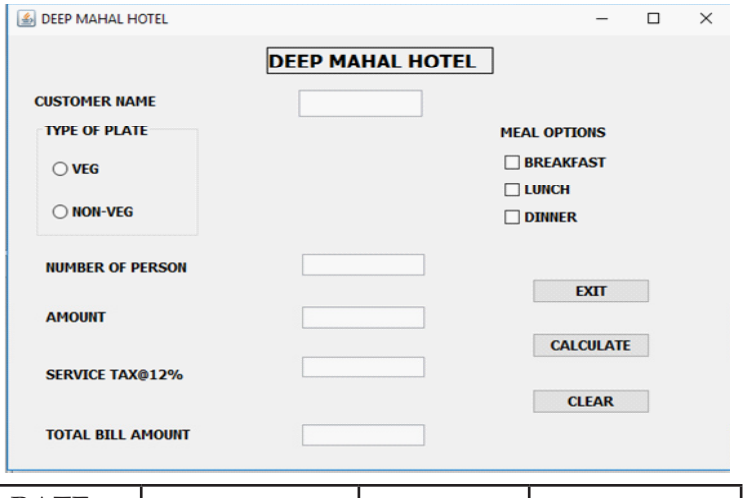
(1) How many characters are occupied by attribute "**Firstname**" and "**Lastname**"? Give reason.

(2) What value will be assigned to other attributes? 1

(iii) He wants to add DOB field in the table to store date of birth of students. Suggest the appropriate datatype for this field and its standard format. 1

(iv) What will be the degree and cardinality of above relation after the above mentioned changes? 1

4. (a) DEEP MAHAL HOTEL computerized its Billing System. Given below the data entry screen through which bill amount is calculated



RATE	BREAKFAST	LUNCH	DINNER
VEG	100	200	300
NON VEG	200	400	500

(i) Write the code for calculate button to calculate amount as per the rate specified in the table, service tax (12% of amount). Total bill amount = total + service tax. 4

(ii) Write the code to clear all textflelds and set Veg as the default option 1

(iii) Write the code to Use ConfirmDialog with the following message "Are you sure you want to Exit." If only user presses 'Yes' button then application should be closed. 1

(b) The following code has some error(s). Rewrite the correct code underlining all the corrections : 2

```
int I=2;j=5;
while j>1
{
    jTextFieldl.getText("j is greater");
    j- -;
    ++i;
}
```

(c) (i) Himank wants to do single selection from a list Box. Which code he should select from given Code A and Code B. What will be the value of selection Mode property of jListBox1? 1+1=2

Code A	**Code B**

if(jListBox1.isSelectedIndex(0)==true
count=count+1;
else if(jListBox1.isSelectedIndex(1)==true)
count=count+2;
else if(jListBox1.isSelectedIndex(2)==true)
count=count+3;
	if(jListBox1.isSelectedIndex(0)==true
	count=count+1;
	if(jListBox1.isSelectedIndex(1)==true)
	count=count+2;
	if(jListBox1.isSelectedIndex(2)==true)
	count=count+3;

(ii) Differentiate between 'null' and 'this' as first parameter in showMessageDialog() method of JOptionPane.

(d) How many times, the following loop gets executed? 1

```
int i=0, a=2, b=4;
do
{
    a=b;
}while(i>40);
```

(a) Zero number of times (b) Infinite number of Times

(c) Once (d) none of these

(e) (i) Convert the following segment into an equivalent do-while loop. 2+2=4

```
int q,r;
for(q=10, r=20; r>=10; r = r–2)
        q++;
```

(ii) Rewrite the following code using switch case:

```
if(Technology= = 'A' || Technology= = 'I')
        Value = "Artificial Intelligence";
else if(Technology= ='B')
        Value="Bluetooth";
else
        Value="Cloud Computing";
```

5. (a) Ms. Sharma mistakenly entered the marks as 69 instead of 96 for Roll no 2. She wrote the following command to make the changes in the table "student". 2

```
Update student set marks = 96;
```

The query did not give the desired output? Why.

(b) Suggest the suitable command/clause/operator for the following purpose : 2

(i) To open the database "School".

(ii) To search specific values from the given list of values.

(iii) To display unique values of a column from a table.

(iv) To filter records based on some criteria.

(c) Write MySQL statements for the following : 1*4=4

(i) Use the string "Cyber Safety" and extract the string "Safe".

(ii) Display the year 10 years from now and label the column as 'future'.

(iii) Display the record of all employees in uppercase from table emp whose name contains "O" .

(iv) To find the day when you were born.

(d) Identify the Single Row functions from the given list

Sum(),Length(),Count(),Mid() 1

(e) Namita wants to remove column Grade from table "result". Help her select the correct SQL command from the options given below. Also, Justify. 1

(i) Alter table result drop Grade;

(ii) Delete Grade from result;

6. (a) Give the output of the following MySQL statements : 4

(i) SELECT CONCAT(11,22,33);

(ii) SELECT POW(INSTR('Exam_Time','_'),2);

(iii) SELECT LENGTH("1+2+3+4+5");

(iv) SELECT ASCII(NULL);

(b) Ms Aradhya is computerizing her payroll department. She wants to store the record of her employees in the form of table as given below.

Table Name : Salesperson

Sale_Id	FirstName	Lastname	Age	Salary	DOJ	Comm
1	Anish	Gupta	42	450000	2009-09-16	5000
2	Maurya	Singh	43	75000	2007-03-01	NULL
3	Sooraj	Rana	23	34500	2002-07-06	3500
4	Saurabh	Arora	30	55000	1996-03-21	4000
5	Radhika		32	270000	2004-09-08	NULL

(i) Help her write the SQL command to create the above table. 2

(ii) Write the command to insert the last tuple. 1

(iii) Delete the records of all the salesperson whose salary is not within the range 30000 to 55000. 1

(iv) Display the record of all the salesperson who have joined after "2003-01-01" in descending order of their date of joining. 1

(v) Ms Aradhya wants to display all records where commission is not NULL. She wrote the command 1

SELECT * FROM SALESPERSON WHERE COMM NOT LIKE NULL;

Will she get the correct output? Justify.

7. (a) (i) Write any two major challenges of E-Learning?

(ii) How does E-Governance help in reducing corruption? Write any two points. 1+1=2

(b) Mr. Paul is going to develop a front end for his school. Help him to choose most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following entries : ½*4=2

(i) To select a student from a list of class-XII Commerce students.

(ii) To enter the email-id.

(iii) To select the hobbies of the student out of 4 hobbies given.

(iv) To submit the form.

(c) What precautions must be taken with regard to making payments while shopping online? 1

INFORMATICS PRACTICES

Time Allowed : 3 Hours | Maximum Marks : 70

MARKING SCHEME / HINTS TO SOLUTIONS

(Note : Any other relevant answer, not given herein but given by the candidates, be suitably awarded.)

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
1.	(a) (i) RJ11	1	
	(ii) Reaper	1	
	(iii) (1) Indian Standard Code for Information Interchange	½+½	
	(2) Quick Response Code Reader		
	(iv) It is necessary to disable cookies while doing online transactions because Cookies are small bit of text files which can store our important information like passwords, address, DOB etc and can act as spywares.	1	
	(b) 1 TB= 1024 GB		
	1 GB= 1024 MB		10
	Hence , 1 TB=1024*1024MB=2^{10}*2^{10}MB=2^{20}MB		
	10 TB will be equal to 10* 1024*1024MB	1	
	Or		
	10 TB will be equal to 2^{20} * 10 MB		
	(c) (i) Disk Defragmentation	1	
	(ii) BIOS	1	
	(d) (i) Firewall	1	
	(ii) Android, iOS (Any other relevant answer should be suitably rewarded)	½+½	
	(e) Control bus	1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
2.	(a) She should set wrapStyleWord property of jTextArea control along with lineWrap property (½ mark for wrapStyleWord property) (½ mark for lineWrap property)	½+½=1	
	(b) b = 16 and a = 8 (½ mark each for the correct value of a and b)	½+½=1	
	(c) (i) If the user gives 'P' as input , the content of jTextfieldl will be "Two" because break statement is missing hence the control will pass to case 'Q'. (½ mark for correct output +½ marks for correct reason)	1	
	(ii) For 's' as input, Default case will be executed as it is case sensitive, hence the content of jTextField 1 will be "Default"; (½ mark for correct output + ½ mark for correct reason)	1	
	(d) Run time errors are also called exceptions and handling such errors in an application is called exception handling. In java, exception handling is done using try { } and catch { } block.	½+½=1	10

	(e) int marks1 ,marks2;
	marks1=Integer.parselnt(jTextFieldl.getText()); (½ mark)
	marks2=Integer.parselnt(jTextField2.getText()); (½ mark)
	if(marksl>marks2)
	jTextField3.setText(" "+marks1); (½ mark)
	else
	jTextField3.setText (" "+marks2); (½ mark)
		2	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	(f) The contents of jTextArea1 : 1+2+4+5+7+8+ The content of jTextField1 : = 27 "While" is an Entry Controlled loop as condition is pretested. (½ mark for identifying the type of loop 1 mark for correct output of jTextArea1 ½ mark for correct output of jTextField1)	2	
	(g) showInputDialog()	1	
3.	(a) (iii) Add a component in a form	1	
	(b) Operators Type >=, Relational AND Logical (½ mark for identifying operator + ½ mark for type)	½+½=1 ½+½=1	
	(c) Create table Learner (**RollNo** integer, //(Fieldname cannot contain space in it. it may contain underscore) Name varchar(25)); //Semicolon is missing. Every SQL command must end with;	½+½=1	
	(d) (i) No, he will not be able to insert the record because Admno is a Primary key in the table and it must contain some value. It can never be NULL.	½+½=1	
	(ii) Acc. to the question Firstname has value "Amrita" and Lastname has value "Bhattacharya"		10
	(1) "Firstname" will occupy 6 characters as its datatype is varchar which is variable length string whereas "Lastname" will occupy 20 characters as its datatype is char which is	½+½=1 ½+½=1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	fixed length string. (2) NULL	1	
	(iii) DOB field will have the datatype as date. The standard format is YYYY-MM-DD	½+½=1	
	(iv) Degree of the above relation will now be 6 as new field DOB has been added in the table "Admission" and Cardinality will be 1 as he inserted one reord only.	½+½=1	

4.	(a) (i) int nperson = 0, amount = 0, breakfast = 0,
	lunch = 0, Dinner=0;
	double tax =0, totalamt = 0;
	nperson=Integer.parseInt(jTextField2.getText());
	if(jRadioButton1.isSelected())
	{
	if(jCheckbox1.isSelected())
	breakfast=100;
	if(jCheckbox2.isSelected())
	lunch=200;
	if(jCheckbox3.isSelected())
	Dinner=300;
	}
	else if (jRadioButton2.isSelected())
	{
	if(jCheckBox1.isSelected())
	breakfast=200;
	if(jCheckBox2.isSelected())
	lunch=400;
	if(jCheckBox3.isSelected())
		4	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

	Dinner=500;
	}
	amount=nperson*(breakfast + lunch + Dinner);
	jTextfield3.setText(""+amount);
	tax=0.12*amount;
	jTextField4.setText(""+tax);
	totalamt=amount+tax;
	jTextField5.setText(""+totalamt);
	(1 mark for correct use of Radiobutton
	1 mark for correct use of checkbox
	1 mark for calculation
	½ mark for setting outputs
	½ mark for input)		

	(ii) jTextField1.setText("");
	jTextField2.setText("");
	jTextField3.setText("");
	jTextField4.setText("");
	jTextField5.setText("");
	jRadioButton1.setSelected(true);
	(½ mark for clearing any TextField
	½ mark for setting radio button)
		½+½=1	

	(iii) int ch; ch=JOptionPane.showConfirmDialog(null, "Are u sure you want to Exit"); if(ch==0) System.exit(0); (½ mark for showConfirmDialog() method ½ mark for System.exit() method)	½+½=1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

	(b) int I=2, j=5;
	while (j>1)
	{
	jTextField1.setText("j is greater");
	j– –;
	++I;
	}
	(½ mark for each correction)
		½+½+
		½+½=2	

	(c) (i) He should select Code A as it is having if statements with else block and hence only one block will be executed at one time. The value of Selection mode property will be Single.	½+½=1	
	(ii) 'this' ensures that the message window is displayed on top of the window executing the method. On the other hand using null ensures that the message window is displayed in the center of the screen irrespective of the window executing the method.	1	15
	(d) (b) Infinite number of times int q = 10, r = 20;	1	

	(e) (i) do
	{
	q++;
	r=r–2;
	}while(r>=10);
	(½ mark for correct initialization
	½ mark for correct test condition
	½ mark for loop statements
	½ mark for ;(semicolon) after while)
		½+½+
		½+½=2	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks

	(ii) switch(Technology)
	{
	case 'A';
	case 'I' : Value="Artiflcial Intelligence";
	break;
	case 'B' : Value="Bluetooth";
	break;
	default: Value="Cloud Computing";
	}
	(½ mark for each correct case and ½ mark for default)
		½+½+
		½+½=2	

5.	(a) Ms. Sharma did not get the desired output as she had missed where clause in the query as a result marks of all the students in the table will be updated to 96. The correct query should be : Update student set marks=96 where rollno=2; (1 mark for correct reason 1 mark for correct query)	1+1=2	

	(b) (i) Use School; //Command
	(ii) IN operator
	(iii) DISTINCT clause
	(iv) Where clause
	(½ mark each)
		½+½+
		½+½=2	

	(c) (i) SUBSTR("Cyber Safety",7,4); SUBSTR("Cyber Safety","–6, 4); OR MID("Cyber Safety",7,4); MID("Cyber Safety",–6,4); (ii) SELECT YEAR(CURDATE())+10 AS FUTURE;	4	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	OR SELECT YEAR(NOW())+ 10 AS FUTURE; (iii) SELECT UPPER(NAME) FROM EMP WHERE NAME LIKE "%o%"; (iv) SELECT DAYNAME("YYYY-MM-DD"); / / ENTER YOUR BIRTHDATE IN THIS FORMAT (1 mark each for correct Statement)		10
	(d) Length(),mid()	½+½=1	
	(e) The correct command will be: (i) Alter table result drop Grade; as Alter command is used to make changes in the structure of table whereas delete command is used to remove records from the table and not fields or columns.	½+½=1	
6.	(a) (i) 112233; (ii) 25 (iii) 9 (iv) NULL; (1 mark for each correct output)	4	
	(b) (i) CREATE TABLE SALESPERSON (SALE_ID INTEGER, FIRSTNAME VARCHAR(25), LASTNAME VARCHAR(20), AGE INTEGER, SALARY INTEGER, DOJ DATE, COMM INTEGER); (1 mark for create table command	2+4=6	10

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	1 mark for identifying correct datatypes) (ii) INSERT INTO SALESPERSON VALUES (5,"RADHIKA","", 32, 270000, "2004-09 08",NULL); (iii) DELETE FROM SALESPERSON WHEERE SALARY NOT BETWEEN 30000 AND 55000; OR DELETE FROM SALESPERSON WHERE SALARY<=30000 OR SALARY>=55000; (iv) SELECT * FROM SALESPERSON WHERE DOJ >"2003–1–1" ORDER BY DOJ DESC; (v) No, she will not get the correct output because we use IS NULL operator to compare NULL values hence the correct query will be : SELECT * FROM SALES WHERE COMM IS NOT NULL; (1 mark for each correct query)		
7.	(a) (i) E-Learning requires (1) high level of motivation (2) Self-Discipline is necessary (3) No Verbal Communication (4) Slow internet Connection (Any two points ½ mark each)	½+½=1	
	(ii) E-governance has helped in reducing corruption in the following ways (1) The availability of the service can be determined from site. (2) One can apply online without needing any	½+½=1	

S. No.	VALUE POINTS / KEY POINTS	Marks Allotted to each value Point/Key Point	Total Marks
	intermediaries. (3) Status of application can be determined online (any 2 points –½ mark each)	½+½+	
	(b) (i) ComboBox (ii) TextField (iii) Checkbox	½+½=2	
	(iv) Command Button	½+½=1	
	(c) The following precautions must be taken while shopping online (1) Don't use public computer to shop online (2) Use secure connections only when you place a order. (3) Use strong passwords (4) Never click on links from Spam e-mails to make purchases. (Any two points- ½ mark each)		5

HINDI

Designed & Developed

by

DAV Centre for Academic Excellence

in a workshop

held at

DAV College Managing Committee

Chitragupta Road

New Delhi - 110055

हिंदी (केंद्रिक)

कक्षा - ग्यारहवीं

समय : 3 घंटे **अधिकतम अंक : 80**

I. अधिगम उद्देश्य का प्रभार :

उद्देश्य	ज्ञानात्मक	बोधात्मक	अनुप्रयोग	कुल अंक
% (अंकों का)	15%	50%	35%	100
अंक	12	40	28	80

II. विभिन्न प्रकार के प्रश्नों का प्रभार :

प्रश्नों के प्रकार	विस्तृत प्रश्न	लघु प्रश्न	अति लघु प्रश्न	कुल अंक
प्रश्न संख्या	05	06	04	15*
अंक	28	39	13	80

नोट - मुख्य प्रश्न संख्या के साथ उप भागों के प्रश्नों (*) को भी शामिल किया गया है।

III. विभिन्न प्रश्नानुसार अनुमानित शब्द सीमा और समय प्रबंधन

प्रश्नों के प्रकार	अनुमानित शब्द सीमा	अनुमानित समय
1. विस्तृत प्रश्न	80-300	90 मिनट
2. लघु प्रश्न (I & II)	60-75	80 मिनट
3. अति लघु प्रश्न	एक शब्द से एक वाक्य	10 मिनट

IV. वैकल्पिक प्रश्न संख्या : 3, 4, 6, 7, 9, 11, 12, 13

V. खंड : क, ख, ग और घ

- घ (श्रवण तथा वाचन एवं परियोजना)

VI. कठिनाई स्तर के अनुसार प्रश्नों के प्रकार

1. कठिन प्रश्न : 20%
2. सामान्य प्रश्न : 60%
3. सरल प्रश्न : 20%

हिंदी (केंद्रिक)

समय : 3 घंटे **अधिकतम अंक : 80**

सामान्य निर्देश :-

1. इस प्रश्नपत्र के तीन खंड हैं - 'क', 'ख' और 'ग'।
2. तीनों खंडों के प्रश्नों के उत्तर देना अनिवार्य है।
3. यथासंभव प्रत्येक खंड के उत्तर क्रमशः लिखिए।

खंड - क

1. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए -

सफलता के पथिक के लिए सर्वप्रथम अपनी वाणी को सरस, मधुर एवं संयत बनाना आवश्यक है। एक मीठी वाणी का स्वामी भले ही कुरूप भी हो पर वह लोगों का प्यारा एवं आकर्षक बन जाता है। वाणी को मीठा बनाने में न धन की आवश्यकता है न श्रम की। वाणी वास्तव में हमारी आत्मा की छवि को प्रतिबिम्बित करती है। वाणी ही अनगिनत मित्र बना सकती है और वाणी ही शत्रु। यह हम पर अपेक्षित है कि हम अपनी वाणी से मित्र बनाएं या शत्रुओं की फौज तैयार करें। वाणी हमारे व्यक्तित्व को हमारे स्वभाव को परिलक्षित करती है।

मीठी वाणी के साथ-साथ चेहरे पर निश्छल, सौम्य मुस्कुराहट भी आवश्यक है। यह मुस्कान एक अनजान को भी बिना बोले अपना बनाने और प्रभावित करने में सक्षम है चेहरा हमारे आन्तरिक भावों का दर्पण है। हमारे अन्तःस्तल में छिपे कपट, बेईमानी या फिर प्यार, सौम्यता, ममता को ये यों परिलक्षित करता है मानों हम अपनी ही छवि आइने में निहार रहे हों। यदि हमारे अन्दर सूक्ष्मदृष्टि है, तो हम सामने वाले के चेहरे पर स्थिर हुए अंकित भावों का विश्लेषण कर उसके व्यक्तित्व का विस्तृत ब्यौरा दे सकते हैं। आकर्षक व्यक्तित्व, सामने वाले को प्रभावित करने का एक सशक्त माध्यम है। ऐसे व्यक्तित्व का

स्वामी बनने के लिए हमें अपने अंदर अच्छे संस्कारों को आरोपित करना होगा जिससे वे संस्कार हमारे चेहरे की छवि को कान्तिमान कर सकें।

(क) वाणी के किन गुणों के कारण जीवन सफल और सुगम बन जाता है? 2

(ख) वाणी हमारी आत्मा की छवि को प्रतिबिम्बित कैसे करती है? 2

(ग) चेहरा हमारे आंतरिक भावों को किस प्रकार दर्शाता है? 2

(घ) सूक्ष्म दृष्टि से आप क्या समझते हैं? 2

(ङ) 'मधुर' एवं 'विस्तृत' शब्द के विलोम शब्द लिखिए। 1

(च) गद्यांश का शीर्षक लिखिए। 1

2. निम्नलिखित काव्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए –

उठो
पुरूष तुम हो,
पौरुष से मण्डित,
भर लो जीवन में,
नूतन आशा का आह्लाद।
विश्व विजय की तुरही,
ललकार रही,
छोड़ निराशा,
कर लो मन में,
आशा का श्रृंङ्गार।
सुख दुख के झोंको से,
मत घबराओ,
है अटल सृष्टि में,
ये प्रभु का वरदान।
शक्ति व श्विास से,
भर लो अन्तर्मन को,
है प्रतीक्षा में
ओज का नवल प्रभात।

तूफानों से मत घबराओ,
झंझा के ये झटके,
भर दे मन में तेरे,
स्फूर्ति यौवन का उन्माद।
गन्तव्य पथ है दूर बहुत,
मंजिल की भी झलक नहीं,
लगे हाँफने अभी से,
बीच पथ में हुए निराश।

(क) कवि ने जीवन में पुरुषार्थ की कामना क्यों की है? 1

(ख) 'नूतन आशा का आह्लाद' का भाव स्पष्ट कीजिए। 1

(ग) कवि क्या छोड़ने और अपनाने की प्रेरणा दे रहा है? 1

(घ) 'ओज का नवल प्रभात' से आप क्या समझते हैं? 1

(ङ) विपरीत परिस्थितियों में किस प्रकार जीवन-पथ पर बढ़ने की प्रेरणा दी गई है? 1

(च) कविता में निहित संदेश को अपने शब्दों में लिखिए। 1

अथवा

एक एक दिन को पकड़ लो
बाहों में जकड़ लो
मुट्ठी में बालू सा
फिसल फिसल जाता है
वक्त गया, वापिस न आता है।

रोज सुबह जीते हैं
रात को मर जाते हैं,
दिन के दावानल को
मेहनत के मेघ
भिगो जाते हैं,
रात के सन्नाटे में

कोलाहल सपनों के
हम को जगा जाते हैं।

रोज नई आशाएँ
रोज नई चिंताएँ
गिर के संभल जाते हैं
फिर से फिसल जाते हैं।

सुंदर से सुंदर भी
शख्स बदल जाते हैं,
अक्श बदल जाते हैं,
पतझड़ की कौन कहे
सावन के मेघ कभी,
जीवन की बगिया पर
बिजली गिरा जाते हैं
अगन लगा जाते हैं।

बचपन कब हुआ युवा
बूढ़ा हो जाता है,
अर्थी बन भट्टी में
भस्म हुआ जाता है,
जब तक
ये अंतर्मन जागता है
वक्त निकल जाता है।

हर पल के
स्पंदन को छू लो
अगले पल
दिल की ये धड़कन
हो भी या न भी हो

(क) समय की तुलना रेत से क्यों की गई है?

(ख) दिन के दावानल को मेहनत के मेघ किस प्रकार भिगोते हैं?

(ग) सपनों के कोलाहल से कवि का क्या अभिप्राय है?

(घ) जीवन की बगिया पर बिजली कौन गिराता है?

(ङ) अंतर्मन कब जागता है?

(च) कविता का संदेश स्पष्ट कीजिए।

खंड - ख

3. निम्नलिखित में से किसी एक विषय पर निबंध लिखिए - 8

(क) भारत और युवा शक्ति

(ख) आपकी यादगार यात्रा

(ग) खेलों में बढ़ता गलैमर

(घ) समाज पर विज्ञापनों का प्रभाव

4. बिगड़ती कानून व्यवस्था की ओर ध्यान आकर्षित करते हुए किसी दैनिक समाचार पत्र के संपादक को पत्र लिखिए। 5

अथवा

आपके क्षेत्र में खाली पड़ी जमीन पर वन-महोत्सव के समय बहुत से पौधे लगाए गए, किंतु उचित देख-रेख के अभाव में वे आधे सूख गए। उद्यान विभाग के वरिष्ठ अधिकारियों का ध्यान इस ओर आकर्षित करते हुए पत्र लिखिए।

5. निम्नलिखित प्रश्नों के संक्षिप्त उत्तर लिखिए - 4

(क) हिंदी का पहला साप्ताहिक पत्र कौन-सा है?

(ख) पीत पत्रकारिता किसे कहते हैं?

(ग) इंटरनेट से आप क्या समझाते हैं?

(घ) जनसंचार माध्यम के किन्हीं दो माध्यमों का उल्लेख कीजिए।

6. 'अभिभावक की अपेक्षाओं में खोता बचपन' विषय पर फीचर लिखिए। 3

अथवा

'कोचिंग सेंटर का बढ़ता मायाजाल' विषय पर आलेख लिखिए।

खंड - ग

7. निम्नलिखित काव्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए।

घर कि घर में चार भाई,
मायके में बहिन आई,
बहिन आई बाप के घर,
हाय रे परिताप के घर।

घर कि घर में सब जुड़े हैं,
सब कि इतने कब जुड़े हैं,
चार भाई चार बहिनें,
भुजा भाई प्यार बहिनें,

(क) मायके में आने पर बहन क्यों दु:खी हुई? 2
(ख) 'परिताप के घर' से कवि का क्या आशय है? 2
(ग) कवि ने भाईयों को भुजा क्यों कहा है? 2

अथवा

हम तौ एक एक करि जाना।
दोइ कहैं तिनहीं कौं दोजग जिन नाहिंन पहिचानां।।
एकै पवन एक ही पानी एकै जोति समानां।।
एकै खाक गढ़े सब भांडै एकै कोंहरा सानां।।
जैसे बाढ़ी काष्ट ही काटै अगिनि न काटै कोई।।
सब घटि अंतरि तूँही व्यापक धरै सरूपै सोई।।

माया देखि के जगत लुभाना काहे रे नर गरबानां।।
निरभै भया कछू नहिं ब्यापै कहे कबीर दिवानां।।

(क) कबीर की परमात्मा के विषय में क्या मान्यता है? अपनी बात को उन्होंने किस प्रकार सिद्ध किया है?

(ख) भ्रमित लोगों के बारे में कबीर ने क्या टिप्पणी की है?

(ग) 'जैसे बाढ़ी काष्ट ही काटै अगिनि न काटै कोई' पंक्ति का भाव स्पष्ट कीजिए।

8. निम्नलिखित काव्यांश को पढ़कर पूछे गए प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लिखिए – 3×2=6

चंपा कहती है,
तुम कागद ही गोदा करते हो दिन भर
कया यह काम बहुत अच्छा है
यह सुनकर मैं हँस देता हूँ
फिर चंपा चुप हो जाती है
उस दिन चंपा आई, मैंने कहा कि
चंपा, तुम भी पढ़ लो
हारे गाढ़े काम सरेगा
गाँधी बाबा की इच्छा है –
सब जन पढ़ना-लिखना सीखें
चंपा ने यह कहा कि
मैं तो नहीं पढ़ूँगी
तुम तो कहते थे गांधी बाबा अच्छे हैं
वे पढ़ने लिखने की कैसे बात कहेंगे
मैं तो नहीं पढ़ूँगी।

(क) प्रस्तुत काव्यांश का भाव-सौंदर्य स्पष्ट कीजिए।

(ख) 'हारे गाढ़े काम सरेगा' पंक्ति में 'हारे गाढ़े' शब्द के सौंदर्य पर प्रकाश डालिए।

(ग) उपर्युक्त काव्यांश के शिल्प-सौंदर्य पर टिप्पणी कीजिए।

9. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लिखिए – 2×2=4

(क) 'वे आँखें' कविता के आधार पर स्पष्ट कीजिए कि किसान की पीड़ा का जिम्मेदार कौन-कौन है?

(ख) 'गजल' के माध्यम से कवि दुष्यंत कुमार क्या कहना चाहते हैं?

(ग) कवयित्री अक्क महादेवी ने दीनता की चरमावस्था को किस प्रकार प्रकट किया है?

10. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए –

धनराम की मंद बुद्धि रही हो या मन में बैठा हुआ डर कि पूरे दिन घोटा लगाने पर भी उसे तेरह का पहाड़ा याद नहीं हो पाया था। छुट्टी के समय जब मास्साब ने उससे दुबारा पहाड़ा सुनाने को कहा तो तीसरी सीढ़ी तक पहुँचते-पहुँचते वह फिर लड़खड़ा गया था। लेकिन इस बार मास्टर त्रिलोक सिंह ने उसके लाए हुए बेंत का उपयोग करने के बजाय जबान की चाबुक लगा दी थी, 'तेरे दिमाग में तो लोहा भरा है रे। विद्या का ताप कहाँ लगेगा इसमें?' अपने थैले से पाँच-छः दराँतियाँ निकाल कर उन्होंने धनराम को धार लगा लाने के लिए पकड़ा दी थीं। किताबों की विद्या का ताप लगाने की सामर्थ्य धनराम के पिता को नहीं थी। धनराम हाथ-पैर चलाने लायक हुआ ही था कि बाप ने उसे धौंकनी फूँकने या सान लगाने के कामों में उलझाना शुरू कर दिया और फिर धीरे-धीरे हथौड़े से लेकर घन चलाने की विद्या सिखाने लगा। फर्क इतना ही था कि जहाँ मास्टर त्रिलोक सिंह उसे अपनी पसंद का बेंत चुनने की छूट दे देते थे वहाँ गंगाराम इसका चुनाव स्चयं करते थे और जरा सी गलती होने पर छड़, बेंत, हत्था जो भी हाथ लग जाता उसी से अपना प्रसाद दे देते। एक दिन गंगाराम अचानक चल बसे तो धनराम ने सहज भाव से उनकी विरासत संभाल ली और पास-पड़ोस के गाँव वालों को याद नहीं रहा वे कब गंगाराम के आफर को धनराम का आफर कहने लगे थे।

(क) धनराम किस कार्य में असफल रहा? कारण बताइए। 2

(ख) धनराम के पिता ने धनराम को किन-किन कामों में लगा दिया और क्यों? 2

(ग) मास्टर त्रिलोकसिंह और गंगाराम किस-किस तरह से धनराम को प्रताड़ित करते थे? 2

(घ) 'विद्या के ताप' से क्या तात्पर्य है? 1

11. निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर पाठ्य पुस्तक 'आरोह' के आधार पर लिखिए –

(क) 'नमक का दरोगा' कहानी के माध्यम से समाज की किस सच्चाई को उद्घाटित किया गया है? तर्क सहित उत्तर दीजिए। 3×3=9

(ख) 'रजनी' पाठ में वर्तमान शिक्षा प्रणाली के किन दोषों को दर्शाया गया है? आपकी दृष्टि में इन समस्याओं के क्या-क्या समाधान हो सकते हैं?

(ग) 'विदाई सम्भाषण' पाठ के आधार पर स्पष्ट कीजिए कि कर्जन के इस्तीफा देने का क्या कारण था?

(घ) 'जामुन का पेड़' शीर्षक कहानी समाज में बढ़ती विवेकहीनता पर कटु व्यंग्य है – कैसे?

12. 'भारतीय गायिकाओं में बेजोड़-लता मंगेशकर' पाठ में लता की गायकी की किन विशेषताओं का उल्लेख किया गया है? 4

अथवा

चेजारों के प्रति समाज की बदलती धारणा का उल्लेख कीजिए।

13. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लिखिए – 4+4

(क) शास्त्रीय संगीत और चित्रपट संगीत में क्या अंतर है? 'भारतीय गायिकाओं में बेजोड़-लता मंगेशकर' पाठ के आधार पर लिखिए।

(ख) राजस्थान में कुईयों का निर्माण क्यों किया जाता है? ये जल संरक्षण में किस प्रकार सहायक हैं?

(ग) वर्तमान समाज के परिप्रेक्ष्य में बताइए कि तातुश ने बेबी हालदार की सहायता किस प्रकार की?

हिंदी (केंद्रिक)

अंक विभाजन तथा उत्तर संकेत **अधिकतम अंक : 80**

निर्देश : यदि ऐसा कोई सही उत्तर जो परीक्षार्थी ने लिखा हो, परन्तु निम्नलिखित उत्तर संकेत में सम्मिलित न हो तो उसके भी यथासंभव अंक दिए जाएँ।

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	खंड - क		
1.	(क) • वाणी को सरस, मधुर एवं संयत बनाना। • मीठी वाणी से आकर्षक व्यक्तित्व का स्वामी होना	2	
	(ख) • वाणी से हमारे व्यक्तित्व की झलक मिलती है। • शत्रु और मित्र की संख्या की गणना द्वारा व्यक्ति की पहचान होती है।	2	
	(ग) • चेहरा आंतरिक भावों का दर्पण है। • अन्तर्मन में छिपे भाव प्रकट करता है। • हृदय में अंकित अच्छे अथवा बुरे भाव जैसे - स्नेह, सौम्यता, छल-कपट सभी को प्रकट कर देता है।	2	
	(घ) • सूक्ष्म दृष्टि से अभिप्राय है पैनी नजर। • विवेक और बुद्धि से गहराई से देखना। • व्यक्ति के चेहरे के भावों को पढ़ना और उसका विश्लेषण करना।	2	
	(ङ) 'कटु', 'संकुचित'।	½+½=1	
	(च) मधुर वाणी (अन्य उचित शीर्षक भी स्वीकार्य)	1	10

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
2.	(क) • मानव जीवन की सफलता उद्यम और परिश्रम में है।	1	
	(ख) • नवचेतना		
	• नवजागृति	1	
	(ग) • निराशा के भाव को छोड़ने		
	• आशा के भाव को अपनाने	1	
	(घ) • उत्साह, आशा और उमंग की एक नई भोर	1	
	(ङ) निर्भय होकर शक्ति और आत्मविश्वास के द्वारा।	1	
	(च) • निराशा का परित्याग करके आशा, विश्वास के साथ गन्तव्य पथ पर बढ़ने की प्रेरणा दी गई है।		
	• विपरीत परिस्थितियों में विचलित न होने का आग्रह किया गया है।	1	
	<u>अथवा</u>		
	(क) • समय की गति का तीव्र होना।		
	• जिस प्रकार मुट्ठी से रेत फिसलती है, उसी प्रकार समय का तीव्रता से बीत जाना।	1	
	(ख) • परिश्रम के द्वारा ही उद्देश्य को प्राप्त करना।		
	• आकांक्षाओं की पूर्ति का श्रम में निहित होना।	1	
	(ग) • उद्देश्य और लक्ष्य की आशा से व्याकुल होना।		
	• रात्रि की नीरवता में भी कामनाओं का हलचल मचाना।	1	
	(घ) • सावन के मेघ		

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	• अपनत्व	1	
	(ङ) • जब इच्छित समय बीत जाता है।		
	• अवसर निकल जाता है।	1	
	(च) • समय की गति को जानना।		
	• उचित अवसर का सदुपयोग करना।	1	6
	खंड - ख		
3.	• भूमिका	1	
	• विषय वस्तु	5	
	• भाषा / प्रस्तुति	1	
	• समापन / उपसंहार	1	8
4.	• प्रारंभ व अंत की औपचारिकताएँ	1	
	• विषय वस्तु	3	
	• भाषा	1	5
5.	(क) उदंत मार्तंड	1	
	(ख) व्यवसायिक लाभ के लिए सनसनी, चकाचौंध या गलैमर फैलाने वाली पत्रकारिता।	1	
	(ग) इंटरनेट जनसंचार का वह लोकप्रिय माध्यम है जिसमें जानकारी संबंधी सारी सूचनाओं के साथ अन्य गुण मौजूद होते हैं।	1	
	(घ) • समाचार पत्र		

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	• रेडियो • दूरदर्शन	1	4
6.	• विषय वस्तु	1	
	• प्रस्तुति	1	
	• भाषा	1	3
	खंड - ग		
7.	(क) • सावन के महीने में बहन का ससुराल से मायके आना। • एक भाई के जेल में होने के कारण बहन का दु:खी होना।	2	
	(ख) • कवि द्वारा स्वयं के जेल में होने पर अपने घर को 'परिताप का घर' कहना। • समस्त भाई-बहन के एकत्र होने पर भी कवि के अभाव में सुखद अनुभूति न होना।	2	
	(ग) • कवि के भाइयों का भुजाओं के समान कर्मशील होना। • बलिष्ठ होना • सहयोगी होना।	2	
	अथवा		
	(क) • परमात्मा को एक मानना। • संसार में एक ही पवन का बहना। • एक-सा ही पानी होना।		

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	• एक-सा प्रकाश संसार में व्याप्त होना।	2	
	(ख) • अज्ञानतावश परमात्मा के सच्चे स्वरूप को न पहचान पाना।		
	• अज्ञानी लोगों को नरक की प्राप्ति।	2	
	(ग) • जिस प्रकार बढ़ई द्वारा लकड़ी को काटा जा सकता है पर उसमें व्याप्त अग्नि तत्व को अलग नहीं किया जा सकता।		
	• उसी प्रकार पंचतत्व से बना शरीर नष्ट हो जाता है परन्तु जीवात्मा अजर-अमर है, उसे नष्ट करना संभव नहीं।	2	6
8.	(किन्हीं दो प्रश्नों के उत्तर अपेक्षित हैं।)		
	(क) • साक्षरता का महत्व न जानने वाली चंपा के विषय में बताना।		
	• चंपा का शिक्षा के प्रति जागरूक न होना।		
	• कवि द्वारा चंपा को पढ़ने के लिए प्रेरित करना।		
	• शैक्षिक परिवेश के अभाव और अपरिपक्वता के कारण चंपा का पढ़ने में अरुचि दिखाना।	3	
	(ख) • कवि द्वारा चंपा को शिक्षा के महत्व से परिचित कराना।		
	• कठिनाई के समय पढ़ा-लिखा होना काम आना।		
	• आवश्यकता पड़ने पर शिक्षा के लाभ को जानना।	3	
	(ग) • खड़ी बोली का प्रयोग।		
	• सहज, सरल, स्वाभाविक भाषा का प्रयोग।		
	• कागद, गोदना, हारे गाढ़े जैसे प्रयोग ग्रामीण परिवेश के अनुकूल।		

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	• 'कहा कि', 'तुम तो', 'की कैसे' में अनुप्रास अलंकार का प्रयोग। • संवाद शैली का प्रयोग।	3	6
9.	(किन्हीं दो प्रश्नों के उत्तर अपेक्षित है।)		
	(क) • जमींदार द्वारा षडयंत्र कर किसान को उसकी जमीन से अलग कर देना। • जमींदार के कारिंदों द्वारा किसान के जवान बेटे की हत्या कर देना। • महाजन द्वारा किसान के घर, बैल तथा गाय तक नीलाम कर देना। • आर्थिक अभाव के कारण इलाज न करवा पाने के कारण किसान की पत्नी का मर जाना। • कोतवाल द्वारा किसान की पुत्रवधू का शोषण करना। पुत्रवधू का आत्महत्या कर लेना।	2	
	(ख) • लोगों को समाज में क्रांति के लिए प्रेरित करना। • राजनीतिज्ञों के झूठे वायदों पर व्यंग्य करना। • हर घर में सुविधा उपलब्ध कराने का वायदा करने पर भी शहर तक में सुविधा उपलब्ध न कराना। • मनुष्य द्वारा अपने सपनों को नहीं छोड़ना चाहिए। • शायर द्वारा शासक की सत्ता को चुनौती देने पर शासक द्वारा उसकी आवाज को दबाना।	2	

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	(ग) • कवयित्री द्वारा भीख माँगना। • भीख माँगने पर भीख न मिलना। • भीख मिलने पर भीख का नीचे गिर जाना। • गिरी हुई भीख को उठाने के लिए नीचे झुकने पर कुत्ते द्वारा उसे झपट लेना। (कोई दो बिंदु अपेक्षित है।)	2	4
10.	(क) • तेरह का पहाड़ा याद करने में असफल। • मंदबुद्धि होना। • मन में पिटाई का भय होना। • शैक्षिक परिवेश का अभाव।	2	
	(ख) • धौंकनी फूँकना, सान लगाना और हथौड़े से लेकर घन तक चलाना। • धनराम द्वारा पढ़ाई ठीक से न कर पाना। • लोहार का काम उसका पुश्तैनी काम होना। • गंगाराम में विद्या दिलाने की आर्थिक सामर्थ्य न होना।	2	
	(ग) • मास्टर त्रिलोकसिंह द्वारा धनराम के पढ़ाई न करने पर बेंत से उसकी पिटाई करना। • गंगाराम द्वारा धनराम से लोहार का कोई काम करते समय जरा-सी गलती होने पर छड़, बेंत, हत्थे आदि से उसकी पिटाई कर देना।	2	
	(घ) • विद्या का प्रकाश अर्थात विद्या का प्राप्त न होना। • विद्या से वंचित रहना।	1	7

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
11.	(किन्हीं तीन प्रश्नों के उत्तर अपेक्षित है।) (क) • आदर्शोन्मुखी यथार्थ • धन पर धर्म की विजय। • वंशीधर के माध्यम से समाज के ईमानदार और कर्मयोगी मनुष्य का प्रति निधित्व करना। • अलोपीदीन द्वारा धन और शक्ति का दुरुपयोग करना। • अदालतों की कार्यप्रणाली पर व्यंग्य। (ख) • शिक्षा का व्यवसायीकरण तथा बढ़ता भ्रष्टाचार। • शिक्षा व्यवस्था के प्रति अधिकारियों की उदासीनता से पिसती आम जनता। • ट्यूशन रैकेट का बढ़ता जाल। समाधान – • लोगों का अधिकारों के प्रति सजग और जागरूक होना। • शिक्षा में जीवन कौशल संबंधी विषयों को सम्मिलित करना। • व्यवहारिक ज्ञान को शिक्षा से जोड़ना। • आम आदमी की सहभागिता द्वारा समस्या का समाधान। (ग) • कर्जन द्वारा बंगाल विभाजन लागू करना। • इसके विरोध में लोगों का खड़ा होना। • राष्ट्रीय ताकतों को खत्म करने के प्रयास में विफल होना। • विफलता के कारण ब्रिटिश शासन की जड़ें हिलना। • इंग्लैंड में एक फौजी अफसर को इच्छित पद पर नियुक्त करने	3 3	

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	की सिफारिश नामंजूर होना। • कर्जन द्वारा इस्तीफे की धमकी देना और ब्रिटिश सरकार द्वारा इस्तीफा मंजूर करना।	3	
	(घ) • सरकारी दफ्तरों की लंबी विवेकहीन कार्यप्रणाली पर व्यंग्य। • विभागों में तालमेल न होने से अधिकारियों की स्वार्थपरता पर कटाक्ष। • संवेदनशीलता विषयों पर निर्णय लेने में विवेकहीनता। • आम आदमी के पेड़ के नीचे दबे होने पर उसे निकालने की कोशिश न करना। संवेदनहीनता की पराकाष्ठा और शिथिल कार्यशैली के कारण आम आदमी की मृत्यु हो जाना।	3	9
12.	• लता की गायकी में सुरीलेपन का होना। • निर्मलता का होना। • लता के स्वरों में कोमलता और मुग्धता का होना। • लता का स्वर नादमय सौंदर्य से युक्त। • गीतों में शास्त्रीय शुद्धता का होना। स्वर और लय के कारण रंजकता का गुण विद्यमान होना।	4	
	<u>अथवा</u>		
	• आधुनिक चकाचौंध का होना। • आवश्यकता के साथ-साथ दिखावटी संस्कृति का प्रवेश।		

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	• कुंई निर्माण में दक्ष चेजारो का काम के समय विशेष ध्यान रखा जाना। • कुंई खुदने पर उसे तरह-तरह की भेंट दिया जाना। • चेजारो को वर्ष भर सम्मानित करना। • तीज, त्योहारों, विवाह जैसे मंगल अवसरों पर भेंट देना। • फसल के समय उनके लिए अलग से अनाज निकालना। • आधुनिक समय में चेजारो से केवल मजदूरी देकर काम करवाया जाता है।	4	4
13.	(किन्हीं दो प्रश्नों के उत्तर अपेक्षित हैं।)		
	(क) • गंभीरता शास्त्रीय संगीत का स्थायी भाव है। • शास्त्रीय संगीत में ताल का परिष्कृत रूप पाया जाता है। • शास्त्रीय संगीत शास्त्र शुद्ध होता है। • शास्त्रीय संगीत संगीत का मूलाधार होता है। • द्रूत और चपलता चित्रपट संगीत का मुख्य गुण धर्म होता है। • चित्रपट संगीत में आधे तालों का उपयोग किया जाता है। • चित्रपट संगीत की लयकारी आसान होती है। यहाँ गीत और अघात को ज्यादा महत्व दिया जाता है। • चित्रपट संगीत में सुलभता और लोच का अग्र स्थान होता है।	4	
	(ख) • जल संबंधी जटिल समस्या के समाधान हेतु। • भूजल नियंत्रण हेतु।		

क्रम सं.	उत्तर संकेत	मुख्य बिन्दु हेतु अंक	कुल अंक
	• वर्षा के जल का सदुपयोग करने हेतु। • सूखा और भविष्य में जल संबंधी समस्याओं से निपटने हेतु • पीने योग्य पानी की व्यवस्था में सहायक। • जल की बूँद-बुँद को संरक्षित करने का उत्तम साधन।	4	
(ग)	• आत्मनिर्भर बनने के लिए प्रोत्साहित करना। • लेखन कार्य हेतु प्रेरित करना। • बच्चों को कुपोषण से बचाकर सुरक्षित भविष्य प्रदान करना। • आत्मदृढ़ता और आत्मविश्वास के गुण को विकसित करना। • जीवन के प्रति सकारात्मक दृष्टिकोण प्रदान करना।	4	8