Version No. 1 0 1 1

ROLL NUMBER

ENGLISH
COMPULSORY SSC-I
SECTION – A (Marks 15)
Time allowed: 20 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Answer Sheet No. _____

Invigilator Sign. _____

Candidate Sign. _____

Fill the relevant bubble against each question according to curriculum:

#	Question	A	B	C	D	A	B	C	D
1.	She is a good speaker. In addition he also writes very well. The underlined part of sentence is a transitional device of:	Emphasis	Sequencing	Exemplification	Addition	○	○	○	●
2.	Re-cognize the Metaphor:	All the trees seem to be dancing.	Some people are brave.	Her tears were flowing down her cheeks.	He is behaving like a child.	○	●	○	○
3.	Most of the butterflies Perish in the first frost of autumn. The underlined word means:	To remain	To endure	To die	To breathe	○	○	●	○
4.	Some people are too fat to walk. Negative connotation of underlined word is:	Obese	Strong	Heavy	Plump	●	○	○	○
5.	Which one of the following sentences has use of transitive verb:	They are running.	He lives on the left side of the road.	She was going to the bank.	The dog chased the running cat.	○	○	○	○
6.	I shall assist you in drawing, _____ I am not a good painter. Choose the correct transitional device from the following:	For example	However	Subsequently	According	●	○	○	○
7.	If you had worked hard, you would have passed. What type of sentence is it?	Zero conditional	Conditional Type-III	Conditional Type-II	Conditional Type-I	○	●	○	○
8.	They bought seashells from seashore. Which poetic device is used in this line?	Metaphor	Simile	Alliteration	Personification	○	○	●	○
9.	We ought to help the poors. The modal verb in the sentence shows the function of:	Doubt	Ability	Obligation	Probability	○	○	●	○
10.	People usually give _____ the money as zakat in the month of Ramdan. Choose the correct preposition:	Away	In	On	Through	●	○	○	○
11.	Identify the indefinite pronoun used in one of the following sentences:	I performed the practical myself.	Poverty is the main hindrence in development	This is the shortest way to school.	Nobody was there to help the injured.	○	○	○	●
12.	The car which has red doors is mine. The underlined part of sentence is:	Noun clause	Principal Clause	Adjective Clause	Adverb Clause	○	○	●	○
13.	In which of the following sentences abstract noun is used?	Jack and Jill went up a hill.	Honesty is the best policy.	The crow could not find water.	Please, help me in this question.	○	●	○	○
14.	The hardworking team won the match. What type of sentence is it?	Simple Sentence	Compound Sentence	Complex Sentence	Compound-Complex Sentence	●	○	○	○
15.	We passed the examination. Which tense is used in this sentence?	Simple present	Simple past	Past perfect	Past continuous	○	●	○	○

—1SA-II 2301—

Page 1 of 1

ENGLISH COMPULSORY SSC–I

Time allowed: 2:40 Hours   Total Marks Sections B and C: 60

NOTE: Sections B and C comprise pages 1-2. Answer all the questions from Sections 'B' and 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 40)

Q. 2 Read the following passage carefully and answer any FIVE questions including Question No. (i) appended to it.

Note: Question (i) about summary writing is compulsory carrying 06 marks while rest of the questions carry 03 marks each.   (6+4x3=18)

One day, standing at the beside of a young patient, I wondered if she could make the same recovery like others. Hira had received severe head and spinal injuries as she was hit by a speeding bus while crossing the busy road. I took her lifeless arms in my hand and tried to do several exercises on her but in vain. Also, I asked her younger sister to come and talk to her, thinking that the voice of near and dear one might activate the nearly dead neurons. She could see but not talk. Her eyes showed a certain helplessness. I could read her mind through her eyes. Perhaps she wanted to say, "Please help me". A fellow nurse came near me and asked, "Rahila, what are you doing? Fighting a last battle?" I was shocked at first to hear a colleague making a hopeless comment. Then I replied, "I am trying to make her brain process by her sister's voice. This might help her walk like normal person". Meanwhile, a senior doctor on duty, walked in. He gave me an ironic smile and said, "If you spend most of your duty hours on one patient, we will have to recruit more nurses to attend other patients. Please go and see the other patients. We do not have much hope for her. I don't think that she could ever walk again". I was upset. The advice to leave the patient unattended did not seem right. I knew that she has suffered from major neural damage, but she needed to be given a chance. An inner voice somewhere within me spoke, "Try once for her". I went to the senior nurse and told her that I wanted to help this patient and work with her more closely. The senior nurse looked at me with utter surprise and remarked that she had orders form the doctor incharge to shift her to the general ward. The doctors thought she was hopeless case and the bed must be spared for other patients.

QUESTIONS:

(i) Write down the summary of the passage. Also suggest a suitable title.   (5+1=6)
(ii) What happened to Hira?
(iii) To what extent does the recovery of a patient depend upon the doctor and the nurse?
(iv) Why younger sister of Hira was asked to have conversation with patient?
(v) Explain the phrase: "Try once for her".
(vi) Describe some qualities of the nurse mentioned in the passage.
(vii) Give the synonyms of the underlined words. (Any three)

Q. 3 a. Paraphrase any ONE of the following stanzas: (03)

(i) I wandered lonely as a cloud,
That floats on higher O'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

OR

(ii) Be still, sad heart, and cease repining;
Behind the clouds is the sun still shining;
The fate is the common fate of all,
Into each life some rain must fall,
Some days must be dark and dreary.

b. Read the following stanza carefully and answer the questions given at the end: (06)

(i) He gave his harness bells a shake
To ask if there is some mistake.
The only other sound's the sweep
Of easy wind and downy flake:

QUESTIONS:

(i) Write the rhyming words from the stanza.   (1)
(ii) Explain the phrase "of easy wind and downy flake".   (1)
(iii) Write the meaning of underlined words. (Any two)   (1)
(iv) Who is shaking harness bell and for whom?   (2)
(v) Which poetic device is used in this stanza?   (1)

OR

(ii) The angle wrote, and _vanished_. The next night
It come again with a great _wakening_ light,
And showed the names whom love of God had _blest_,
And Lo! Ben Adhem's name _led_ all the rest.

QUESTIONS:
(i) Write down the rhyme scheme of the stanza. (1)
(ii) What was the angle writing? (1)
(iii) Give the meanings of the underlined words.(Any two) (1)
(iv) How did the angle come again? (2)
(v) Why was Ben Adhem's name on the top of the list? (1)

Q. 4 a. Fill in the blanks using the passive voice form of the verbs given in brackets to complete the passage. (05)

First of all, water is _____ (take) in a pan and it is _____ (boil) on medium flame. Then sugar and coffee are _____ (beat) in the cup by hand for fluffiness. Then boiling water is _____ (pour) in the slurry and adjustable changes are _____ (make) as per requirement. The coffee is then _____ (serve) and _____ (enjoy).

b. Change the underlined Verbs of the following sentences as directed in the brackets. (any five) (05)

(i) He _____ here yesterday. (come)
(ii) If he works hard, he _____ the competition. (win)
(iii) If you _____, I shall be available. (want)
(iv) When you _____ tomorrow? (go)
(v) She _____ (not prepare) for the party yet.
(vi) It _____ (rain) since morning.
(vii) We _____ (be) fond of travelling in summer vacation.

c. Punctuate the following para/line(s): (03)

The rasool (ﷺ) and his close companion hazrat abu bakr Siddique (رضي) migrated from makkah to madinah in the year 622 ad.

SECTION – C (Marks 20)

Q. 5 Write an email to your friend thanking him / her for a gift on your birthday. (08)

OR

Write an application to the Principal for a character certificate.

Q. 6 Write a paragraph of about 80 to 100 words on any ONE of the following: (06)

"Importance of Fashion"

OR

"A visit to an Industrial Exhibition"

Q. 7 Translate the following passage into Urdu: (06)

Now education upto middle level is free of cost so the children of the poor will be able to get the education. Government of Pakistan has nationalized all schools and colleges. All the citizens of the country have equal rights and government will award scholarships to intelligent students. They will be able to get higher education. We shall make Pakistan strong and make efforts for its development.

OR

Write a dialogue between a student and a teacher about SLO based examination.

—1SA-II 2301—

Page 2 of 2 (English)

| ROLL NUMBER | Version No. 1 · 0 · 3 · 1 |

اردو
2023

اردو ایس ایس سی ۔ا

حصہ اول (کل نمبر 15)
وقت: 20 منٹ

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed.
Do not use lead pencil.

Answer Sheet No. _____

Candidate Sign. _____

Invigilator Sign. _____

Fill the relevant bubble against each question according to curriculum:

د	ج	ب	الف	د	ج	ب	الف	سوال
○	○	○	○	پدر	تنہا	دو	پانچ	1.
○	○	○	○	فعل معروف	فعل ناقص	فعل معاون	فعل تام	2.
○	○	○	○	مترادف الفاظ	بے معنی الفاظ	ہمصدا معنی والے	ایک سے زیادہ معنی والے	3.
○	○	○	○	غزلیات	حرف بیت	بحیں اور اجزائے	اشاریات	4.
○	○	○	○	دوہرا شعر	حرف تشبیہ	تشبیہ	مشبہ	5.
○	○	○	○	تشبیہ	روزمرہ	محاورہ	ترکیب	6.
○	○	○	○	تحریر	محاورتاً	استعارہ	کنایہ	7.
○	○	○	○	لغیر مقفی	مقفی	لغیر معروف	غزل	8.
○	○	○	○	فعل ناقص	خبر	فاعل	مبتدا	9.
○	○	○	○	ازلی	ساقی	مہکی	پانی	10.
○	○	○	○	قانونی	حکمتی	صلواتی	ازلی	11.
○	○	○	○	تشبیہ	محاورہ سے	کنایہ	استعارہ	12.
○	○	○	○	مرکب توصیفی	مرکب اضافی	مرکب عطفی	مرکب تامی	13.
○	○	○	○	مطلع	مقطع	آخری مصرع	حسن مطلع	14.
○	○	○	○	شہید اور فرش تشبیہ	شہید اور وجہ شبہ	شہید اور مشبہ	شہید اور حروف	15.

— 1SA-II 2303 —

نوٹ: حصہ دوم اور سوم (2- اصلاحات پر مشتمل ہیں۔ ان سوالات کے جوابات علیحدہ سے مہیا کی گئی جوابی کاپی پر دیجیۓ آپ کے خوابات حاصل اور واضح ہونے چاہئیں۔

حصہ دوم (کل نمبر 34)

سوال نمبر: حصہ نثر

(8x2 = 16)

الف: درج ذیل عبارت کو غور سے پڑھیں اور نیچے دیے گئے سوالات میں سے آٹھ کے جوابات اپنے الفاظ میں لکھیں:

اسلام کی خاص خوبی یہ ہے کہ اسلام کے سے نہیں پوچھتا کہ تو کن ہے اور نسل کی ہے یا اندرستان کا ہے اور وہ کالا رنگ کا ہے یا گورے رنگ کا۔ بلکہ جنہوں نے حروتِ ذاتی اللہ توحید کو مسلم گردیدہ متحدہ ہو کر ایک قوم بن گئے۔ مجھے اس بات سے دیکھے سے نہایت افسوس ہے کہ ہم مثل بر اندران یوسف ہیں کہ جن سے آپ اپنا آپ اور دستی اور محبت یک دل کی جتی بہت کم ہے۔ جہد وعداوت کا اہر جہاں اتریا پایا جاتا ہے۔ جس کا نتیجہ آپس کی ناانفاقی ہے۔ شیطان جس نے خدا سے حسد وعد وکیا تھا کہ ضرور ان پر تیری سیدھا سیقیم پر بیٹھا رہوں گا ایک مقدس اور بظاہر ہدایت لورانی شیلے سے آپس میں بھائیوں کو جن کو کہ خدانے ہوائی لانے والے خلال لانے والے کامیاب ہوجاتا ہے اور جس طرح کہ آپ کے بابا حضرت آدم سے وعدے میں آگئے اسی طرح ہم بھی شیطان کے وعدے میں آجاتے ہیں اور اس نفاق کے جو ہر حالت میں مردود ہیں اور ایک مقدس لباس پہنتے ہیں۔

سوالات:

(i) عبارت کا مرکزی خیال لکھیے۔
(ii) اسلام کی خاص خوبی کیا ہے؟
(iii) ہم مثل بر اندران یوسف کیوں ہیں؟
(iv) شیطان نے اللہ تعالیٰ سے کیا وعدہ کیا تھا؟
(v) شیطان نے سب سے پہلے کس کو وعدہ دیا؟
(vi) ہم شیطان کے دھوکے میں آکر کیا لطفی کرتے ہیں؟
(vii) شیطان کس شیلے سے نفاق ڈالتا ہے؟
(viii) ناانفاقی کا کیا نتیجہ نکلتا ہے؟
(ix) کس کو توحید کو مسلم کرنے کا کیا نتیجہ ہوا؟

ب: حصہ شعر

(5x2 = 10)

درج ذیل اشعار کو غور سے پڑھیں اور نیچے دیے گئے سوالات میں سے پانچ کے جوابات لکھیں:

(i) ہے تیرے گلستان میں بھی لعل و نگار بہت
خالی ہے جب محل، نہ کمال عیار ہے

(ii) ہے نصیب ہے کتنا ہے بد نصیب وہ دن کے لیے
دو مگر زمین بھی نہ ملی کرے یار میں

(iii) نہ زمین سے نہ فلک سے نہ بشر سے نہ ملک سے
نہیں مانگا کوئی سری لناں، نہ کہوں جو تم سے تو کیا کروں

(iv) غم و خوشہ رنج وآندوہ و حرماں
کھبی ہیں مہرباں کبھے کبھے

(v) ان کی نظر میں شوکت، بچپن لوں کسی کسی کی
آنکھوں میں بس رہا ہے، جن کے جمال تیرا

سوالات:

(i) جیب کس چیز سے خالی ہے؟ (حوالہ شعر i)
(ii) شاعر نے اپنی کس بد نصیبی کا ذکر کیا ہے؟ (حوالہ شعر ii)
(iii) شاعر کو زمین، فلک، بشر اور ملک سے کیا مانگتا ہے؟ (حوالہ شعر iii)
(iv) شاعر نے کن چیزوں کو اپنا مہربان شمار کیا ہے؟ (حوالہ شعر iv)
(v) کن لوگوں کی نظر میں کسی کی شوکت بچین پہنچی؟ (حوالہ شعر v)
(vi) شاعر کے مطابق گلستان میں کون سا اور چل رہا ہے؟ (حوالہ شعر)

ج: حصہ قواعد

مندرجہ ذیل میں سے چار سوالات کے جوابات تحریر کریں:

(4x2 = 8)

(i) ارکان تشبیہ کی مثال سے وضاحت کریں۔
(ii) مجاز مرسل سے کیا مراد ہے؟ ایک مثال دیں۔
(iii) مرکب تام اور مرکب ناقص میں فرق بتائیے۔
(iv) روایت کی ایک مثال تحریر کریں۔
(v) محسن کسے کہتے ہیں؟

۶

(5) مندرجہ ذیل میں سے کسی ایک عبارت کی تشریح کریں:

انسان بھی مثل اور حیوانوں کے ایک حیوان ہے اور جب کہ اس کے دل کوئی نئی تحریک سست ہو جاتی ہے اور کام میں نئی لائی ہوئی تو وہ اپنی جوانی خصلت میں پڑ جاتا ہے اور جسمانی باتوں میں مشغول ہو جاتا ہے۔ اور انسانی ملت کو کوکر کہ ہر جوان جن جانتا ہے۔ پس ہر انسان پر لازم ہے کہ اپنے اندر کوئی نئی کو دعوہ دیکھنے کی کوشش میں رہے اور ان کو بے کارہ چھوڑ دے۔

یہ بات ہم کو بھولنی نہیں چاہیے کہ ان روحانی بھائیوں کے سوا اور بھی ہمارے روحانی بھائی ہیں جو ہمارے ساتھ اسی گلے میں، جس نے ہم مختلف قوموں اور مختلف فرقوں کو ایک قوم اور آپس میں روحانی بھائی بنا دیا ہے، شریک نہیں ہیں، مگر بہت سے جسمانی امور ہیں، جن میں ہم اور روحانی بھائیوں کے شریک ہیں۔ اسانے کا اب ہمارے مذہب کا ایک جزو ہے اور یہی ہماری یگانگی وسعت پاتے پاتے ہم ملکی اور ہم وطنی کی وسعت تک پہنچ گیا ہے۔

(5) مندرجہ ذیل میں سے کسی ایک نظم/نظم کے جزو کی آسان لفظوں میں تشریح کریں:

کیا کیا دیکھے ہیں یا رب ۔ امکان تیری قدرت	سب راہ محبت میں ہے کون کسی کا رہی
بدلے ہیں رنگ کیا کیا ۔ ہر آن تیری قدرت	ساتھ مرے رہ گئی ۔ ایک مری آرزو
سب مست ہو رہے ہیں ۔ پہچان تیری قدرت	میرا یقین نہیں ۔ ورگم میں و ولے
تیز پکارتے ہیں ۔ سبحان تیری قدرت	میرا یقین بھی تو ۔ شاخ یقین بھی تو

(5) درج ذیل میں سے کسی ایک غزل/غزل کے جزو کی تشریح کریں:

الف	ب
جلیل کو بانہاں سے نہ ستار سے لگا	اتنی ہو گئی سب تدبیریں نہم نہ والے کام کیا
قسمت میں قید لکھی تھی فصل بہار میں	دیکھا اس بیچاری دل نے آخر کام تم کیا
ان حسرتوں سے کہ کہہ کبھی اور جا بھیج	عہد جوانی رو رو کا نا، تیری میں بھی آنکھیں موند
اتنی جگہ کہاں ہے دل دانۂ دار میں	یہی رات بہت تھے جاگے ، صبح ہوئی آرام کیا

(6) جلسہ "تنظیم امتحانات" کی روداد لکھیں۔

یا

ایک پرانے سکول میگ کی آپ بیتی لکھیں۔

(5) مریض اور ڈاکٹر کے درمیان مکالمہ تحریر کریں۔ ری امتحانات کے علاوہ دیے گئے موضوع پر کم از کم پانچ جملے لکھیں۔

ISLAMIYAT COMPULSORY
(NEW)
SSC–I
SECTION – A (Marks 10)
Time allowed: 15 Minutes
Section–A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Answer Sheet No. _____

Invigilator Sign. _____

Candidate Sign. _____

Fill the relevant bubble against each question according to curriculum:

#	Question	A	B	C	D	A	B	C	D
1.	Which believer is declared better by the Prophet (ﷺ)?	Wealthy	Poor	Weak	Powerful	○	○	○	○
2.	When did Hazrat Zain ul Abidin (رضي الله عنه) die?	85 Hijri	90 Hijri	95 Hijri	98 Hijri	○	○	○	○
3.	Which two blessing are NOT appreciated by most people?	Exercise & engagement	Health & leisure	Money & wealth	Sports and leisure	○	○	○	○
4.	In which of the following surah of Holy Quran, aqeedah towheed is described?	Al-Kausar	Al-Akhlas	Al-Falaq	An-Naas	○	○	○	○
5.	What is the number of Hadiths narrated by Abdullah Bin Amr (رضي الله عنه)?	300	500	700	900	○	○	○	○
6.	Who did Iblees envy first?	Hazrat Ibrahim (عليه السلام)	Hazrat Musa (عليه السلام)	Hazrat Muhammad (ﷺ)	Hazrat Adam (عليه السلام)	○	○	○	○
7.	When did Invasion of Tabuk take place?	8th Hijri	9th Hijri	10th Hijri	11th Hijri	○	○	○	○
8.	How many fasts are required to make atonement for Qasm?	3	4	5	6	○	○	○	○
9.	The Prophet (ﷺ) declared prayer as:	Light of eyes	Light of Heart	Coldness of eyes	Coldness of heart	○	○	○	○
10.	At which Prophet, the chain of Prophet hood ended?	Hazrat Noah (عليه السلام)	Hazrat Musa (عليه السلام)	Hazrat Ibrahim (عليه السلام)	Hazrat Muhammad (ﷺ)	○	○	○	○

٨

ISLAMIYAT COMPULSORY SSC–I
(NEW)

Time allowed: 2:15 Hours   Total Marks Sections B, C and D: 40

NOTE: Answer the questions given in the sections B, C and D on the separately provided answer book according to instructions.

SECTION – B (Marks 10) / (حصہ دوم)

Q. 2   Write short answers to any FIVE of the following questions according to syllabus: (5x2=10)

(5x2=10)

(i)   The famous arab poet Farzadaq wrote the Qasida in the honour of Hazrat Imam Zain ul Abidin. Write its translation or meaning.

(ii)   Briefly explain, what is called Sahifa Sadiqah?

(iii)   Write a short note on the life and character of Hazrat Shifa Bint Abdullah.

(iv)   What are the effects of physical exercise on our body? Write any four points.

(v)   Who was Hazrat Ume Sulaim? Give a brief introduction.

(vi)   Write any two sayings of Hazrat Khawaja Nizam ud Din Aulia (رحمۃ).

(vii)   Write the names of two famous works (books) of Allama Ibn Khaldun (رحمۃ).

SECTION – C (Marks 16) / (حصہ سوئم)

Note: Attempt any TWO questions. All questions carry equal marks.   (2 x 8 =16)

Q. 3   Write the benefits and fruits of prayer in the light of Quran and Sunnah.

Q. 4   Explain the meaning of generosity. Also give examples of generosity and self-sacrifice from the Messenger (خاتم النبیین) (ﷺ) of Allah (ﷻ).

Q. 5   Explain in detail the types and effect of monotheism.

(2 x 8 =16)

SECTION – D (Marks 14) / (حصہ چہارم)

Q. 6   Read the following Quranic Verses with their translations and answer the questions appended to any three of these: (3 x 3 = 9)

(3 x 3 = 9)

(i)   فَسَجَدَ الْمَلَائِكَةُ كُلُّهُمْ أَجْمَعُونَ ۞ إِلَّا إِبْلِيسَ اسْتَكْبَرَ وَكَانَ مِنَ الْكَافِرِينَ ۞

So the angles prostrated themselves, all of them except Iblis, he was proud and was one of the disbelievers.

a.   What did the angles do on Allah's command?   (01)

b.   Why did Iblis disobey Allah's order?   (01)

c.   What became of Iblis?   (01)

(ii)   وَمِنَ النَّاسِ مَن يَشْتَرِي لَهْوَ الْحَدِيثِ لِيُضِلَّ عَن سَبِيلِ اللَّهِ بِغَيْرِ عِلْمٍ وَيَتَّخِذَهَا هُزُوًا أُولَٰئِكَ لَهُمْ عَذَابٌ مُّهِينٌ ۞

And of mankind is he who purchases idle talks to mislead from the path of Allah (ﷻ) without knowledge and takes it (the verses of Quran) by way of mockery. For such there will be a humiliating torment.

a.   Explain the meaning of لَهْوَ الْحَدِيثِ   (01)

b.   What is meant by لِيُضِلَّ عَن سَبِيلِ اللَّهِ ?   (01)

c.   What will be the fate of those who make fun of Allah's verses?   (01)

Page 1 of 2 (Islamiyat)

9.

(iii) وَإِذَا قِيلَ لَهُمْ أَنْفِقُوا مِمَّا رَزَقَكُمُ اللَّهُ قَالَ الَّذِينَ كَفَرُوا لِلَّذِينَ آمَنُوا أَنُطْعِمُ مَنْ لَوْ يَشَاءُ اللَّهُ أَطْعَمَهُ؟

اور جب ان سے کہا جاتا ہے کہ خرچ کرو اس مال میں سے جو اللہ (ﷻ) نے تمہیں عطا فرمایا ہے تو یہ لوگ جنہوں نے ایمان نہ لانے ہیں کہتے ہیں ایمان والوں کیا ہم اس شخص کو کھلائیں جسے اللہ (ﷻ) اگر چاہتا تو کھلا دیتا؟

And when it is said to them, spend of that with which Allah (ﷻ) has provided you, those who disbelieve say to those whom believe, shall we feed those whom if Allah (ﷻ) willed, he would have fed.

الف — أَنْفِقُوا مِمَّا رَزَقَكُمُ اللَّهُ سے کیا مراد ہے؟
a. What is meant by أَنْفِقُوا مِمَّا رَزَقَكُمُ اللَّهُ ? (01)

ب — کافروں کی کیا ہٹ دھرمی بیان کی گئی ہے؟
b. What stubbornness of disbelievers is described? (01)

ج — اہل ایمان مشرکین مکہ کو کس بات کی تلقین کرتے تھے؟
c. What did the believers use to advise the disbelievers of Makkah? (01)

(iv) يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمْ وَاخْشَوْا يَوْمًا لَا يَجْزِي وَالِدٌ عَنْ وَلَدِهِ وَلَا مَوْلُودٌ هُوَ جَازٍ عَنْ وَالِدِهِ شَيْئًا إِنَّ وَعْدَ اللَّهِ حَقٌّ

اے لوگو! اپنے رب سے ڈرو اور اس دن سے جس میں نہ باپ بیٹے کے کام آئے گا اور نہ بیٹا باپ کے کام آئے گا بے شک اللہ (عزوجل) کا وعدہ سچا ہے۔

O Mankind! Be afraid of your lord and fear the day when no father can avail any favor for his son nor a son avail any favor for his father. No doubt, the promise of Allah (ﷻ) is true.

الف — لَا يَجْزِي وَالِدٌ عَنْ وَلَدِهِ سے کیا مراد ہے؟
a. What is meant by لَا يَجْزِي وَالِدٌ عَنْ وَلَدِهِ ? (01)

ب — تمام انسانوں کو کن دو چیزوں سے ڈرنے کی ترغیب دی گئی ہے؟
b. What two things are encouraged for all human beings to fear? (01)

ج — اللہ (عزوجل) کے وعدے سے کیا مراد ہے؟
c. What is meant by Allah's (ﷻ) promise? (01)

(v) إِنَّكَ لَمِنَ الْمُرْسَلِينَ ۞ عَلَىٰ صِرَاطٍ مُّسْتَقِيمٍ ۞ تَنزِيلَ الْعَزِيزِ الرَّحِيمِ ۞ لِتُنذِرَ قَوْمًا مَّا أُنذِرَ آبَاؤُهُمْ فَهُمْ غَافِلُونَ ۞

بے شک آپ (ﷺ) رسولوں میں سے ہیں۔ سیدھے راستے پر ہیں۔ (یہ قرآن) اس ذات کا اتارا ہوا ہے جو بڑی عزت والا نہایت رحم کرنے والا ہے۔ تاکہ آپ خبردار کریں ان لوگوں کو جن کے باپ دادا خبردار نہیں کیے گئے تھے۔ پس وہ غافل ہیں۔

Truly, you are one of the Messengers on the straight path. (This Quran) sent down by the Almighty, The most merciful, in order that you may warn people whose forefathers were not warned, so they are heedless.

الف — آپ (ﷺ) (خاتم النبیین ﷺ) کی کس شان کا ذکر کیا گیا ہے؟
a. What glory of Hazrat Muhammad (ﷺ) has been mentioned? (01)

ب — ان آیات میں اللہ تعالیٰ کی کن دو صفات کا ذکر ہے؟
b. Which two attributes of Allah (ﷻ) are mentioned in these verses? (01)

ج — قرآن کریم کے نازل کرنے کی کیا حکمت بیان فرمائی گئی ہے؟
c. What is the wisdom of the revelation of the Holy Quran? (01)

Q.7. Read the following Ahadith with their translations and answer the questions appended to any one of these: (05)

سوال نمبر ۷: درج ذیل احادیث مبارکہ کو ترجمہ کے ساتھ پڑھیں اور ان میں سے ایک کے آخر میں دیے گئے سوالات کے جوابات تحریر کریں۔ (05)

(i) أَكْمَلُ الْمُؤْمِنِينَ إِيمَانًا أَحْسَنُهُمْ خُلُقًا، وَخِيَارُكُمْ خِيَارُكُمْ لِنِسَائِهِمْ۔

مومنوں میں سے کامل ترین ایمان والا وہ ہے جو اپنے اخلاق میں ان سب سے بہتر ہے اور ان میں سب سے بہتر وہ ہیں جو اپنی بیویوں کے لیے بہتر ہیں۔

The most perfect believer among the believers is the one who is the best in his conduct and the best of them are those who are best to their wives.

الف — خِيَارُكُمْ لِنِسَائِهِمْ سے کیا مراد ہے؟
a. What is the meant by خِيَارُكُمْ لِنِسَائِهِمْ ? (01)

ب — کامل ترین مومن کون ہے؟
b. Who is the most perfect believer? (01)

ج — اس حدیث مبارکہ کا ہماری عملی زندگی کے تعلق واضح کریں۔
c. Relate this blessed Hadith to our practical life. (01)

(ii) عَنِ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ فِي الْكَبَائِرِ، قَالَ: الشِّرْكُ بِاللَّهِ، وَعُقُوقُ الْوَالِدَيْنِ وَقَتْلُ النَّفْسِ وَقَوْلُ الزُّورِ۔

رسول اللہ خاتم النبیین ﷺ نے کبیرہ گناہوں کے بارے میں فرمایا: اللہ کے ساتھ شرک کرنا اور والدین کی نافرمانی کرنا اور ناحق کسی کو قتل کرنا اور جھوٹ بولنا۔

The messenger of Allah (ﷺ) said about the major sins: Associating partners with Allah (ﷻ) and disobeying parents and killing and telling lies.

الف — عُقُوقُ الْوَالِدَيْنِ کا مطلب واضح کریں۔
a. Explain the meaning of عُقُوقُ الْوَالِدَيْنِ . (01)

ب — کبیرہ گناہ کون سے ہیں؟
b. What are the major sins? (01)

ج — اس حدیث مبارکہ کا ہماری عملی زندگی کے تعلق واضح کریں۔
c. Relate this blessed Hadith to our practical life. (01)

Version No. | **ROLL NUMBER**

PHYS 202

PHYSICS SSC-I

SECTION – A (Marks 12)
Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

ہر سوال کے ساتھ دئے گئے درکرکم کے مطابق درست دائرہ کو پر کریں۔

Answer Sheet No. _____

Invigilator Sign. _____

Fill the relevant bubble against each question according to curriculum: **Candidate Sign.** _____

	Question	سوال	A	B	C	D	A	B	C	D
1.	How many millimeters are there in 200cm? 200 سینٹی میٹر میں کتنے ملی میٹر ہوتے ہیں؟		200mm 200 ملی میٹر	500mm 500 ملی میٹر	800mm 800 ملی میٹر	2000mm 2000 ملی میٹر	O	O	O	O
2.	If an object is moving with constant speed then its distance-time graph will be: اگر ایک جسم کو نسبتاً سپیڈ کے ساتھ حرکت کر رہا ہے تو اس کی موشن کا فاصلہ - وقت گراف کیا ہوگا؟						O	O	O	O
3.	When a car is moving with velocity 40ms^{-1} slows down uniformly to 20ms^{-1} in 4 second. Then the retardation produced by the car is:		$-3ms^{-2}$	$-4ms^{-2}$	$-5ms^{-2}$	$-6ms^{-2}$	O	O	O	O
4.	An object is taken from earth to moon should have:		Less mass/same weight	Same mass/more weight	Same mass/less weight	Less mass/less weight	O	O	O	O
5.	The unit of co-efficient of friction is: کسی مادے کی جلدی فریکشن کا یونٹ ہے ____		N	kg	watt	it has no unit	O	O	O	O
6.	Two masses are separated by a distance r. If both masses are doubled, the force of interaction between the two masses changes by a factor:		2 times	4 times	$\frac{1}{2}$ times	$\frac{1}{4}$ times	O	O	O	O
7.	According to first condition of equilibrium: توازن کے پہلے قانون کے مطابق:		$\Sigma F_n = 0$	$\Sigma m_n = 0$	$\Sigma \tau_n = 0$	$\Sigma P_n = 0$	O	O	O	O
8.	The angle at which X and Y components of a force are equal is:		0°	30°	45°	60°	O	O	O	O

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	Question	سوال	A	B	C	D	A	B	C	D
9.	Asma weighing 500 N takes 90 s to reach the top of a hill 9m high. Her average muscle power is: 500 نیوٹن وزنی اسما 9 میٹر بلند پہاڑی پر پہنچنے کے لیے 90 سیکنڈ لیتی ہے۔ اس کی اوسط پٹھوں کی طاقت ہوگی۔		3.24 W 3.24 واٹ	32.8 W 32.8 واٹ	50 W 50 واٹ	250 W 250 واٹ	○	○	○	○
10.	Which of the following is NOT used to measure pressure? کسی مقدار پریشر کی ماپنے کے لیے استعمال نہیں ہوتا ہے؟		Atm	Pa	Bar	Kgm^{-3}	○	○	○	○
11.	310 K in centigrade scale is: 310 کیلون کو سنٹی گریڈ پیمانے میں تبدیل کریں۔		37°C	310°C	63°C	273°C	○	○	○	○
12.	The best absorber of radiation is a body whose surface is: ریڈی ایشن کو جذب کرنے کے لیے بہترین جسم کی سطح ہوتی ہے۔		White سفید	Grey سرمئی	Dull black سیاہ مدھم	Highly polished چمکدار	○	○	○	○

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ROLL NUMBER							

$$F = G\frac{m_1 m_2}{r^2}$$

$$g_{moon} = 1.6 ms^{-2}$$

$$g_r = 10 ms^{-2}$$

$$a = \frac{(v_f - v_i)}{t}$$

$$f_s = \mu_s (mg)$$

$$\frac{F_\perp}{F_x} = \tan\theta$$

$$T_C = T_K - 273$$

$$P = \frac{F.h}{t}$$

PHYSICS SSC–I 12

16

Time allowed: 2:45 Hours   **Total Marks Sections B and C: 53**

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2   Attempt any ELEVEN parts. All parts carry equal marks.   **(11 x 3 = 33)**

(i)   The hair of a horse grow at the rate of 0.5mm per day. Find their growth rate in mms^{-1}.

(ii)   Under what condition will displacement be equal to distance?

(iii)   A train starts form rest. It moves through 2km in 100s with uniform acceleration. What will be its speed at the end of 100s?

(iv)   Briefly explain the term 'inertia'.

(v)   A body has weight 40N. How much force is required to move it with a string vertically upward with acceleration of $2ms^{-2}$.

(vi)   Why is a vehicle made heavy at the bottom?. Its height is also kept as low as possible. Explain briefly.

(vii) A force of 200N makes an angle of 60° with x-axis. Resolve this force into rectangular components.

(viii) Calculate the mass of earth using law of gravitation. (Diagram is not required)

(ix)   Calculate the energy released if two kilogram of uranium is completely converted into energy.

(x)   Write a short note on green house effect.

(xi)   What is meant by elasticity? Also compare stress and strain.

(xii) What is power? Write its formula and S.I unit.

(xiii) Why are small gaps left when the steel girders are installed in walls?

(xiv) Evaporation causes cooling. Explain briefly with one example.

(xv)   In certain places, birds can fly for hours without flapping their wings. Explain briefly.

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks.   **(2 x 10= 20)**

Q. 3   a.   Explain different types of motion and give an example of each.

b.   A bullet of mass 40g moving with velocity of $20ms^{-1}$ penetrates into a sand bag and is brought to rest in 0.1s. Find (a) the depth of penetration in metres. (b) The average retardation force exerted by sand bag in newton.

Q. 4   a.   What is meant by resolution of force? How can a force resolved into rectangular components? Explain with example.

b.   Derive the formula for the orbital speed of an artificial satellite.

Q. 5   a.   State and explain Archimedes principle.

b.   Make the following conversion:

(i)   0°C to Kelvin   (ii)   273°C to Kelvin

(iii)   0K to Celsius   (iv)   100°F to Celsius

—— ISA-II 2307——

- $v_f = v_i + at$ $S = v_i t + \frac{1}{2} at^2$ $F_{net} = T - W$

- $F_x = F \cos\theta$ $F_y = F \sin\theta$ $P = \frac{F}{A}$

- $g_e = 10 ms^{-2}$ $R_e = 6.4 \times 10^6 m$ $G = 6.673 \times 10^{-11} Nm^2 kg^{-2}$

- $E = mc^2$ $F = ma$ $2as = v_f^2 - v_i^2$

Version No.
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ROLL NUMBER

CHEMISTRY SSC-I

SECTION – A (Marks 12)
Time allowed: 20 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Answer Sheet No. _____

Invigilator Sign. _____

Fill the relevant bubble against each question according to curriculum:

Candidate Sign. _____

Question	A	B	C	D	A	B	C	D
1. The atomic mass number of an element is 35. It has 17 protons in its nucleus. What number of neutrons it will have in its nucleus?	17	18	19	20	○	○	○	○
2. Acetic acid is a colorless liquid with a characteristic vinegar like smell. The use of technology and ways to obtain acetic acid on the large scale comes under:	Inorganic Chemistry	Bio Chemistry	Industrial Chemistry	Analytical Chemistry	○	○	○	○
3. Find out the position of Cl in the periodic table by considering its electronic configuration: $1s^2,2s^2,2p^6,3s^2,3p^5$	Period=2, Group=5	Period=3, Group=2	Period=3, Group=7	Period=5, Group=2	○	○	○	○
4. In the following reaction identify whether "O" has been oxidized or reduced? $2H_2 + O_2 \rightarrow 2H_2O$	Oxidized	Reduced	First oxidized then reduced	Neither oxidized nor reduced	○	○	○	○
5. Which one of the following is used to estimate the age of carbon-containing substances in a process called carbon dating?	C-12	C-13	C-14	C-15	○	○	○	○
6. Metallic elements in the group II-A are called:	Noble metals	Transition metals	Alkali Metals	Alkaline earth metals	○	○	○	○

Page 1 of 2

	Question سوال	A	B	C	D	A	B
7.	Which one of the following is the correct order representing oxidizing power of halogens? سوال شدہ میں سے کوئی ترتیب ہیلوجنز کی آکسیڈائز پاور کی نمائندگی کے حوالے سے درست ہے؟	$Br_2 > Cl_2 > F_2$	$F_2 > Cl_2 > Br_2$	$Cl_2 < F_2 < Br_2$	$Cl_2 < Br_2 < F_2$	○	○
8.	Brine is an example of which solution? سوال شدہ برائن ایک محلول ہے اس میں سے کس قسم کے محلول کی مثال ہے؟	Liquid in liquid مائع میں مائع	Solid in Liquid مائع میں ٹھوس	Liquid in Solid ٹھوس میں مائع	Solid in Solid ٹھوس میں ٹھوس	○	○
9.	Which one of the following elements belongs to group II-A? سوال شدہ میں سے کون سا عنصر گروپ II-A سے تعلق رکھتا ہے؟	K	Li	Be	C	○	○
10.	Which one of the following elements is NOT a Noble metal? سوال شدہ میں سے کون سا عنصر نوبل دھات نہیں ہے؟	Platinum پلاٹینم	Silver چاندی	Palladium پلاڈیم	Gold گولڈ (سونا)	○	○
11.	The SI unit of pressure is Pascal (Pa) but it is mostly represented in atm. 1 atm= پریشر کی (S.I) یونٹ پاسکل (Pa) ہے لیکن اس کو زیادہ تر atm کی صورت میں ظاہر کیا جاتا ہے۔ 1 atm کس کے برابر ہے؟	101.325 Pa	101.325 kPa	101325 kPa	$1.01325 \times 10^5 kPa$	○	○
12.	Choose the chemical specie from the following options that can have the structure given below: [diagram] سوال شدہ میں سے ان کیمیائی انواع کا انتخاب کریں جس کی ساخت ذیل کی سالمہ میں دی گئی ہے۔	O^{-1}	F^{-1}	Cl^-	S^{-1}	○	○

———— ISA-II 2308-1081 ————

SUPPLEMENTARY TABLE

Atomic No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Symbol	H	He	Li	Ba	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar	K	Ca
Mass No	1	4	7	9	11	12	14	16	19	20	23	24	27	28	31	32	35.5	40	39	40

ROLL NUMBER

CHEMISTRY SSC-I

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. All parts carry equal marks. **(11 x 3 = 33)**

(i) Differentiate between a compound and a mixture. Give examples of each.

(ii) Chlorine has two isotopes ($Cl-35$ and $Cl-37$). Draw the complete structure of each isotope showing the number of protons, neutrons and electrons.

(iii) Briefly explain saturated, unsaturated and supersaturated solutions.

(iv) Differentiate between oxidation and reduction. (Give at least three comparison points for each.)

(v) What will be the molarity of the following solutions having:

(a) 1 mole of H_2SO_4 per dm^3 (b) 12.1 moles of HCl per dm^3 (c) 18 moles of $NaOH$ per dm^3

(vi) Write the valence shell electronic configuration of the following elements.

(a) Ne (b) O (c) Na

(vii) Choose the element whose atoms have greater ionization energy in each of the following pairs:

(a) Li or Na (b) B or C (c) F or Cl

(viii) State Charles's law. Derive its mathematical expression.

(ix) Briefly explain the chemical bonding in methane (CH_4). Also draw electron dot and cross structure for methane.

(x) Is the given reaction possible? Justify the answer as well.

$F_{2(g)} + MgBr_{2(aq)} \rightarrow MgF_{2(aq)} + Br_{2(l)}$

(xi) Identify the oxidizing and reducing agents in the following reaction. Also show oxidation number of each atom. $WO_3 + 3H_2 \rightarrow W + 3H_2O$

(xii) What is corrosion? Enlist the methods used to prevent corrosion.

(xiii) Use electron dot and cross structures to write the equation for the formation of ionic bond between Mg and O.

(xiv) In each of the following pairs, choose which oxide is more basic? Give reason.

(a) Li_2O or Na_2O (b) MgO or Al_2O_3

(xv) Find the number of valence electrons in the members of following groups:

(a) $II-A$ (b) $V-A$ (c) $VII-A$

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. **(2 x 10= 20)**

Q. 3 a. What are allotropes? Discuss the allotropic forms of Carbon and Phosphorus. Draw their structures also.

b. Calculate the number of atoms/molecules present in each of the following samples:

(i) 2.5 moles of carbon dioxide (CO_2) (ii) 0.01 moles of acetic acid (CH_3COOH)

(iii) 23 g of sodium (Na) (iv) 5g of hydrogen (H) atoms

Q. 4 a. Explain the Rutherford's model for the atomic structure. Discuss only the experiment and conclusions.

b. Represent the formation of cations for the following metals along with discussing the change in electronic configuration in them after forming cations. (i) Mg (ii) Al

Q.5 a. Discuss the manufacturing of sodium metal from fused sodium chloride in Down's cell. Show reactions occurring at electrodes and draw diagram also.

b. The Chemistry saying "like dissolves like" is a guiding rule when considering the solubility of a substance. Discuss the molecular basis of solubility of methanol (CH_3OH) and salt ($NaCl$) in water. Also draw diagrams.

— 1SA-II 2308 —

SUPPLEMENTARY TABLE

Atomic No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Symbol	H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar	K	Ca
Mass No	1	4	7	9	11	12	14	16	19	20	23	24	27	28	31	32	35.5	40	39	40

$$M_1V_1 = M_2V_2$$

BIOLOGY SSC–I
SECTION – A (Marks 12)
Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Answer Sheet No. _____

Invigilator Sign. _____

Fill the relevant bubble against each question according to curriculum: Candidate Sign. _____

#	Question	A	B	C	D	A	B	C	D
1.	The career most associated with the study of plants grown for beautification is:	Agriculture	Botany	Forestry	Horticulture	O	O	O	O
2.	Maheen has learned that the brain, spinal cord and peripheral nerves work together. She combined all parts to form:	A cell	A tissue	An organ	An organ system	O	O	O	O
3.	What part of an experiment contains the data tables and graphs?	Analysis	Conclusion	Hypothesis	Result	O	O	O	O
4.	A good classification system does all of the following EXCEPT:	Showing relationship	Showing evolutionary trends	Creating confusion	Use one name for an organism	O	O	O	O
5.	Resolution of Electron Microscope can be upto:	$0.2\mu m$	$0.2cm$	$0.2mm$	$0.2nm$	O	O	O	O
6.	Which structure is the site of protein synthesis?	Lysosome	Mitochondria	Nucleus	Ribosomes	O	O	O	O
7.	Crossing-over occurs between:	Sister chromatids of the same chromosome	Two different bivalents	Non-sister chromatids of bivalent	Two daughter nuclei	O	O	O	O
8.	Uncontrolled cell division is known as:	Cancer	Cytokinesis	Mitosis	Growth	O	O	O	O
9.	What happens to an enzyme when it is denatured?	Activation energy is lowered	It becomes stronger	It loses its shape	Activation energy is raised	O	O	O	O

Page 1 of 2

Question	A	B	C	D	A	B	C	D
10. Which of these uses oxygen as the final acceptor?	Calvin cycle	Electron transport chain	Glycolysis	Krebs cycle	○	○	○	○
11. In which part of the alimentary canal is water absorbed?	Caecum	Colon	Rectum	Villi	○	○	○	○
12. Which of these association is incorrect?	white blood cells — infection fighting	Red blood cells — blood clotting	Plasma — water, nutrients and wastes	Platelets — blood clotting	○	○	○	○

—— 15A-II 2310 ——

BIOLOGY SSC-I

Time allowed: 2:45 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. All parts carry equal marks. (11 x 3 = 33)

(i) How is a Volvox colony different from a Mustard Plant?

(ii) What is a hypothesis? State the characteristics of a good hypothesis.

(iii) What advantage is there for two scientists on opposite sides of the world to use a single name for a particular organism?

(iv) Suppose a new single celled organism has been discovered. This organism has a nucleus, a giant chloroplast and mitochondria. In what kingdom would this organism be placed? Write reasons as well.

(v) What happens to an animal cell in pure water? Why does a plant cell act different?

(vi) Complete the table:

Sr.	Tissue	Location	Function
1.	Cuboidal epithelium		
2.	Nervous Tissues		
3.	Meristematic Tissues		

(vii) Briefly describe the three phases of interphase.

(viii) Compare cytokinesis in plant cells and animal cells.

(ix) List three ways used by enzymes to lower the activation energy.

(x) Discuss "Lock and Key Model" of enzyme action.

(xi) What is fermentation? Mention its importance in daily life.

(xii) Label any six parts of the given diagram using these labels; water, sugar, carbon dioxide, oxygen, ATP, ADP+P, NADPH and NADP+.

Q.No.2 (xii)

(xiii) How can Myocardial Infarction be treated?

(xiv) Why is Rh incompatibility important in blood transfusions?

(xv) Complete the following table:
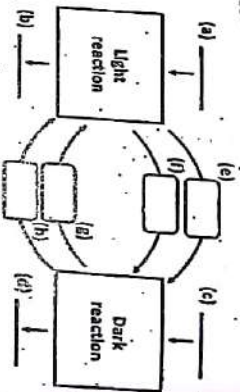
Sr.		Obtained from	Used in Plant for
1.	Carbon dioxide	Atmosphere, through stomata	Making food
2.	Nitrogen		
3.	Magnesium		
4.	Water		

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

Q. 3
a. Trace the course of blood from the right ventricle to right atrium (Draw a flow chart).
b. Describe any two organelles that are found in animal cell but not in plant cell.

Q. 4
a. What would happen to a piece of steak, containing only protein as it passes through alimentary canal?
b. Explain the steps of Calvin Cycle.

Q. 5
a. Explain the mechanism of food translocation by the theory of Pressure Flow Mechanism.
b. Describe the problems of Protein Energy Malnutrition (PEM).

— ISA-II 2310 —

MATHEMATICS SSC-I
(Science Group)
SECTION – A (Marks 15)

Time allowed: 20 Minutes

Version No.

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19.

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ROLL NUMBER

19
2023

Answer Sheet No. _____

Fill the relevant bubble against each question according to curriculum:

Invigilator Sign. _____   Candidate Sign. _____

Question	A	B	C	D	A	B	C	D
1. If $\begin{vmatrix} 1 & -3 \\ 6 & a \end{vmatrix} = 0$ then value of a is:	$\frac{1}{18}$	1	-18	18	○	○	○	○
2. If $-4, 6 \in R$ then $-4 \times 6 \in R$ is the ____ property w.r.t multiplication.	Associative	Commutative	Closure	Distributive	○	○	○	○
3. $\log_5 8 \times \log_8 125 =$	5	125	3	8	○	○	○	○
4. a^2+ab+b^2 is the factor of:	a^3+b^3	a^3-b^3	$(a+b)^2$	$(a-b)^2$	○	○	○	○
5. Factors of $x^2-11x-42$ are:	$(x-14)(x+3)$	$(x+14)(x-3)$	$(x-14)(x-3)$	$(x+14)(x+3)$	○	○	○	○
6. $\frac{a}{9a^2-b^2} + \frac{1}{3a-b} =$	$\frac{a}{3a-b}$	$\frac{a}{3a+b}$	$\frac{1}{3a-b}$	$\frac{1}{3a+b}$	○	○	○	○
7. HCF of x^2-5x+6 and x^2-x-6 is:	$x-3$	$x+2$	$x+3$	$x-2$	○	○	○	○
8. The solution set of $|x+2|=-8$ is:	$\{-10\}$	$\{10\}$	$\{6\}$	$\{\ \}$	○	○	○	○
9. If $(x+1, y-1)=(0,0)$ then (x,y) is:	$(1,-1)$	$(-1,1)$	$(-1,-1)$	$(1,1)$	○	○	○	○
10. The point $(7,-5)$ lies in quadrant:	I	II	III	IV	○	○	○	○

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Question	A	B	C	D	A	B	C
11. The value of 'm' in the equation $3x-5y=-10$ is: حل _____ میں 'm' کی قیمت $3x-5y=-10$	$\dfrac{3}{5}$	$\dfrac{5}{3}$	1	-2	○	○	○
The value of 'x' in given figure is: 12. دی گئی شکل میں 'x' کی قیمت _____ ہے۔	96°	126°	54°	84°	○	○	○
13. Measure of two sides of a triangle are 10 and 14. Which can be its third side? ایک مثلث کے دو اضلاع کی پیمائش 10 اور 14 ہے۔ اس کا تیسرا ضلع کونسا ہو سکتا ہے؟	4	20	24	2	○	○	○
14. Which of the following are the sides of a right angled triangle? درج ذیل میں سے کونسے قائمہ زاویہ مثلث کے اضلاع ہیں؟	1,2,3	2,3,4	3,4,5	4,5,6	○	○	○
15. A quadrilateral having each angle of 90° is called: ایک چوکور جس کا ہر زاویہ 90° ہو _____ کہلاتا ہے۔	Parallelogram متوازی الاضلاع	Rectangle مستطیل	Rhombus معین	Triangle مثلث	○	○	○
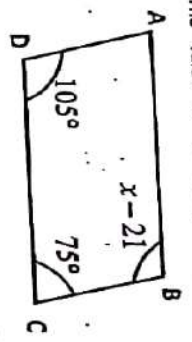
Figure (Q12): quadrilateral $ABCD$ with angle $A = 105°$, angle $B = 75°$, side marked $x - 21$.

A [105°] ... B [75°]
D ... C

— ISA-II 2309-1091 —

Page 2 of 2

MATHEMATICS SSC-I
(Science Group)

Time allowed: 2:40 Hours

Total Marks Sections B and C: 60

NOTE: Answer any nine parts from Section 'B' and any three questions from Section 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 36)

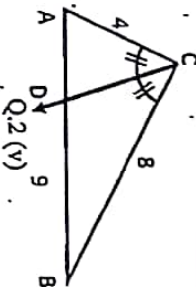**Q. 2   Attempt any NINE parts. All parts carry equal marks.**   (9 x 4 = 36)

(i)   If $A = \begin{bmatrix} 5 & 1 \\ 2 & 2 \end{bmatrix}$, $B = \begin{bmatrix} 0 & 1 \\ 4 & 0 \end{bmatrix}$ then:

    a)   Find $(AB)^t$ b)   Find $B^t A^t$ c)   Is $(AB)^t$ equal to $B^t A^t$?

(ii)   If $z = \dfrac{i}{1-i}$ then:

    a)   Write z in $a + bi$ form.   b)   Calculate z   c)   Show that $(z - \bar{z})^2$ is real.

(iii)   Simplify $\left[(125)^{\frac{1}{3}} \times (25)^{\frac{1}{3}} \right]^{\frac{1}{3}} + (16)^{\frac{3}{4}} \times (64)^{\frac{1}{3}} + \dfrac{1}{(49)^{\frac{1}{2}}} \right]^{\frac{1}{3}}$

(iv)   Solve with the help of logarithm $\dfrac{0.987 \times (16.42)^2}{(4.567)^3}$

(v)   Find the length of side $\overline{AD}$ in the given figure. If $m\overline{AC} = 4cm$, $m\overline{BC} = 8cm$ and $m\overline{DB} = 9cm$

(vi)   In $\triangle LMN$, $\overline{MO} \perp \overline{LN}$ and $\overline{LM} \cong \overline{MN}$. Prove that $\overline{LO} \cong \overline{ON}$ and $\angle LMO \cong \angle NMO$.

(vii)   If $x = 3 - \sqrt{8}$ then find.

(viii)   Factorize $(x-5)(x-7)(x+6)(x+4) - 504$

(ix)   Use factor theorem to factorize $x^3 + 2x^2 - 5x - 6$

(x)   Find the HCF of the following polynomials by division method $a^4 + 3a^3 + 2a^2 + 3a + 1$, $a^4 + 4a^2 + 4a + 1$

(xi)   Simplify $\dfrac{6x^2 + 9x}{x^2 + 8x + 15} \div \dfrac{4x+6}{x^3 - 9}$

    a) $\dfrac{1}{x} - x$ b) $x - \dfrac{1}{x}$ c) $x^3 + \dfrac{1}{x^3}$

(xii)   Prove that any point on the bisector of angle is equidistant from its arms.

(xiii)   If $2x - y - 3 = 0$, then: Make a table of any four values satisfying given equation.

(xiv)   Solve and check for extraneous solution if any $\sqrt[3]{2x+5} = \sqrt[3]{4x-11}$
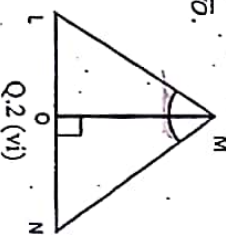
SECTION – C (Marks 24)

Note: Attempt any THREE questions. All questions carry equal marks.   (3 x 8 = 24)

Q. 3   The length of a park is 3m more than its width and perimeter of the park is 180m. Find the dimensions of the park by matrices.

Q. 4   Prove that if the square of one side of a triangle is equal to the sum of squares of other two sides, then the triangle is right angled triangle.

Q. 5   Prove that the line segment joining the mid points of two sides of a triangle, is parallel to the third side and is equal to one half of its length.

Q. 6   A quadrilateral has points $A(9,3), B(-7,7), C(-3,-7), D(5,-5)$ then:

    a)   Find the mid points of sides

    b)   Verify that figure so formed by joining mid points is a parallelogram

Q. 7   Given that $m\overline{AB} = 8cm$, $m\overline{BC} = 6.4cm$, $m\angle B = 90°$ then:

    (a)   Construct the $\triangle ABC$ b)   Draw the angle bisectors of three angles

    (c)   Verify their concurrency. Also write steps of construction.

—1SA-II 2209 —

COMPUTER SCIENCE
SSC-I

SECTION – A (Marks 12)

Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent.
Deleting/overwriting is not allowed.
Do not use lead pencil.

Answer Sheet No. _____

Version No.

1	1	1	1

ROLL NUMBER

22 COMPUTER 23 2025

Invigilator Sign. _____

Candidate Sign. _____

Fill the relevant bubble against each question according to curriculum:

#	Question	A	B	C	D	A	B	C	D
1.	In which generation of computers were the microprocessors used for the first time?	First	Second	Third	Fourth	○	○	○	○
2.	Which of the following option in word is used to "End" the page and shift the control to the new (next) page?	Section Break Break	Paragraph Break	Page Break	Document Break	○	○	○	○
3.	Amplification is the solution of:	Cross talk	Distortion	Attenuation	Timeliness	○	○	○	○
4.	Which of the following is full duplex transmission mode?	Money drawing through ATM machine	TV transmission	Sending data to printer	○	○	○	○
5.	Which of the following operating system is used to control the traffic signals?	Time sharing	Real Time	Multi-User	Single User	○	○	○	○
6.	Which program is used to make Backup of data?	Device Driver	Language Processor	Utility Program	Operating system	○	○	○	○
7.	Key logger software is an example of:	Virus	Worm	Hacker	Cracker	○	○	○	○
8.	Which of the following networks is MOST suitable for small number of users?	Client server network	Peer to peer network	Point-to-point network	Metropolitan Area network	○	○	○	○

Question	A	B	C	D	A	B	C	D
9. Which command is used to limit the entities in a cell?	Data validation	Conditional formatting	Functions	Formula	○	○	○	○
10. Which interface is based on textual input?	GUI	CLI	Menu Driven	Window	○	○	○	○
11. Which type of network is used in Cable TV?	Local Area Network	Metropolitan Area Network	Wide Area Network	Personal Area Network	○	○	○	○
12. Wireless mouse is connected with Computer by _____ unguided technology.	Bluetooth	Radio wave	Infra-red	Microwave	○	○	○	○

—1SA-II 2311-1111—

ROLL NUMBER

SECTION – B (Marks 27)

Q. 2 Attempt any NINE parts. All parts carry equal marks. (9 x 3 = 27)

(I)   "List the names of any three "volatile memories".

(ii)   What is the word processor? Why word has replaced type writer? Give two reasons.

(iii)   Compare synchronous and asynchronous transmissions on basis of working, time interval and examples.

(iv)   Write the effects of following malware: Worm, Virus, Spyware.

(v)   Write the uses of following icons: Recycle Bin, Computer Icon, Folder Icon.

(vi)   What is meant by 'Data rate' and 'Baud rate'? Also write their relationship.

(vii)   Why are computer networks needed? Give three reasons.

(viii) Differentiate between software piracy and information privacy.

(ix)   Write three uses of E-commerce in daily life.

(x)   Enlist any three authentication methods.

(xi)   What are the disadvantage of using satellite as transmission medium? (any three)

(xii)   Write any three uses of vital sign monitoring computer in hospital?

(xiii) How is fiber optics more reliable than other guided media? Give three reasons.

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 8 = 16)

Q. 3 a.   Write short notes on any two GUI operating systems.

        b.   Write four advantages of GUI operating system.

Q. 4 a.   How does modem work? Explain. Also draw diagram.

        b.   Compare analog and digital signals on basis of:

             (i)   Signal type   (ii)   Diagram   (iii)   Examples and   (iv)   Speed

Q. 5 a.   Write detailed note on LAN.

        b.   Write any four characteristics of WAN.

— ISA-II 2311 —

Version No. 1 0 1 1

ROLL NUMBER

ENGLISH
COMPULSORY SSC-I
SECTION – A (Marks 15)
Time allowed: 20 Minutes

Answer Sheet No. _____ 2022

Sign. of Candidate _____

Sign. of Invigilator _____

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Fill the relevant bubble against each question:

1. The train had already left. Which tense is used in the sentence?
   ○ Present perfect   ○ Past perfect   ○ Present continuous   ○ Past continuous

2. Napoleon's army was finally defeated at waterloo. The underlined word in an example of:
   ○ Common noun   ○ Abstract noun   ○ Collective noun   ○ Proper noun

3. I am looking for someone ____ can watch my dog while I am on vacations. Choose the best answer to complete the sentence.
   ○ Who   ○ That   ○ Which   ○ What

4. Choose the best answer, I am tired. I ____ for three hours.
   ○ Had studied   ○ Have been studying   ○ Will be studying   ○ Shall study

5. His body was shaking with fury. Write the antonym of the underlined word:
   ○ Rage   ○ Earthquake   ○ Calmness   ○ Fear

6. The cost of living has increased so much that he finds it difficult to make both ends meet. Meaning of the underlined idiom is:
   ○ To live within Income   ○ Buy food   ○ Spend money   ○ Live a life of luxury

7. He is a chicken and cannot face a difficulty. In this sentence 'chicken' refers to ____ person.
   ○ An innocent   ○ A cowardly   ○ A harmless   ○ A foolish

8. Which one of the modal verbs used in the given sentences shows the function of likelihood?
   ○ My sister can speak three languages   ○ She can play the flute and the guitar   ○ You must wash your hands before cooking   ○ My baby brother should be asleep by now

9. He is good ____ Mathematics. Fill in the blank with suitable preposition.
   ○ In   ○ At   ○ With   ○ On

ROLL NUMBER

10. We shall meet _____ the airport. Use the correct preposition to complete the sentence.
    ○ A   ○ In   ○ On   ○ Into

11. Please take the _____ of the two. Choose the best answer.
    ○ Shorter   ○ Short   ○ Shortest   ○ More short

12. Her purse was _____ by me. Choose the correct word for passive voice.
    ○ Found   ○ Find   ○ Founded   ○ Finding

13. A rolling stone gathers no moss. The underlined part is:
    ○ Present   ○ Adverb   ○ Infinitive   ○ Past participle

14. Hockey is the national game of Pakistan. It is a:
    ○ Complex sentence   ○ Simple sentence   ○ Compound sentence   ○ Compound complex sentence

15. Each hand has five fingers. The underlined part is an adjective of:
    ○ Manner   ○ Number   ○ Quality   ○ Time

ENGLISH COMPULSORY SSC-I

3

NOTE: Sections B and C comprise pages 1-2. Answer all the questions from Sections 'B' and 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 40)

Q.2 Read the following passage carefully and answer any FIVE questions including Question No. (i) appended to it.

Note: Question (i) about summary writing is compulsory carrying 06 marks while the rest of the question carry 03 marks each.   (6+4x3=18)

Media helps people to share knowledge of the world, their feelings and opinions are expressed through it. Media attracts the attention of a very large audience. It is through media that the world has become a global village. Media plays a very constructive role for the society. It raises awareness about many social issues like corruption, terrorism, drug addiction and violation of human rights. Media has become a mouthpiece of the downtrodden. It would not be wrong to say that media is the most vigilant institution that keeps an eye on every segment of the society. Through debates, reports and talk shows it makes everyone accountable and answerable. This is why media has become an integral part of our lives. Media can play a positive role and has a corrective impact if it works honestly.

QUESTIONS:
(i) Write the summary of the passage. Also suggest a suitable title. (Compulsory)   (5+1=6)
(ii) How has media attracted the attention of a large number of audience?
(iii) Do you agree that media has become part of our life? Explain your answer.
(iv) Through media world has become a global village. Discuss
(v) Why is it important for media to be very vigilant and honest?
(vi) In today's world media plays a very constructive role in the society. Discuss.
(vii) Write down the meanings of the underlined words from the context.

Q.3 a. Paraphrase any ONE of the following stanzas: (03)

(i) I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd
A host of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze,

OR

(ii) Whose woods are these I think I know
His house is in the village though;
He will not see me stopping here
To watch his woods fill up with snow.

b. Read the following stanza carefully and answer the questions given at the end: (06)

(i) For oft, when on my couch I lie
In vacant, or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.

QUESTIONS:
(i) What effect does the memory of golden daffodils has on the mood of the poet?   (1)
(ii) Which poetic device has been used in the last line of the stanza?   (1)
(iii) Write down the rhyme scheme of the stanza.   (1)
(iv) Write the meanings of the underlined words.   (1)
(v) What do you understand by the term inward eye?   (2)

OR

(ii) My little horse must think it queer,
To stop without a farmhouse near
Between the woods and frozen lake
The darkest evening of the year

QUESTIONS:
(i) Why does the little horse think it improper to stop in the woods?   (1)
(ii) Describe the imagery used in the stanza.   (2)
(iii) Write the rhyme scheme of the stanza.   (1)
(iv) Write the meaning of the underlined word.   (1)
(v) Why is the evening dark them the usual?   (1)

Q. 4 a. Fill in the blanks to complete a crime story. Use the passive voice form of the verbs given in brackets. (05)

Police were _____ (call) to the National Bank yesterday. The bank was _____ (rob). One billion rupees were _____ (steal). No customer was _____ (hurt). But one robber was _____ (shot) by the police.

b. Use the Verbs given in the brackets as present and past participles. (any five) (05)

(i) We met a girl _____ a basket of flowers. (carry)

(ii) Books _____ in the childhood seem like old friends. (read)

(iii) I heard my mother _____ on the phone. (talk)

(iv) We stood _____ for the taxi. (wait)

(v) Having _____ my passport, I applied for a new one. (lose)

(vi) She hurt her leg while _____ the rope. (skip)

(vii) The letter was badly _____. (write)

c. Punctuate the following para/line(s): (03)

I know every kid in practically the whole school he says some of those guys in schools on TV don't even know the people in their own class

SECTION – C (Marks 20)

Q. 5 Write an email to an American friend telling him/her about attractive tourist destinations in Pakistan briefly. (08)

OR

Write an application to the Principal requesting him/her to hold a 'funfair' in your school.

Q. 6 Write a paragraph of about 80 to 100 words on any ONE of the following: (06)

Kindness

OR

Examinations

Q. 7 Translate the following passage into Urdu: (06)

Noise pollution causes not only environmental damage but it also has negative impact on human health. It can cause aggression, hypertension, high stress levels, hearing loss, restlessness, depression and insomnia. Insomnia can further lead to anxiety, bad temper and emotional stress. In addition, noise pollution can seriously affect the learners, it gives them unnecessary mental and physical tension.

OR

Write a dialogue between discussing the importance of tree-plantation.

—1SA-I 2201—

Page 2 of 2 (English)

Answer Sheet No. _____

Sign. of Candidate _____ 2022

Sign. of Invigilator _____

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

اردو ایس ایس سی - ۱

حصہ اول (کل نمبر 15)

وقت:20منٹ

Fill the relevant bubble against each question:

—1SA-I 2203—

Page 1 of 1

اردو ایس ایس سی - I

(Sheet-B)

(8×2 = 16)

(34 مارکس)

(i)
(iii)
(v)
(vii)
(ix)

(ii)
(iv)
(vi)
(viii)

(5×2 = 10)

(i)
(iii)
(v)

(ii)
(iv)

(i)
(iii)
(v)

(ii)
(iv)
(vi)

(4×2 = 8)

(i)
(iii)
(v)

(ii)
(iv)

Left Page (Urdu)

(٢٦ حصہ سوم کل نمبر)

سوال نمبر ٣: مندرجہ ذیل میں سے کسی ایک عبارت کی تشریح کریں: (5)

الف ۔ زمانے نے علم اس دور سے اتاروا ہے ... (عبارت)

ب ۔ اخلاق کا ایک دینی تقاضہ ہے کہ انسان دینے کے لیے ... (عبارت)

سوال نمبر ٤: مندرجہ ذیل میں سے کسی ایک نظم کی آسان جزوی تشریح کریں: (5)

ب	الف
گرم بھی ہے ایسا ہی جیسا کہ ہے نا گرم	پل ہوا کے اوپر بہ ست چلا ہے ہا
کم کہ دہ سا جس پر یں بید گلا تیرا	جھڑیں کی ستیوں سے اہوسی بجا ہے ہا
چپ بھی کم پانی مر بد ہل قمل ہتا ہے ہا	بیٹھے ہیں پانی مر یا ہل قمل ہتا ہے ہا
کہی میں گن ابل رہا ہے گدا تیرا	گزار بیٹھے ہیں میرے نبا رہے ہا

سوال نمبر ٥: درج ذیل میں سے کسی غزلیہ جوڑی کی تشریح کریں: (5)

ب	الف
ان مہربوں سے کہ وہ، کہیں اور یاسیں	دیکھ پر ان ان کے گان کیے کیے
اتی چپ کہیں ہے دل دیا وار میں	کام آتے ہیں دمیں کیے کیے
دن زندگی کے گلے ہوے نام ہو گی	دین جہن، کل کھائی ہے کیا کیا
کیا کے پاس سوپی کے تج جوم میں	O ہے رنگ آسان کیے کیے

سوال نمبر ٦: یوم آزادی کے حوالے سے منقد ہونے والی کسی تقریب کی اردو تقریر کریں۔ (6)

(۱)

اپنی زندگی کے کسی پر سرت دن کی یاداشت (ڈائری) تحریر کریں۔

سوال نمبر ٧: استاد اور شاگرد کے درمیان عزیز وطن پاکستان کے موضوع پر مکالمہ لکھیں۔ (درسی کلات کے مطالعہ دوں کے سو ضوابط کو مانظر کر رہا کو بھی کامیابی کے لیے ھے سکتی ہیں) (5)

— ISA-I Z203 —

Right Page (Physics)

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

PHYSICS SSC–I
SECTION – A (Marks 12)
Time allowed: 15 Minutes

Fill the relevant bubble against each question:

1. Which of the following is True?
- ○ Centi = 10^{-4}
- ○ Tera = 10^{12}
- ○ Pico = 10^{-12}
- ○ Kilo = 10^{8}

2. The moving wings of a turning fan is an example of:
- ○ Circular motion
- ○ Random motion
- ○ Vibratory motion
- ○ Rotatory motion

3. A cyclist starting from rest moves with an acceleration of $2m/s^2$. It will cover _____ distance in 10 seconds.
- ○ 200m
- ○ 100m
- ○ 20m
- ○ 10m

4. The unit of momentum according to system international is:
- ○ Nm
- ○ Nm^{-1}
- ○ Ns
- ○ Ns^{-1}

5. The centripetal acceleration for an object of mass 1kg moving with speed of $6ms^{-1}$ in a circle of radius 3m is:
- ○ $18ms^{-1}$
- ○ $12ms^{-2}$
- ○ $15ms^{-2}$
- ○ $9ms^{-2}$

6. A force of 20N makes an angle of 45° with x-axis. Its horizontal and vertical components are:
- ○ 0.866N, 14.14N
- ○ 0.5N, 14.14N
- ○ 0.5N, 0.866N
- ○ 14.14N, 14.14N

Scanned with CamScanner

7. The position of centre of gravity of a triangular plate is at _____
   - ○ A point outside triangle
   - ○ Point of intersection of medians
   - ○ Point of intersection of diagonals
   - ○ On highest vertex

8. At a distance of two Earth's radius above the Earth's surface, the value of "g" becomes _____ of its value on Earth. (where $g_e = \dfrac{GM_e}{R_e^2}$)
   - ○ Four times
   - ○ One-fourth
   - ○ Nine times
   - ○ One-ninth

9. $1 hp =$ _____
   - ○ 476 Watt
   - ○ 576 Watt
   - ○ 676 Watt
   - ○ 746 Watt

10. The extension per unit length is termed as:
   - ○ Stress
   - ○ Strain
   - ○ Elasticity
   - ○ Plasticity

11. The relation between co-efficient of linear expansion "α" and co-efficient of volumetric expansion "β" is:
   - ○ $\alpha = 3\beta$
   - ○ $\beta = 3\alpha$
   - ○ $\alpha = \beta$
   - ○ $\beta = \frac{1}{3}\alpha$

12. In solids, transfer of heat takes place by:
   - ○ Conduction
   - ○ Convection
   - ○ Radiation
   - ○ Absorption

—— 1SA-I 2207-6071 (HA) ——

- $S = V_i t + \frac{1}{2}at^2$
- $a_c = \dfrac{v^2}{r}$
- $g_e = \dfrac{GM_e}{R_e^2}$
- $F_x = F\cos\theta$
- $F_y = F\sin\theta$

ROLL NUMBER

Page 2 of 2

PHYSICS SSC–I

Time allowed: 2:45 Hours

10

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

Total Marks Sections B and C: 53

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. All parts carry equal marks. (11 x 3 = 33)

(i) Enlist any three base and derived quantities with their respective units.

(ii) Calculate the number of seconds in "one week". Express the number in standard form.

(iii) Sketch the distance time graph for the given states.
   a. When object moves with constant speed
   b. When the object is at rest

(iv) A cricket ball is hit vertically upwards and returns to ground 10 second later. Calculate maximum height reached by the ball. ($g = 10 m/s^2$)

(v) Mass and weight are two different physical quantities. Make a comparison between them with three points to support.

(vi) A 200gm bullet is fired from a 15kg gun with a speed of $100 m s^{-1}$. What is speed of recoil of this gun?

(vii) Why it is better to use a long spanner rather than a short one to loosen a rusty nut?

(viii) A picture frame is hanging by two vertical strings. The tensions in the string are 5.7 N and 3.5N. Find the weight of picture frame.

(ix) A meteoroid is at $4.4 \times 10^7 m$ from the earth. What is the value of free fall acceleration "g" at this point due to earth?

(x) What is biomass? How it can be used as an energy source? What is its harmful effect?

(xi) How do 'thermals' help birds to fly for hours without flapping their wings?

(xii) At what temperature the readings on Fahrenheit and Celsius scales are equal?

(xiii) Give reasons:
   a. Whey wet clothes dry up more quickly in summer than in winter?
   b. Why water evaporates faster when spread over larger area?

(xiv) How can submarines travel over as well as under the water?

(xv) Define thermal conductivity of a solid material. What is its SI unit?

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

Q. 3 a. Derive an equation of motion which is independent of time.

   b. Two bodies of masses 8kg and 5kg are attached to the ends of string suspended from a frictionless pulley. Find acceleration of bodies and the tension of the string

Q. 4 a. What is work? Write its mathematical form along with its unit. Explain the cases when:
   (i) Work done is maximum
   (ii) Work don is zero

   b. A satellite is revolving around the earth at an altitude of 35000km. Calculate its orbital speed

Q. 5 a. State "Pascal's Law". Explain working of hydraulic press and braking system in vehicle as an application of Pascal's Law.

   b. A container has 2.5 litres of water at 20°C. How much heat is required to boil the water?

—— 1SA-I 2207 (HA) ——

- $S = V_i t + \frac{1}{2}gt^2$
- $m_1 u_1 + m_2 u_2 = m_1 v_1 + m_2 v_2$
- $T_F = 1.8 T_c + 32$
- $g_h = \dfrac{gR_e^2}{(R_e + h)^2}$
- $\Sigma F = 0$
- $Q = cm\Delta T$
- $\Sigma \tau = 0$
- $a = \left(\dfrac{m_1 - m_2}{m_1 + m_2}\right)g$
- $T = \left(\dfrac{2m_1 m_2}{m_1 + m_2}\right)g$
- $V = \sqrt{\dfrac{GM_e}{(R_e + h)}}$

Version No.

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ROLL NUMBER

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

CHEMISTRY SSC–I
SECTION – A (Marks 12)
Time allowed: 20 Minutes

Fill the relevant bubble against each question:

1. Which products are formed by the electrolysis of molten $NaCl$?
   - $Na_{(l)}, Cl_{2(s)}$
   - $Na_{(s)}, H_{2(g)}$
   - $Na_{(l)}, O_{2(g)}$
   - $Na_{(s)}, H_{2(g)}, O_{2(g)}$

2. Mass of 2 moles of hydrogen gas is:
   (H atomic mass = 1.008 a.m.u.)
   - 8.064g
   - 4.032g
   - 1.008g
   - 2.106g

3. $_{10}^{20}Ne$ has electronic configuration:
   - $1s^2, 2s^2, 3s^2, 3p^4$
   - $1s^2, 2p^4, 3s^2$
   - $1s^2, 2s^2, 3s^2, 2p^4$
   - $1s^2, 2s^2, 2p^4$

4. Predict the location of $_{13}^{27}Al$ in Periodic table:
   - 2nd Period, 2nd Group
   - 2nd Period, 3rd Group
   - 3rd Period, 2nd Group
   - 3rd Period, 3rd Group

5. Identify the ionic compound from the given options:
   - MgO
   - O_2
   - H_2O
   - CO_2

6. Conversion of a liquid into a gas at all temperatures is called:
   - Freezing
   - Melting
   - Evaporation
   - Condensation

7. The elements that can exist in two or more different arrangements of atoms are called:
   - Isotopes
   - Allotropes
   - Amorphous
   - Crystalline

Left Page (Page 2 of 2)

8. Atmospheric pressure at Murree is less than 1 atm so, the boiling point of water at Murree will be:

○ Less than $100°C$ $f < 100°C$ ○ $100°C$ ○ More than $100°C$ $100°C$ سے زیادہ ○ $120°C$

9. Keeping the pressure of gas constant, average kinetic energy increases by:

○ Increasing temperature ○ Decreasing pressure ○ Decreasing temperature ○ Increasing pressure

10. Mass of Copper Sulphate dissolved in 100 g of solution is called:

○ Concentration ○ Molarity ○ Percentage ○ Solubility

11. The oxidation state of N in NH_3 is:

○ +1 ○ -3 ○ -1 ○ +3

12. Identify the branch of chemistry which deals with study of glucose formation by plants:

○ Inorganic chemistry ○ Organic chemistry ○ Biochemistry ○ Analytical chemistry

—1SA-I 2208-1081—

SUPPLEMENTARY TABLE

Atomic No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Symbol	H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar	K	Ca
Mass No	1	4	7	9	11	12	14	16	19	20	23	24	27	28	31	32	35.5	40	39	40

ROLL NUMBER

Page 2 of 2

Right Page

CHEMISTRY SSC–I

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. All parts carry equal marks. $(11 \times 3 = 33)$

(i) Differentiate between molecular ion and free radical with examples

(ii) What is meant by: a. Atomic mass b. Atomic number c. Atomic mass unit

(iii) Draw Bohr's atomic model for $^{19}_9F$ and $^{23}_{11}Na$, indicating location of electrons, protons and neutrons.

(iv) The atomic mass of copper metal is 63.5 amu. Calculate the mass of 3.5 moles of copper sulphate. ($CuSO_4$)

(v) Write the electronic configuration of $^{24}_{12}Mg$, $^{14}_7N$ and $^{28}_{14}Si$.

(vi) What is meant by corrosion? Write the chemical equation for rusting of iron.

(vii) State the substances which are being oxidized or Reduced in the given chemical reactions:

$N_2 + 3H_2 \rightarrow 2NH_3$

$Mg + H_2O \rightarrow MgO + H_2$

$Fe_2O_3 + 3CO \rightarrow 2Fe + 3CO_2$

(viii) How can the location of an element $^{23}_{11}X$ be identified on periodic table by its electronic configuration?

(ix) Platinum is an inert metal. Discuss its commercial importance.

(x) Explain the composition of 'Aqua Regia'. How it is used to dissolve the noble metals.

(xi) Show the formation of cations from the following metals, using electron dot cross structures.

a. Be (atomic number=4) b. Al (atomic number=13)

(xii) What are allotropes? Explain the allotropes of phosphorus.

(xiii) $MgSO_4$ is used in medicines. How can 0.5 M 500cm³ solution of $MgSO_4$ be prepared from a 2.5 M stock solution of $MgSO_4$?

(xiv) State Octet and Duplet rules with one example each.

(xv) Dry cells are used to power wall clock. Describe how a dry cell produces electrical energy. Explain with the reactions at anode and cathode.

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. $(2 \times 10 = 20)$

Q. 3 a. State Charle's Law. Ammonia gas is used as a refrigerant. Calculate the initial volume of NH_3 gas at 0°C that is changed to 731cm³ by cooling it to -14°C at constant pressure. (05)

b. What are Isotopes? State the importance and uses of isotopes in daily life. (1+4=5)

Q. 4 a. Explain electron affinity and electronegativity alongwith their trends in periodic table. (05)

b. How covalent bond is formed? Describe single, double and triple covalent bond formation between two non-metallic atoms with the help of structures. (1+3=4)

Q. 5 a. What is Molarity? If 50g of a chemical, having molecular formula $C_6N_4H_6$ is dissolved in 250cm³ of solution. Calculate the molarity of this solution. (1+4=5)

b. Copper metal obtained from its ores is impure. Explain electrolytic refining of copper. Sketch the cell showing anode cathode and flow of electrons. (05)

—1SA-I 2208—

SUPPLEMENTARY TABLE

Atomic No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Symbol	H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar	K	Ca
Mass No	1	4	7	9	11	12	14	16	19	20	23	24	27	28	31	32	35.5	40	39	40

Version No.			
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ROLL NUMBER

Answer Sheet No. **BIOLOGY**

2022

Sign. of Candidate _____

Sign. of Invigilator _____

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

BIOLOGY SSC–I
SECTION – A (Marks 12)
Time allowed: 15 Minutes

Fill the relevant bubble against each question:

1. Being a biological research worker, you are studying 'Brassica campestris', which branch of biology it will be?
   - ○ Zoology
   - ○ Botany
   - ○ Parasitology
   - ○ Palaeontology

2. The tentative statement that may prove to be the answer of a scientific problem:
   - ○ Law
   - ○ Theory
   - ○ Deduction
   - ○ Hypothesis

3. All of these are characteristics of algae except:
   - ○ Multi cellular sex organs
   - ○ Chlorophyll in chloroplast
   - ○ Cellulose in cell wall
   - ○ Unicellular, colonial or simple multicellular

4. The network of channels that extends from plasma membrane to nuclear envelop is:
   - ○ Mitochondria
   - ○ Golgi Bodies
   - ○ Plastids
   - ○ Endo Plasmic Reticulum

5. When an animal cell is placed in hypotonic solution what would happen?
   - ○ Cell will become rigid
   - ○ Cell will become turgid
   - ○ Cell may rupture
   - ○ Cell may shrink

6. Identify the phase during which sister chromatids of each chromosome are separated?
   - ○ Prophase
   - ○ Metaphase
   - ○ Anaphase
   - ○ Telophase

7. Hydrolysis of starch occurs with the help of:
   - ○ Amylase
   - ○ Cellulose
   - ○ Lipase
   - ○ Lactase

Page 1 of 2

8. If plants lose their Mesophyll Tissues, which gas will increase in the atmosphere?

اگر پودے اپنی میسوفل ٹشوز کھو دیں تو فضا میں کون سی گیس بڑھ جائے گی؟

○ O_2 ○ CO_2 ○ CO ○ H_2

9. Choose the correct pair for deficiency of vitamin and disease

وٹامن اور بیماری کی کمی کے لیے درست جوڑا منتخب کریں

○ Vitamin A – Rickets
   وٹامن اے – ریکٹس

○ Vitamin D – Ostomalacia
   وٹامن ڈی – اوسٹومالیشیا

○ Vitamin C – Scurvy
   وٹامن سی – سکروی

○ Vitamin D – Night blindness
   وٹامن ڈی – رات کا اندھا پن

10. Conversion of simple absorbed food into complex compounds that become part of body is called:

سادہ جذب شدہ خوراک کو پیچیدہ مرکبات میں تبدیل کرنا جو جسم کا حصہ بن جاتے ہیں، کہلاتا ہے:

○ Digestion
   ہاضمہ

○ Assimilation
   تمثل

○ Ingestion
   نگلنا

○ Absorption
   جذب

11. If blood is not supplied to the arms of a person, which arteries will be defective?

اگر کسی شخص کے بازوؤں کو خون فراہم نہ ہو تو کون سی شریانیں خراب ہوں گی؟

○ Coronary
   تاجی

○ Mesenteric
   میسنٹرک

○ Hepatic
   جگری

○ Sub clavian
   سب کلاوین

12. All of these are characteristics of veins except:

یہ سب وریدوں کی خصوصیات ہیں سوائے:

○ Thick muscular layer
   موٹی پٹھوں کی تہہ

○ Have valves to prevent backward flow of blood
   خون کے پیچھے بہاؤ کو روکنے کے لیے والوز

○ Carry blood from body parts to heart
   جسم کے حصوں سے خون دل کی طرف لے جانا

○ Low blood pressure
   کم خون کا دباؤ

ISA-I 2210 - 5101 (HA)

ROLL NUMBER

BIOLOGY SSC-I

Time allowed: 2:45 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. All parts carry equal marks.   (11 x 3 = 33)

(i) Differentiate between oxidation and reduction.

(ii) Protein and amino acids belong to which type of biomolecules? Compare this type of biomolecules and give two examples of each.

(iii) Describe blood disorder "thalassemia".

(iv) Differentiate between fats and oils. Also write sources of lipids.

(v) Write causes and effects of deforestation.

(vi) Describe structure and function of Ribosome.

(vii) Describe structure of a nerve cell with the help of labelled diagram.

(viii) Describe three phases of inter phase.

(ix) What is apoptosis? Describe its process with two examples.

(x) Describe the effect of pH on the rate of enzyme action with the help of suitable graph.

(xi) Emil Fischer proposed a model of enzyme action. Write name of the model and describe it with the help of diagram.

(xii) Describe observations collected during study of malaria.

(xiii) Which environmental hazards are caused by the use of fertilizers?

(xiv) Transpiration is a necessary evil. Discuss it.

(xv) Why blood group "O" is called universal donor and blood group "AB" universal recipient?

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks.   (2 x 10= 20)

Q. 3 a. Heart acts as a double pump for circulation of blood, discuss it. Also draw flow chart for double pump of blood circulation.

b. Which type of cellular organelles are responsible for photosynthesis. Describe it with the help of labelled diagram.

Q. 4 a. Describe structure and function of stomach with the help of labelled diagram.

b. Discuss characteristics of Kingdom fungi and Monera.

Q. 5 a. Describe events of light reactions.

b. Describe prophase-I with the help of diagram.

ISA-I 2210 (HA)

Answer Sheet No. 006160

2022

Sign. of Candidate

Sign. of Invigilator

MATHEMATICS SSC–I
(Science Group)
SECTION – A (Marks 15)
Time allowed: 20 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Fill the relevant bubble against each question.

1. If $A=[1\ \ 2]$, $B=\begin{bmatrix} a & b & c \\ 1 & 2 & 3 \end{bmatrix}$ then what is the order of matrix AB?

    ○ 1–by–3   ○ 2–by–2   ○ 3–by–1   ○ 3–by–2

2. What equals $-i^3$ in the following options?

    ○ i ○ 1 ○ $-i$ ○ -1

3. What is the value of $\log_3 3$?

    ○ 3   ○ 0   ○ 0.48   ○ Not Possible

4. $\dfrac{1}{2-\sqrt{3}}$ is equal to:

    ○ $1+\sqrt{3}$ ○ $2+\sqrt{3}$ ○ $-2+\sqrt{3}$ ○ $-2-\sqrt{3}$

5. Factorization of x^2-2x+1 is:

    ○ $(x-1)^2$ ○ $(x+1)^2$ ○ $(x-1)(x+1)$ ○ $(x+2)(x-1)$
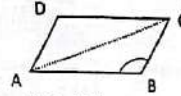
6. What is the square root of $[-(a+b-c)]^2$?

    ○ $-(a+b+c)$ ○ $\pm(a-b+c)$ ○ $-(a+b-c)$ ○ Not Possible

7. Which one of the following is a solution of $6-\dfrac{2}{3}x \le 0$?

    ○ $x\ge 9$ ○ $x\le 9$ ○ $x\ge -9$ ○ $x\le -9$

8. Which of the following lines passes through (0,0)?

    ○ $x-1=0$ ○ $y=2$ ○ $y=2x+3$ ○ $y=2x$

Page 1 of 2
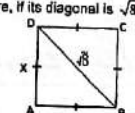
9. If medians of a triangle are equal in length, then the triangle is:
اگر مثلث کے وسطیے لمبائی میں برابر ہوں تو مثلث کیسا ہوگا ____
- ○ Equilateral مساوی الاضلاع
- ○ Scalene مختلف الاضلاع
- ○ Isosceles متساوی الساقین
- ○ Right isosceles قائمہ متساوی الساقین

10. If one interior angle of a parallelogram is 60°, then its opposite interior angle is:
اگر متوازی الاضلاع کا ایک اندرونی زاویہ 60° ہے تو اس کا مقابل اندرونی زاویہ کیا ہوگا؟
- ○ 60°
- ○ 120°
- ○ 180°
- ○ 360°

11. In a parallelogram ABCD, if $m\angle B$ is obtuse then the longest segment is:

متوازی الاضلاع ABCD میں اگر $m\angle B$ منفرجہ زاویہ ہو تو سب سے لمبا قطعہ کون سا ہے؟
- ○ $\overline{AD}$
- ○ $\overline{AC}$
- ○ $\overline{BD}$
- ○ $\overline{BC}$

12. What is the length of the side of a square, if its diagonal is $\sqrt{8}$ cm long?

ایک مربع کے ایک ضلع کی لمبائی کیا ہے اگر اس کا وتر $\sqrt{8}$ cm ہے؟
- ○ ±3
- ○ 2
- ○ 4
- ○ 8

13. What is the solution set of $|x+7|+7=0$?

$|x+7|+7=0$ کا حل سیٹ کیا ہے؟
- ○ { }
- ○ {(−14,0)}
- ○ {0,−14}
- ○ {14−4}

14. Which one of the following is a point of intersection of the angle bisectors of a triangle?

مندرجہ ذیل میں کون سا نقطہ مثلث کے اندرونی زاویوں کے نصف کنندہ کا نقطہ ملاپ ہے؟
- ○ In-centre اندرونی مرکز
- ○ Circum centre محیطی مرکز
- ○ Orthocentre قائمی مرکز
- ○ Centroid مرکز

15. The simplified form of $\frac{12x^3(x^2)^4}{3x^3}$ is:

$\frac{12x^3(x^2)^4}{3x^3}$ کی سادہ شکل کیا ہے؟
- ○ $4x^{11}$
- ○ $4x^{12}$
- ○ $4x^7$
- ○ $4x^8$

1SA-I 2209-5031-(HA)

ROLL NUMBER

MATHEMATICS SSC-I
(Science Group)

Time allowed: 2:40 Hours   **Total Marks Sections B and C: 60**

NOTE: Answer any nine parts from Section 'B' and any three questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly. Logbook and graph paper will be provided on demand.

SECTION – B (Marks 36)

Q. 2 Attempt any NINE parts. All parts carry equal marks.   (9 x 4 = 36)

(i) Find the values of x and y if $-2\begin{bmatrix} -x & 3 \\ 1 & -2 \end{bmatrix} + 4\begin{bmatrix} -1 & 2 \\ 1 & -2y \end{bmatrix} = \begin{bmatrix} 0 & 2 \\ 2 & -12 \end{bmatrix}$

(ii) Simplify the expression $\frac{2+3i}{2+i}$ and write the answer in the form $a+bi$

(iii) Simplify $\left(\frac{x^{2p}}{x^{p+q}}\right)\left(\frac{x^{2q}}{x^{q+r}}\right)\left(\frac{x^{2r}}{x^{r+p}}\right)$

(iv) Find x if $\log_3(x^3-2)=2$

(v) If $x=2-\sqrt{3}$, find the values of $x+\frac{1}{x}$ and $x-\frac{1}{x}$

(vi) Factorize: $1-x^2-y^2+2xy$

(vii) Find the square root of $9x^4-24x^3-14x^2+40x+25$

(viii) Solve the inequality $\frac{x}{3}+\frac{x-3}{3} \ge \frac{2x}{3}-\frac{1}{3}(2x+3)$ where $x \in W$

(ix) Solve: $\left|\frac{5+9x}{3}\right|=\frac{4}{3}$

(x) Draw the graph of $y+4x+2=0$ by taking at least four ordered pairs.

(xi) Using distance formula, show that points $A(12,8), B(-2,6)$ and $C(6,0)$ form a right triangle.

(xii) Any point inside an angle, equidistant from its arms, is on the bisector of it. Prove it.

(xiii) In $\triangle ABC$, internal angle bisector of $\angle A$ meets $\overline{CB}$ at the point D such that $m\overline{BD}:m\overline{DC}=m\overline{AB}:m\overline{AC}$. Find the value of x.
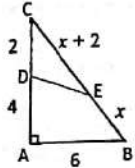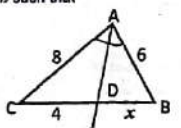
(xiv) In right $\triangle ABC$, find the value of x if $\overline{DE} \parallel \overline{AB}$.

SECTION – C (Marks 24)

Note: **Attempt any THREE questions. All questions carry equal marks.**   (3 x 8 = 24)

Q. 3 Solve the following system of linear equations by using the matrix inversion method. $4x-6y=-2$, $x+3y=7$

Q. 4 Show that the points $A(2,-3), B(6,-1), C(6,4)$ and $D(2,4)$ are the vertices of a rectangle.

Q. 5 Solve the system of linear equations $x+2y=-1$, $4x-3y=18$ by using the graphical method.

Q. 6 If two opposite sides of a quadrilateral are congruent and parallel, it is a parallelogram. Prove it.

Q. 7 From the following data, construct a triangle ABC. Draw two altitudes of triangle ABC. Write the construction steps also. $m\overline{AB}=5cm$, $m\angle A=45°$, $m\overline{BC}=6cm$

——— 1SA-I 2209 (HA) ———

Version No.

1	1	1

ROLL NUMBER

COMPUTER SCIENCE
SSC-I
SECTION – A (Marks 12)
Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Cutting/overwriting is not allowed. Do not use lead pencil.
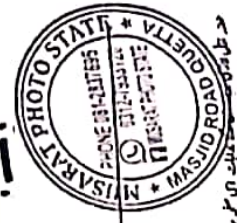
Fill the relevant bubble against each question:

1. Input was based on punched cards in _____ generation of computers.
   - ○ Fourth
   - ○ Third
   - ○ Second
   - ○ First

2. Which of the following network topologies uses a device called terminator?
   - ○ Ring Topology
   - ○ Mesh Topology
   - ○ Bus Topology
   - ○ Star Topolgy

3. _____ is used for creating 'decorative' effects in word.
   - ○ Word Art
   - ○ Formulas
   - ○ Equation Editor
   - ○ Hyperlink

4. Which of the following commands in excel (spread sheet) allows the user to view only certain data in worksheet based on condition?
   - ○ Data Validation
   - ○ Data Filtering
   - ○ Page Formating
   - ○ Data Manipulation

5. Which of the following devices is used for connecting computers in wired Local Area Network (LAN)?
   - ○ Dial up modem
   - ○ Bluetooth Device
   - ○ Switch
   - ○ Satellite

6. Which of the following is NOT an authentication method for ensuring security?
○ Username and password ○ Personal Identification Number ○ Adware ○ Biometrics

7. The impairment that refers to undesired signals that enter the path of the transmitted signal due to electromagnetic radiation is:
○ Distortion ○ Attenuation ○ Cross talk ○ Noise

8. Which of the following topologies is MOST expensive to implement?
○ Star topology ○ Bus topology ○ Mesh topology ○ Ring topology

9. Which one of the following will allow users to give commands in any natural language such as English?
○ Fifth generation of computers ○ First generation of computers ○ Second generation of computers ○ Fourth generation of computers

10. Which one of the following is GUI operating system?
○ UNIX ○ DOS ○ Windows ○ Menu Driven OS

11. In which of the following transmissions the time-interval between the characters is always the same?
○ Asynchronous ○ Synchronous ○ Satellite ○ Microwave

12. _____ allows the user to access the contents of computer drives and manage files and folders.
○ Program Icon ○ Computer Icon ○ File Icon ○ Recycle Bin Icon

— 1SA-I 2211-1111 —

ROLL NUMBER

COMPUTER SCIENCE SSC-I 22

Time allowed: 2:45 Hours

Total Marks Sections B and C: 43

NOTE: Answer any nine parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 27)

Q. 2 Attempt any NINE parts. All parts carry equal marks. (9 x 3 = 27)

(i) Differentiate between RAM and ROM.

(ii) What is meant by managing data and why is it important?

(iii) Why is operating system an important software for a computer? Give any three reasons.

(iv) What is dial up modem and why it is used?

(v) Differentiate between 'page break' and 'section break' in MS Word (Word processor).

(vi) What is meant by:
   a. Port   b. Expansion card   c. Expansion slot

(vii) Enlist any three uses of computer in media.

(viii) Write any three limitations of ring topology.

(ix) Enlist any three actions performed by spyware.

(x) State the difference between 'authentication' and 'authorization' with examples.

(xi) Mention any three problems which may occur if peer-to-peer network is used for a large number of users in an organization.

(xii) Compare 'DSL' and 'Dial up line' in terms of:
   a. Transfer rate   b. Cost per month   c. Disadvantage

(xiii) What happens if storage devices are removed from computer system?

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 8 = 16)

Q. 3 Describe the following guided media on basis of structure, purpose, speed and cost.
   a. Twisted Pair Cable
   b. Fiber Optic Cable

Q. 4 a. Describe any four uses of networks.
   b. Compare LAN and WAN.

Q. 5 a. Explain basic operations of a computer.
   b. Describe following components of communication system.
   Sender   Receiver   Message   Protocol

— 1SA-I 2211 —

9th Class

ENGLISH COMPULSORY SSC-I
SECTION – A (Marks 15)

فیڈرل بورڈ 2019

Time allowed: 20 Minutes

NOTE: Section—A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

English

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) In Pakistan, there are almost _____ drug addicts.
- A. Two million
- B. Three million
- C. Five million
- D. Ten million

(ii) Noise pollution is one of the biggest sources of discomfort and nuisance in Pakistan. The underlined word means:
- A. Annoyance
- B. Comfort
- C. Enjoyment
- D. Sleeplessness

(iii) After reading the poem, "Stopping by Woods on a Snowy Evening", we:
- A. Feel fed up with life
- B. Get ready to face the challenges of life
- C. Wish to go on a journey
- D. Wish to sleep for a long time

(iv) As per custom, the Sultan Ahmad Mosque comprises a Madrassah, a hospice and a/the:
- A. Burial chamber
- B. Cellar
- C. Gallows
- D. Tomb of the founder

(v) The Quaid was a man of strong faith and belief. The underlined word means:
- A. Firm faith
- B. Powerful faith
- C. Uncertain faith
- D. Wavering faith

(vi) The phrase 'rugged and rough path' appeals to our sense of:
- A. Hearing
- B. Smell
- C. Taste
- D. Touch

(vii) He spoke very loudly. The underlined word is an adverb of:
- A. Degree
- B. Frequency
- C. Manner
- D. Time

(viii) The galloping horse scared the child. The underlined word is a/an:
- A. Gerund
- B. Infinitive
- C. Present participle
- D. Past participle

(ix) A _____ of ships stood at the harbour. The correct collective noun for this would be:
- A. Fleet
- B. Flight
- C. Herd
- D. Team

(x) Nobody was there to rescue the child. The underlined word is a/an:
- A. Demonstrative pronoun
- B. Indefinite pronoun
- C. Possessive pronoun
- D. Reflexive pronoun

(xi) I _____ living in this house since 1970.
- A. Has been
- B. Have been
- C. Was
- D. Will be

(xii) I soon returned home because I was upset. It is a:
- A. Complex sentence
- B. Compound sentence
- C. Compound-complex sentence
- D. Simple sentence

(xiii) The dog sat _____ his master.
- A. Across
- B. Along
- C. Beside
- D. Over

(xiv) He tells a tale that sounds untrue. The underlined part of the sentence is a/an:
- A. Adverb clause
- B. Adjective clause
- C. Noun clause
- D. Independent clause

(xv) Choose the correct spelling:
- A. Flamboyant
- B. Flameboyant
- C. Flemboyant
- D. Flambuoyant

For Examiner's use only:

Total Marks: | 15

Marks Obtained: |

— 1SA 1901 (L) —

9th Class FedRal Board 2019

ENGLISH COMPULSORY SSC–I

2

Time allowed: 2:40 Hours   **Total Marks Sections B and C: 60**

NOTE: Sections B and C comprise Pages 1-2. Answer all the questions from Sections 'B' and 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 39)

Q. 2 Answer any SIX of the following parts in about 30 to 40 words each. Each part carries 3 marks.
                                                                                                    (6 x 3 = 18)

(i) Why did the pagan Arabs threaten the Holy Prophet's (ﷺ) uncle?
(ii) How will you define patriotism?
(iii) What happens when media is allowed to play its role unchecked?   (Media and Its Impact)
(iv) What can be the possible solution to our present problems? (Refer to the lesson "The Quaid's Vision and Pakistan)
(v) How does the interior of the Sultan Ahmad Mosque look?
(vi) Why do families feel reluctant to take the drug victims to drug rehabilitation centers?
(vii) How is construction work a cause of noise pollution?   (Noise in the Environment)
(viii) How did Hazrat Asma (RA) console her grandfather?

Q. 3 a. Paraphrase any ONE of the following stanzas: (03)

(i)
My little horse must think it queer
To stop without a farm house near
Between the woods and frozen lake
The darkest evening of the year.

(ii)
For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.

b. Read the following stanza carefully and answer the questions given at the end: (06)

The woods are lovely, dark and deep,
But I have promises to keep,
And miles to go before I sleep,
And miles to go before I sleep.

Questions:

(i) Name the poem this stanza has been taken from. Also state the name of the poet.

(ii) The speaker in the poem is captivated by the beauty of nature. Why doesn't he stop for long to enjoy it?

(iii) Identify the alliteration and imagery used in the stanza.

Q. 4 a. Change the Voice of any FOUR of the following: (04)

(i) They had gained nothing.
(ii) The driver opened the door of the car.
(iii) He will give you a box of chocolates.
(iv) We use milk for making cheese.
(v) A car ran over an old man.
(vi) They are buying this house.
(vii) We did not hear a sound.

Page 1 of 2 (Eng)

ENGLISH COMPULSORY SSC–I

2

Time allowed: 2:40 Hours

Total Marks Sections B and C: 60

NOTE: Sections B and C comprise Pages 1-2. Answer all the questions from Sections 'B' and 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 39)

Q. 2 Answer any SIX of the following parts in about 30 to 40 words each. Each part carries 3 marks. **(6 x 3 = 18)**

(i) Why did the pagan Arabs threaten the Holy Prophet's (ﷺ) uncle?
(ii) How will you define patriotism?
(iii) What happens when media is allowed to play its role unchecked? (Media and Its Impact)
(iv) What can be the possible solution to our present problems? (Refer to the lesson "The Quaid's Vision and Pakistan)
(v) How does the interior of the Sultan Ahmad Mosque look?
(vi) Why do families feel reluctant to take the drug victims to drug rehabilitation centers?
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And miles to go before I sleep,
And miles to go before I sleep.

Questions:

(i) Name the poem this stanza has been taken from. Also state the name of the poet.
(ii) The speaker in the poem is captivated by the beauty of nature. Why doesn't he stop for long to enjoy it?
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(iii) He will give you a box of chocolates.
(iv) We use milk for making cheese.
(v) A car ran over an old man.
(vi) They are buying this house.
(vii) We did not hear a sound.

b. Provide correct form of Verb of any FIVE of the following sentences: **(05)**

    (i)   He (take) the examination next year.

    (ii)   If I (go) out, I will turn off the T.V.

    (iii) The baby (cry) for milk now.

    (iv) I already (take) three cups of coffee.

    (v)   It (begin) to rain an hour ago.

    (vi) All (prepare) for his examination since October.

    (vii) The sun (set) in the west.

    (viii) You (rest) since morning.

c. Punctuate and capitalize the following para / line(s): **(03)**

if I were the president of a university, I would establish a compulsory course in how to use your eyes

SECTION – C (Marks 21)

Q. 5 Write a letter to your father requesting him to send you some extra money for the payment of hostel dues. **(08)**

-OR-

Write a letter to your friend thanking him/her for the books he/she lent you.

Q. 6 Write a paragraph of about 60 to 70 words on "Pakistani Women". **(05)**

Q. 7 Translate any EIGHT of the following sentences into English: **(08)**

-OR-

Write a dialogue between a student who came late to school and his / her teacher.

-OR-

Write a dialogue between a police officer and a young man regarding the whereabouts of the nearest market.

— ISA 1901 (L) —

2:40

60

8

نوٹ (الف):

(12x2=24)

نوٹ (ب): (34 نمبر)

(i)

(ii)

(iii)

(iv)

(v)

(vi)

(vii)

(viii)

(ix)

(x)

(xi)

(xii)

(xiii)

(xiv)

ج:

(i)

(ii)

(iii)

(iv)

(v)

(vi)

(5x2=10)

اسلامیات لازمی اسلامیات (لازمی) ایس ایس سی-I

2019

وقت: 15 منٹ   **حصہ اول (کل نمبر:10)**

نوٹ: حصول دائرہ ہے کے علامات سے دیئے گئے عمل کریں۔ اپنے درست جواب کے دائرہ کو بال پوائنٹ سے پُر کریں۔

سوال نمبر1۔ دیئے گئے خانہ خالی کا صحیح انتخاب کا نشان ہر سیدھا کر کے دائرہ کو بھریں۔ ہر ایک کا ایک نمبر ہے۔

(i) ذکوٰۃ کے کیا معنی ہیں؟
- الف۔ بڑھتے ہیں
- ب۔ دوڑتے ہیں
- ج۔ رکتے ہیں
- د۔ دیکھتے ہیں

(ii) مؤمن کے کیا معنی ہیں؟
- الف۔ انکار کرنے والا
- ب۔ معتبرد کرنے والا
- ج۔ کذب کرنے والا
- د۔ جادو کرنے والا

(iii) " اور جان کو کہ کہ تمہارا مال اور اولاد ہے۔ کی " .... ہیں۔
- الف۔ آزمائش
- ب۔ فتنہ
- ج۔ مصیبت
- د۔ کزدی

(iv) بیت المقدس سے .... چھ بچین میں تعمیر کیا جائیگا۔
- الف۔ دو
- ب۔ تین
- ج۔ چار
- د۔ پانچ

(v) عذاب فخریت کا کیا مطلب ہے؟
- الف۔ پانی کا عذاب
- ب۔ ہوا کا عذاب
- ج۔ چٹروں کا عذاب
- د۔ آگ کا عذاب

(vi) سورۃ انفال کے مطابق نزدیک بدیش میں کتنے فرشتوں کے ذریعہ مدد کا ذکر فرمایا گیا ہے؟
- الف۔ ایک ہزار
- ب۔ دو ہزار
- ج۔ تین ہزار
- د۔ چار ہزار

(vii) حدیث کے مطابق سب سے بہتر مال .... ہے۔
- الف۔ استعمال کرنا
- ب۔ کل کا ورد
- ج۔ روزی کمانا
- د۔ اولاد کا کمانا

(viii) " مؤمنوں میں سب سے کامل ترین ایمان والا وہ ہے جو ان میں .... کے لحاظ سے سب سے اچھا ہے"
- الف۔ الایمان
- ب۔ اسلام
- ج۔ ایمان
- د۔ اخلاق

(ix) کس خلیفہ اشدہ نے اپنے عہد خلافت میں قرآن مجید کی حد مقتول تیار کر کے تمام صوبائی دار الحکومتوں میں بھجوائیں؟
- الف۔ حضرت ابوبکرؓ
- ب۔ حضرت عمرؓ
- ج۔ حضرت عثمانؓ
- د۔ حضرت علیؓ

(x) نبی کریمﷺ کے فرمان کے مطابق جنت کی پھواریاں .... ہیں۔
- الف۔ مساجد
- ب۔ قبرستان
- ج۔ دنیا کی مجلس
- د۔ علمی مجلس

برائے ممتحن: کل نمبر: 10   حاصل کردہ نمبر: ☐

6.

حصہ سوم (کل نمبر 26)

(1/2+1/2+1+4=6) سوال نمبر3۔ سبق مضمون اور اس کے متن کا مختصر حوالہ دیتے ہوئے کی ایک شریاح کی تشریح کیجئے:

الف۔ ختم آدم پر میرا مطلب، پونے دیں بیٹی بیٹھی کی اور ہم اللہ کو کا امتحان لینے کریں میں داخل ہوئے۔ یہاں بہت تعلق دار اور اس فن سے کام کرتے۔ مجھے چچا میں بنی تھی، میں نے ان کے ہاتھ میں ساتھ سے لیے۔ چکہ چائی اور بڑی دیر کہ فس فس کر باتیں کرتے رہے۔ میں کھانا چلوچو ایہ ایہ، اللہ دے اور بندہ دے لوگک دی بیچ پر تقسیم ہوا۔ میں نے پر چلیا سرسری نظر ڈالی اور میز پر کو دیا۔ لیکن یہ ضرور کوں کا کہ پر چہ پڑھنے کے بعد میرے چہرے پر اطمینان تھا شاید وہ کی کے چہرے پر پہو کا۔

ب۔ یہ بے کہ لوگ پڑتے ہیں اور پڑتے ہیں ترقی بھی کرتے ہیں اور ہزار ہزار برسے میں شاید وہ کیا اس موقع میانہ ہوگا کہ اپنی تعلیم کو اور اپنی حصل کو ضرور دریا کام میں لا دے۔ لیکن اگر انسان ان عارضی ضرورتوں کا منظور ہو اور اپنے دنی توتو کی کو بکار ڈال دے تو وہ نہایت سخت کافل اور وحشی ہو جاتا ہے۔ انسان بھی وحش اور حیوانوں کے ایک ہے حیوان ہے اور جب کے اس کے ولی قوی کی تحریک سے نسبت ہو جاتی ہے اور کام میں نہیں لائی جاتی تو وہ اپنی حیوانی خصلت میں پرجاتا ہے اور جسمانی باتوں میں مشغول ہو جاتا ہے اور انسانی صفت کھوکر پورا حیوان بن جاتا ہے۔

(1/2+1/2+2+2=5) سوال نمبر4۔ شاعر اور نظم کا حوالہ دیتے ہوئے کی ایک نظم پارے کی تشریح کیجئے:

الف۔ سنی ہم نے طوطی و بلبل کی باتیں
ترا تذکرہ ہے، تری منظر ہے
جیوں تیرے در پر مردوں تیرے در پر
کی بجھ کو حسرت کی آرزو ہے

ب۔ ہے تیرے گلستاں میں بھی نسلِ خزاں کا دور
خالی ہے جیب گل، رز کمال عیار سے
جو نخت زن تھے خلوت اوراق میں لیور
رخصت ہوئے ترے فجر سایہ دار سے

(1+2+2=5) سوال نمبر5۔ شاعر کا حوالہ دیتے ہوئے کی ایک غزلیہ جوی کی تشریح کیجئے:

الف۔ ہم ہیں مشتاق اور وہ بیزار
یا الٰہی! یہ ماجرا کیا ہے؟
میں سمجھ نہ میں زبان رکتا ہوں
کاش پوچھو کہ مدعا کیا ہے؟

ب۔ عمر دراز مانگ کے لائے تھے چار دن
دو آرزو میں کٹ گئے دو انتظار میں
بلبل کو نافیاں سے دستیاد سے پلہ
قسمت میں قید لکھی تھی فصلِ بہار میں

(5) سوال نمبر6۔ دورِ ہم جماعتوں کے مابین جھوٹ کے نقصانات کے موضوع پر مکالمہ تحریر کریں۔

(ا)

ایک بگل نعت کی رودا لکھیں۔

(5) سوال نمبر7۔ اپنے چچا کے نام خط لکھو کہ انہیں فریضہ حج ادا کرنے پر مبارک باد پیش کریں۔

اسلامیات (لازمی) (ایس ایس سی-۱)

نوٹ: حصہ دوم اور سوم کے سوالات کے جوابات علیحدہ سے مہیا کی جانے والی کاپی پر دیں۔ حصہ دوم کے تمام سوالات اور حصہ سوم میں سے کوئی سے دو (02) سوال حل کریں۔ ایکسٹرا شیٹ (Sheet-B) طلب کرنے پر جو کاپی جائے گی آپ کے جوابات حاصل اساتہ ہوے جائیں۔

حصہ دوم (کل نمبر 24)

(3x3=9)

سوال نمبر2: مندرجہ ذیل قرآنی آیات میں سے کوئی سی تین آیات کا مفہوم ترجمہ کیجیے:

(i) اِنَّمَا الۡمُؤۡمِنُوۡنَ الَّذِیۡنَ اِذَا ذُکِرَ اللّٰهُ وَجِلَتۡ قُلُوۡبُهُمۡ وَاِذَا تُلِیَتۡ عَلَیۡهِمۡ اٰیٰتُهٗ زَادَتۡهُمۡ اِیۡمَانًا وَّعَلٰی رَبِّهِمۡ یَتَوَکَّلُوۡنَ ۚ

(ii) یٰۤاَیُّهَا الَّذِیۡنَ اٰمَنُوۡا لَا تَخُوۡنُوا اللّٰهَ وَالرَّسُوۡلَ وَتَخُوۡنُوۤا اَمٰنٰتِکُمۡ وَاَنۡتُمۡ تَعۡلَمُوۡنَ ۚ

(iii) وَاَطِیۡعُوا اللّٰهَ وَرَسُوۡلَهٗ وَلَا تَنَازَعُوۡا فَتَفۡشَلُوۡا وَتَذۡهَبَ رِیۡحُکُمۡ وَاصۡبِرُوۡا ۚ اِنَّ اللّٰهَ مَعَ الصّٰبِرِیۡنَ ۚ

(iv) کُتٰبٍ اِلٰی ذٰلِکَ بِاَنَّهُمۡ شَآقُّوا اللّٰهَ وَرَسُوۡلَهٗ وَمَنۡ یُّشَاقِقِ اللّٰهَ فَاِنَّ اللّٰهَ شَدِیۡدُ الۡعِقَابِ

(v) وَاِنۡ جَنَحُوۡا لِلسَّلۡمِ فَاجۡنَحۡ لَهَا وَتَوَکَّلۡ عَلَی اللّٰهِ ۚ اِنَّهٗ هُوَ السَّمِیۡعُ الۡعَلِیۡمُ ۚ

(2+2+1=5)

سوال نمبر3: مندرجہ ذیل میں سے کسی ایک حدیث کا ترجمہ و تشریح کرتے ہوے اس کا مادی ملی زندگی سے تعلق واضح کیجیے۔

(i) اَفۡضَلُ الۡاَعۡمَالِ لَا اِلٰهَ اِلَّا اللّٰهُ وَاَفۡضَلُ الدُّعَاءِ الۡاِسۡتِغۡفَار۔

(ii) مَنۡ حَلَّ عَلٰی مَرَّةٍ فَتَحَ اللّٰهُ لَهٗ بِهَا اَبۡوَابَ الۡعَافِیَةِ۔

(5x2=10)

سوال نمبر4: مندرجہ ذیل میں سے کسی پانچ سوالات کے مختصر جوابات تحریر کیجیے:

(i) دوگروہی (طائفتین) سے کیا مراد ہے؟

(ii) کنانہ کے مقابلے کے باوجود احتفاعی نے اس پر عذاب نازل کیوں نہ کیا؟

(iii) غزوہ بدر میں مسلمانوں کی نصرت کے لیے نازل ہونے والے فرشتوں کو کیا کرشیطان کار عمل کیا تھا؟

(iv) سورہ انفال میں جہادی تیاری کے بارے میں ارشاد باری تعالیٰ نے کیا احکم دیا ہے؟

(v) قرآن مجید کو کیجیے اور سکانے کے متعلق کسی حدیث کا ترجمہ کیجیے۔

(vi) فتح نبوت کا مفہوم بیان کریں۔

(vii) مندرجہ ذیل میں "الرقاب" اور "الخارمین" کا مفہوم واضح کریں۔

حصہ سوم (کل نمبر 16)

(2x8=16)

(کوئی سے دو سوال حل کیجیے تمام سوالوں کے نمبر برابر ہیں۔)

سوال نمبر5: فضائل قرآن پر مشتمل نوٹ لکھیں۔

سوال نمبر6: علم معصوم بیان کریں نیز علم کی فضیلت اور اہمیت بھی بیان کیجیے۔

سوال نمبر7: مصارف زکوۃ پر مشتمل نوٹ لکھیں۔

— 1SA 1905 —

PAKISTAN STUDIES SSC–I

SECTION – A (Marks 10)

Time allowed: 15 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 15 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) Who gave the Presidential Address in the Resolution of Lahore, 23rd March 1940 AD?
A. The Quaid-e-Azam
B. Tiger of Bengal A.K. Fazl-ul-Haque
C. Moulana Muhammad Ali Jauhar
D. Liaquat Ali Khan

(ii) The word "Pakistan" was coined by:
A. Allama Muhammad Iqbal
B. Sir Agha Khan
C. Choudhary Rehmat Ali
D. Sir Syed Ahmad Khan

(iii) When did the Quaid-e-Azam present his famous fourteen points?
A. 1909 AD
B. 1919 AD
C. 1929 AD
D. 1939 AD

(iv) When was the Battle of Palasi fought?
A. 1757 AD
B. 1657 AD
C. 1557 AD
D. 1857 AD

(v) The total area of Pakistan is:
A. 696095 sq. kilo meter
B. 795095 sq. kilo meter
C. 896096 sq. kilo meter
D. 796096 sq. kilo meter

(vi) What percent part of the total area of Pakistan is covered with forests?
A. 0.5
B. 5
C. 15
D. 25

(vii) Along the borders of Pakistan and China there is mountain range of:
A. Himalayas
B. Siwalik
C. Karakoram
D. Hindu Kush

(viii) Indus Water Treaty was brokered by:
A. Trusteeship Council
B. Security Council
C. The International Court
D. The World Bank

(ix) The First Constitution of Pakistan was implemented in the country in:
A. 1958 AD
B. 1956 AD
C. 1954 AD
D. 1955 AD

(x) The World War II broke out in:
A. 1914 AD
B. 1919 AD
C. 1939 AD
D. 1945 AD

For Examiner's use only:

Total Marks: | 10

Marks Obtained: |

— 1SA 1929 —

PAKISTAN STUDIES SSC–I

.15.

Time allowed: 2:15 Hours

Total Marks Sections B and C: 40

NOTE: Answer any Eight parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 24)

Q. 2 Answer briefly any eight of the following questions.

(i) What is meant by ideology of Pakistan?   (8 x 3 =24)

(ii) What did the Quaid-e-Azam say about Nationalism?

(iii) What was the reply of the Quaid-e-Azam in Jinnah – Gandhi talks 1944 AD?

(iv) Write the text of Pakistan Resolution.

(v) Write the names of the members of cabinet mission plan 1946 AD.

(vi) Describe the location of Pakistan.

(vii) In which mountain range are the Topi pass and Gomal pass situated?

(viii) What steps are being taken by the government to improve forest?

(ix) What do you mean by Economic Development?

(x) Write any three points of Muslim Family Laws Ordinance 1961 AD.

(xi) Which areas of Muslim majority, India got as a result of unjust division by Radcliffe?

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks.

Q. 3 Explain the role of the Quaid-e-Azam as first governor general of Pakistan.   (2 x 8 =16)

Q. 4 Describe the importance of plain region of Pakistan.

Q. 5 Write the salient features of the cabinet mission plan 1946 AD.

حصہ دوم (کل نمبر 24)

(8×3=24)

سوال نمبر: درج ذیل میں سے کوئی سے آٹھ سوالات کے مختصر جوابات تحریر کیجیے۔

(i) نظریہ پاکستان سے کیا مراد ہے؟

(ii) قائد اعظم محمد علی جناح نے قومیت کے بارے میں کیا فرمایا؟

(iii) جناح گاندھی مذاکرات 1944 میں قائد اعظم کا جواب تحریر کریں۔

(iv) قرارداد پاکستان کا متن بیان کیجیے۔

(v) کابینہ مشن پلان 1946 کے ممبران کے نام تحریر کیجیے۔

(vi) پاکستان کا محل وقوع بیان کیجیے۔

(vii) ٹوپی اور گومل کول کس پہاڑی سلسلے میں واقع ہیں؟

(viii) جنگلات کی بہتری کے لیے حکومت کیا اقدامات کر رہی ہے؟

(ix) معاشی ترقی سے کیا مراد ہے؟

(x) مسلم فیملی لا آرڈیننس 1961 کے کوئی سے تین نکات تحریر کریں۔

(xi) ریڈکلف کی غیر منصفانہ تقسیم سے کون کون سے مسلم اکثریت والے علاقے بھارت کے پاس چلے گئے؟

حصہ سوم (کل نمبر 16)

(2×8=16)

(کوئی سے دو سوال حل کیجیے تمام سوالوں کے نمبر برابر ہیں۔)

سوال نمبر: پاکستان کے پہلے گورنر جنرل کی حیثیت سے قائد اعظم کا کردار واضح کیجیے۔

سوال نمبر: پاکستان کے میدانی خطے کی اہمیت بیان کیجیے۔

سوال نمبر: کابینہ مشن پلان 1946 کے نمایاں پہلو بیان کیجیے۔

— ISA 1929 —

Roll No.

Sig. of Candidate.

Answer Sheet No.

Sig. of Invigilator.

PHYSICS SSC–I

PHYSICS 2019

SECTION – A (Marks 12)

Time allowed: 20 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) $0.0000000081 m = $ _____ nm.

   A. 0.081   B. 0.81   C. 8.1   D. 81.0

(ii) $108 \, kmh^{-1} = $ _____ ms^{-1}

   A. 10   B. 20   C. 30   D. 40

(iii) Change in position is called:

   A. Speed   B. Velocity   C. Displacement   D. Distance

(iv) What is SI unit of coefficient of friction?

   A. Metre   B. Kilogram   C. Second   D. No unit

(v) Mass of a body is 2000 g. Its weight on the surface of earth is:

   A. 20000 N   B. 2 N   C. 20 N   D. 0.2 N

(vi) If $F = 200N$ and $\theta = 30°$ with horizontal then what will be the value of F_x ?

   A. 50 N   B. 100 N   C. 173.2 N   D. 200 N

(vii) The value of g on moon's surface is $1.6 \, ms^{-2}$. What will be the weight of a 100 kg body on the surface of the moon?

   A. 100 N   B. 160 N   C. 1000 N   D. 1600N

(viii) A body of mass 50 kg is raised to a height of 3 m. What is its potential energy?

   A. 500 J   B. 1000 J   C. 1500 J   D. 150 J

(ix) Pressure of 76 cm of mercury column is _____ Pa.

   A. 10,300   B. 13,100   C. 101,100   D. 101,300

(x) In which of the following the molecules do not leave their mean position?

   A. Solid   B. Liquid   C. Gas   D. Plasma

(xi) On Fahrenheit scale, the interval between lower and upper fixed points is divided into _____ equal parts.

   A. 180   B. 32   C. 212   D. 273

(xii) SI unit of thermal conductivity is:

   A. Wk^{-1} B. $Wm^{-1}k^{-1}$ C. Wmk^{-1} D. $Wm^{-1}k$

For Examiner's use only:

Total Marks: 12

Marks Obtained:

— ISA 1907 (L) —

PHYSICS SSC–I

12

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Answer any ELEVEN parts. The answer to each part should not exceed three to four lines. (11 x 3 = 33)

(i) Define 'base quantities' and 'derived quantities'. Also give one example of each.

(ii) Express the following quantities using prefixes:
   a. $5000g$ b. $2000000W$ c. $52 \times 10^{-10} kg$

(iii) Draw distance time graphs for an object
   a. At rest
   b. Moving with constant speed
   c. Moving with variable speed

(iv) A body of mass 5 kg is moving with a velocity of $10\ ms^{-1}$. Find the force required to stop it in 2 seconds.

(v) Friction is a necessary evil. Why?

(vi) Two children are sitting on the see-saw such that they cannot swing. What is the net torque in this situation?

(vii) What is the relation between stability and position of centre of mass?

(viii) How can you say that gravitational force is a field force?

(ix) What is chemical energy? Explain briefly.

(x) A girl carries a 10 kg bag upstairs to a height of 18 steps, each 20 cm high. Calculate the amount of work she has done to carry the bag. ($g = 10ms^{-2}$)

(xi) The weight of a metal spoon in air is 0.48 N, its weight in water is 0.42 N. Find its density.

(xii) What is up thrust? Explain the principle of floatation.

(xiii) Why is water used in cooling system of automobiles?

(xiv) How does bimetallic strip work?

(xv) Deserts soon get hot during the day and soon get cold after sunset. Why?

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

Q. 3
a. What is a physical balance? Explain. (03)
b. Derive $2aS = v_f^2 - v_i^2$ (04)
c. A body has weight 20 N. How much force is required to move it vertically upwards with an acceleration of $2ms^{-2}$? (03)

Q. 4
a. What is meant by stable and unstable equilibrium? Explain. (2+2)
b. Derive an expression for the orbital speed of an artificial satellite. (04)
c. A motor boat moves at a steady speed of $4ms^{-1}$. Water resistance acting on it is 4000N. Calculate the power of its engine. (02)

Q. 5
a. Write a note on hydraulic braking system in vehicles. (03)
b. A container has 2.5 litres of water at 20°C. How much heat is required to boil the water? (03)
c. Write a note on application and consequences of radiation. (2+2)

— ISA 1907 (L) —

CHEMISTRY SSC–I

13

24

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Answer any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

(i) Define molecular mass and formula mass. Also write an example of each.

(ii) The atomic mass of copper metal is 63.6 amu. Calculate the mass of 3.5 moles of copper.

(iii) Write any three uses of isotopes in medical field.

(iv) Write the group and period number of Phosphorus $^{31}_{15}P$ and Boron $^{10.6}_{5}B$ from their valence shell electronic configuration.

(v) Briefly explain the formation of ionic bond between Magnesium and Fluorine with the help of diagram.

(vi) Briefly explain the conductance of electricity by molten sodium chloride without diagram.

(vii) Differentiate diffusion and effusion.

(viii) What is meant by allotropes? Elaborate your answer briefly by writing about allotropes of phosphorus.

(ix) A chemist dissolves 11.2 g of KOH (molar mass 56) in two dm^3 of solution. Find its molarity.

(x) Compare solution and suspension in three points.

(xi) Which substance is reduced and which one is oxidized in each of the following reactions:
   a. $N_2 + 3H_2 \rightarrow 2NH_3$
   b. $Cl_2 + H_2S \rightarrow 2HCl + S$
   c. $2NH_3 + 3CuO \rightarrow 3Cu + 3H_2O + N_2$

(xii) Explain Zinc plating with the help of chemical equations.

(xiii) a. Which element is more metallic among Beryllium or Calcium? Give reason.
   b. Write any one use of Magnesium.

(xiv) Noble metals are inert. Elaborate this statement.

(xv) Write the electronic configuration of the following by using 1s, 2s ......form.
   a. $^{35}_{17}Cl$ b. $^{28}_{14}Si$ c. $^{20}_{10}Ne$

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

Q. 3
a. A molecule has two nitrogen and four hydrogen atoms. If the symbols of nitrogen and hydrogen are $^{14}_{7}N$ and $^{1}_{1}H$ respectively then write its empirical formula and determine its molar mass. (1+3)
b. Define ionization energy and atomic size. Also write their trends in periodic table. (3+3)

Q. 4
a. Define octet rule. Using this rule, show the formation of carbon dioxide molecule with dot and cross model. (2+2)
b. Define Boyle's law. Volume of ethane gas is $2.5dm^3$ at 2.10 atm pressure. When its pressure is reduced to 1.05 atm its volume becomes $5.0dm^3$. Explain this change using Boyle's law. (2+4)

Q. 5
a. Define solubility. Explain the effect of temperature on the solubility of ionic solids and gases. (1+4)
b. Explain the electrolytic refining of copper using a cell diagram. (4+1)

— ISA 1908 (L) —

CHEMISTRY 2019

CHEMISTRY SSC–I
SECTION – A (Marks 12)

Time allowed: 20 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option I.e. A / B / C / D. Each part carries one mark.

(i) If the molar mass of a compound is 90 g/mole, the number of its moles containing 3.011×10^{23} molecules will be:

A. 1.5   B. 3.0   C. 0.5   D. 4.5

(ii) The correct electronic configuration of $_{12}^{24}Mg$ is:

A. $1s^2, 2s^2, 2p^6, 3s^2, 3p^6, 4s^2, 3d^4$ B. $1s^2, 2s^2, 2p^6, 3s^2$

C. $1s^2, 2s^2, 2p^6, 3s^2, 3p^6, 4s^2, 3d^3$ D. $1s^2, 2s^2, 2p^4, 3s^4$

(iii) If you move from left to right in a period of periodic table, which of the following will NOT change?

A. Atomic radius   B. Atomic mass   C. Shielding effect   D. Nuclear charge

(iv) The bond which is formed by complete transfer of electrons from one atom to another is called:

A. Covalent bond   B. Hydrogen bond   C. Co-ordinate bond   D. Ionic bond

(v) The melting point and boiling pint of water are higher due to:

A. Its covalent nature   B. Hydrogen bonding   C. Its higher molecular mass   D. Its higher density

(vi) The equation $\frac{V}{T}$ = constant is the mathematical expression of:

A. Charles's law   B. Avogadro's law   C. Boyle's law   D. Law of diffusion

(vii) The direct conversion of a solid into vapours is called:

A. Evaporation   B. Melting   C. Boiling   D. Sublimation

(viii) An aqueous solution can dissolve 25 g of a solid at 25°C. If someone dissolves 20 g of this solid in water at 25°C then this solution will be called:

A. Supersaturated solution   B. Unsaturated solution   C. Saturated solution   D. Solution of liquid in liquid

(ix) A chemist dissolves 15 g of $NaCl$ in 85g of H_2O. This solution is:

A. 85% m/m $NaCl$ solution   B. 15% m/v $NaCl$ solution   C. 15% v/v $NaCl$ solution   D. 15% m/m $NaCl$ solution

(x) Gain of electrons and loss of oxygen is called:

A. Oxidation   B. Reduction   C. Redox reaction   D. Neutralization reaction

(xi) Which of the following is the reaction taking place at anode?

A. $2H_{2(g)} + O_{2(g)} \rightarrow 2H_2O_{(l)}$ B. $Zn^{+2}_{(aq)} + 2e^- \rightarrow Zn_{(s)}$

C. $Cr_{(s)} \rightarrow Cr^{+3}_{(aq)} + 3e^-$ D. $Pb_{(s)} + Cl_{2(g)} \rightarrow PbCl_{2(s)}$

(xii) Which of the following oxides is the Most basic oxide?

A. SrO   B. BaO   C. CaO   D. MgO

For Examiner's use only:

Total Marks: [12]

Marks Obtained: [   ]

— ISA 1908 (L) —

BIOLOGY 2019

BIOLOGY SSC–I
SECTION – A (Marks 12)

Time allowed: 20 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option I.e. A / B / C / D. Each part carries one mark.

(i) Skin is an organ because it comprises of:

A. Cells only   B. Tissues only   C. Both Cells and Tissues   D. Both Cells and Systems

(ii) The unicellular organisms which resemble animals, lack both chlorophyll and cell walls are called:

A. Algae   B. Fungi   C. Monera   D. Protozoa

(iii) Which sample will be examined to find out whether the patient is infected with the malarial parasite or not?

A. Blood   B. Saliva   C. Urine   D. Faeces

(iv) The cell theory is NOT applicable to:

A. Bacteria   B. Virus   C. Fungi   D. Animals

(v) Smooth form of endoplasmic reticulum is without:

A. Golgi complex   B. Ribosome   C. Nucleus   D. Mitochondria

(vi) Each diploid human cell contains 46 chromosomes. If such a cell undergoes mitosis, how many chromosomes will be found in the daughter cells which have just passed through telophase?

A. 23   B. 46   C. 92   D. 184

(vii) If more substrate is added in an already going chemical reaction without changing its rate, the situation is termed as:

A. Saturation   B. Denaturation   C. Composition   D. Inhibition

(viii) A compound which is found in all living cells and play a key role in energy transformations is:

A. Chlorophyll   B. Thylakoid   C. ADP   D. ATP

(ix) During starch test, why is leaf boiled in ethanol?

A. To kill its protoplasm   B. To soften it   C. To extract its chlorophyll   D. To retain its starch

(x) Villus contains vessels for the transport of food materials. What is transported by lacteal?

A. Amino acids   B. Blood   C. Carbohydrates   D. Fats

(xi) In which of the following plants, there will be NO transpiration?

A. Plants growing in hilly regions   B. Aquatic submerged plants   C. Plants living in deserts   D. Aquatic plants with floating leaves

(xii) Arteries have thick elastic walls because:

A. Rapid blood flow at high pressure   B. Slow blood flow at low pressure   C. Rapid blood flow at low pressure   D. Slow blood flow at high pressure

For Examiner's use only:

Total Marks: [12]

Marks Obtained: [   ]

— ISA 1910 (L) —

BIOLOGY SSC–I

32

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

(i) Define the following branches of Biology:

    a. Entomology   b. Embryology   c. Physiology

(ii) Why Ronald Ross used female Culex mosquito instead of female Anopheles mosquito in his experiments on malaria?

(iii) Who proposed 3-kingdom classification system and what objections were raised against this system?

(iv) Name any three Endangered species of animals in Pakistan.

(v) Which group of organisms contain cell walls around their cells? Also write the composition of cell wall in each group.

(vi) How is the structure of mitochondria related to its functions?

(vii) Define following:

    a. Facilitated diffusion   b. Osmosis   c. Active transport

(viii) Apoptosis is considered as programmed cell death. Prove this by enlisting the steps of the process.

(ix) Define crossing over. How is it significant?

(x) How can enzymes lower the Activation energy?

(xi) How does structure of ATP reveal that it is the energy currency of cell?

(xii) Differentiate between Alcoholic and lactic acid fermentation.

(xiii) What are the reasons for the creation of Transpiration Pull in plants?

(xiv) How are erythrocytes different from leucocytes?

(xv) Write sources, functions and deficiency symptoms of vitamin A.

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

Q. 3 a. What are Epithelial cells? Name their different types and write about their structure, location and functions.

b. Enlist the phases of Cell Cycle with labelled diagram. (1+5)

Q. 4 a. Describe the process of aerobic respiration in detail with the help of labelled diagram. (3+1)

b. High temperature denatures the enzymes. How? (5+2)

Q. 5 a. The process of digestion completes in small intestine. Explain various steps of this process with labelled diagram. (03)

b. Give a comparison of Pulmonary and Systemic circulation. (4+2)

(04)

MATHEMATICS SSC–I
SECTION – A (Marks 15)

MATH 2019

Time allowed: 20 Minutes

(Science Group)

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) A square matrix is called singular if its determinant is:

  A. Negative   B. Positive   C. Zero   D. One

(ii) The value of i^{18} is:

  A. 1   B. -1 C. i D. $-i$

(iii) The logarithm of any number to itself as base is:

  A. 1   B. 0   C. -1 D. 10

(iv) $a^2 - ab + b^2$ is a factor of:

  A. $a^3 - b^3$ B. $a^3 + b^3$ C. $(a+b)^3$ D. $(a-b)^3$

(v) When $9x^2 - 6x + 2$ is divided by x, the remainder is:

  A. 9   B. -6 C. 2   D. 3

(vi) H.C.F of $5x^2y^2z^3$ and $30x^3y^3z$ is:

  A. $5x^2y^2z^3$ B. $5x^2y^2z$ C. $30x^3y^3z^3$ D. $30x^3y^3z$

(vii) $x = 5$ is a possible solution of the inequality:

  A. $x < 0$ B. $x + 5 < 0$ C. $x + 5 > 0$ D. $x - 10 > 0$

(viii) The point $(-3, -1)$ lies in the quadrant:

  A. I   B. II   C. III   D. IV

(ix) The midpoint of the line segment joining the points $(-4, 9)$ and $(-4, -3)$ is:

  A. $(-8, 6)$ B. $(-4, 3)$ C. $(0, 6)$ D. $(0, -6)$

(x) A Ray has _____ end points.

  A. No   B. One   C. Two   D. Infinite

(xi) Sum of the adjacent angles of a parallelogram is:

  A. 90°   B. 180°   C. 270°   D. 360°

(xii) In the bisection of right angle, each angle is of:

  A. 30°   B. 45°   C. 60°   D. 90°

(xiii) Right bisection of a line segment means to draw a perpendicular at the _____ of that line segment.

  A. Any point   B. Midpoint   C. Two points   D. Infinite points

(xiv) If hypotenuse of an isosceles right triangle is $\sqrt{2}\,cm$, then each of the other side is of length:

  A. $2\,cm$ B. $\sqrt{2}\,cm$ C. $1\,cm$ D. $4\,cm$

(xv) Altitude of an equilateral triangle from vertex to the opposite side makes an angle of _____ to that side.

  A. 30°   B. 45°   C. 60°   D. 90°

For Examiner's use only:

Total Marks: | 15 |

Marks Obtained:

— 1SA 1909 (L) —

MATHEMATICS SSC–I 18
(Science Group)

Time allowed: 2:40 Hours   **Total Marks Sections B and C: 60**

NOTE: Attempt any twelve parts from Section 'B' and any three questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly. Logbook and graph paper will be provided on demand.

SECTION – B (Marks 36)

Q. 2   Attempt any TWELVE parts. All parts carry equal marks.   **(12 x 3 = 36)**

(i) Let $A=\begin{bmatrix} -1 & 3 \\ 2 & 0 \end{bmatrix}$, $B=\begin{bmatrix} 1 & 2 \\ -3 & -5 \end{bmatrix}$, $C=\begin{bmatrix} 2 & 1 \\ 1 & 3 \end{bmatrix}$ verify that $A(B-C)=AB-AC$

(ii) If $B=\begin{bmatrix} 3 & -1 \\ 2 & -2 \end{bmatrix}$ then show that $BB^{-1}=I$

(iii) Solve the system of linear equations using matrix inverse method, $x+y=75$, $x-4y=0$

(iv) Simplify $\left(\dfrac{a^p}{a^q}\right)^{p+q}\left(\dfrac{a^q}{a^r}\right)^{q+r} \div 5\,(a^p.a^r)^{p-r}$

(v) Solve the following equation for real x and y $(3-2i)(x+yi)=2(x-2yi)+2i-1$

(vi) Prove that $\log_e\left(\dfrac{m}{n}\right)=\log_e m-\log_e n$

(vii) Use log to find the value of $\dfrac{83\times\sqrt[2]{92}}{127\times\sqrt[3]{246}}$

(viii) Perform the indicated operation and simplify $\dfrac{x-2}{x^2+6x+9}-\dfrac{x+2}{2x^2-18}$

(ix) If $5x-6y=13$ and $xy=6$, then find the value of $125x^3-216y^3$

(x) Factorize $4x^4+81$

(xi) The polynomial $x^3+lx^2+mx+24$ has a factor $x+4$ and it leaves a remainder of 36 when divided by $(x-2)$. Find the values of l and m.

(xii) Factorize the polynomial by factor theorem $x^3-6x^2+3x+10$

(xiii) Find H.C.F by division method $2x^5-4x^4-6x$, $x^3+x^4-3x^3-3x^2$

(xiv) Find the value of k for which the following expression will become a perfect square. $4x^4-12x^3+37x^2-42x+k$

(xv) Solve the equation $\dfrac{2}{x^2-1}-\dfrac{1}{x+1}=\dfrac{1}{x+1}$, $x\neq\pm1$

(xvi) Solve the double inequality $-2\left(\dfrac{1-2x}{3}\right($1 where $x\in R$

(xvii) Solve the following pair of equations $x=3y$, $2x-3y=-6$ using table of value of x and y.

(xviii) Find the length of the diameter of the circle having centre at $(-3,6)$ and passing through $P(1,3)$.

SECTION – C (Marks 24)

Note: Attempt any THREE questions. All questions carry equal marks.   **(3 x 8 = 24)**

Q. 3 Prove the midpoint of the hypotenuse of a right triangle is equidistant from its three vertices $P(-2,5)$, $Q(1,3)$ and $R(-1,0)$.

Q. 4 Prove that the line segment, joining the midpoints of two sides of a triangle is parallel to the third side and is equal to one half of its length.

Q. 5 Prove that if two sides of a triangle are unequal in length, the longer side has an angle of greater measure opposite to it.

Q. 6 Prove that the internal bisector of an angle of a triangle divides the side opposite to it in the ratio of the lengths of the sides containing the angle.

Q. 7 Construct the triangle ABC. Draw the perpendicular bisectors of its sides and show that they are concurrent. $m\overline{AB}=5.3cm$, $m\angle A=45°$, $m\angle B=30°$

— 1SA 1909 (L) —

COMPUTER SCIENCE SSC–I
(For Hearing Impaired Children)
SECTION – A (Marks 15)

19
COMPUTER 2019

Time allowed: 30 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 30 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) A/an _____ is a set of programs that gives the necessary instructions to the computer, telling it how to operate with the hardware, other software and the user.
A. Arithmetic and logical unit B. Central processing unit
C. Operating system D. Compiler

(ii) Which of the following is the first computing device?
A. ENIAC B. Mark I
C. ABACUS D. UNIVAC

(iii) Which of the following board is a rectangular circuit board in a computer system?
A. Sign board B. Motherboard C. Hard board D. White board

(iv) GB stands for:
A. Gigabyte B. Gigabit C. Grade byte D. Great bus

(v) Which of the following is a volatile memory?
A. ALU B. CPU C. RAM D. ROM

(vi) Which of the following DOS command is used to clear the screen?
A. DIR B. MD C. CD D. CLS

(vii) Which of the following operating system developed by Microsoft is widely used?
A. LINUX B. UNIX C. MAC D. Windows

(viii) The blank area where user types the text in MS Word is called:
A. Slide B. Sheet C. Outlet D. Document window

(ix) Which of the following option is used for including the bullets, foreign characters mathematical symbols, curly quotes etc?
A. Symbol B. Word Art C. Drawing D. Clip Art

(x) Which of the following software automatically plays, displays or downloads advertisements to a computer usually without user's knowledge?
A. Virus B. Worm C. Adware D. Hacker

(xi) Which of the following type of virus is a computer code sent as an e-mail attachment?
A. Software virus B. Email-virus C. Antivirus D. Animal virus

(xii) Which of the following software is an antivirus software?
A. VLX B. OLX C. AVG D. MAPS

(xiii) What is used for creating decorative effects in MS Word?
A. Paragraph formatting B. Text formatting
C. Page formatting D. Word Art

(xiv) The white space between two adjacent lines of text is called:
A. Margin B. Alignment C. Line spacing D. Paragraph spacing

(xv) Which of the following is the shape of bullet placed before each item in the list?
A. 1) B. L C. ♦ D. i.

For Examiner's use only:

Total Marks: 15

Marks Obtained:

— 1SA 1944 (HIC) —

Scanned with CamScanner

COMPUTER SCIENCE SSC–I
(For Hearing Impaired Children)

20

Total Marks Section B : 20

NOTE: Answer any five questions from Section 'B' on the separately provided answer book. Use supplementary answer sheet I.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 20)

Q. 2 Answer any FIVE of the following parts in 3 to 4 lines each. Each part carries 4 marks. **(5 x 4 = 20)**

(i) What do you understand by word processing?

(ii) What is a document window?

(iii) Explain various ways through which security threats spread in computers.

(iv) What is application software? Name different application software.

(v) What are single-user and multi-user operating systems?

(vi) Why is ROM known as a non-volatile memory?

(vii) What is the difference between analog and digital computers?

(viii) Define input and output devices.

— 1SA 1944 (HIC) —

Roll No. ☐☐☐☐☐☐

Answer Sheet No. 2018

Name of Candidate_____

Sig. of Invigilator_____

9TH Class

Time allowed: 20 Minutes

ENGLISH COMPULSORY SSC–I
SECTION – A (Marks 15)

ENGLISH

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) Hazrat Muhammad (ﷺ) spent most of his time in solitude and meditation at the age of _____ years.
A. Thirty eight   B. Thirty five   C. Forty   D. Sixty three

(ii) Hazrat Asma (R.A) remained steadfast and did not reveal the secret. The underlined word means:
A. Truthful   B. Firm and resolute
C. Modest   D. Prepared for the worst

(iii) The Blue Mosque has _____ minarets.
A. Six   B. Nine   C. Twelve   D. Three

(iv) The branches were covered with blanket of snow. In this sentence we find an example of:
A. Alliteration   B. Personification   C. Simile   D. Metaphor

(v) Helen Keller wrote the book "The World I Live In" in:
A. 1908 AD   B. 1905 AD   C. 1880 AD   D. 1968 AD

(vi) If I see Aslam, I'll _____ him to dinner tomorrow. Choose the correct form of verb:
A. Invite   B. Invited   C. Have invited   D. Inviting

(vii) Nobody was there to rescue the child. The underlined word is a/an:
A. Indefinite Pronoun   B. Reflexive Pronoun
C. Possessive Pronoun   D. Personal Pronoun

(viii) She gave _____ all the money to the poor and the needy.
A. Out   B. Through   C. In   D. Away

(ix) The boy laughs loudly. The underlined word is a/an:
A. Intransitive verb   B. Linking verb
C. Transitive verb   D. Helping verb

(x) The lorry was carrying stolen goods. The underlined word is:
A. Present Participle   B. Past Participle
C. Main verb   D. Gerund

(xi) We have been reading for two hours. What tense is it?
A. Present Perfect Continuous Tense   B. Future Perfect Continuous Tense
C. Past Perfect Continuous Tense   D. Present Perfect Tense

(xii) I ate some rice. The underlined word is a/an:
A. Adjective of Quantity   B. Adjective of Number
C. Adjective of Quality   D. Demonstrative Adjective

(xiii) Most of us take life for granted. It is a/an:
A. Compound sentence   B. Complex Sentence
C. Simple sentence   D. Compound-Complex sentence

(xiv) He was very pleased that you have passed. The underlined clause is a/an:
A. Adverbial clause of Manner   B. Adverbial clause of Place
C. Adverbial clause of Time   D. Adverbial clause of Reason

(xv) Choose the correct spelling:
A. Embellish   B. Imbellish   C. Embelish   D. Emmbelish

For Examiner's use only:

Total Marks: **15**

Marks Obtained: ☐

— 1SA 1801 (L) —

ENGLISH COMPULSORY SSC–I

2

Time allowed: 2:40 Hours   Total Marks Sections B and C: 60

NOTE: Sections B and C comprise Pages 1-2. Answer all the questions from Sections 'B' and 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 39)

Q. 2 Answer any SIX of the following parts in about 30 to 40 words each. Each part carries 3 marks.

(6 x 3 = 18)

(i)   Why did the Holy Prophet (ﷺ) stay in the cave of Hira?
(ii)   What are the qualities of a Patriot?
(iii)   What happens when media is allowed to play its role unchecked?
(iv)   How did Hazrat Asma (R.A) console her grandfather?
(v)   What do the daffodils represent in the poem?
(vi)   What was the ideology of Pakistan in view of the Quaid-e-Azam?
(vii)   Why was a heavy iron chain hung at the entrance of the court?
(viii) Why did the nurse disagree with the doctor's point of view?

Q. 3 a.   Paraphrase any ONE of the following stanzas: (03)

(i)   The woods are lovely, dark and deep,

But I have promises to keep,

And miles to go before I sleep.

And miles to go before I sleep.

(ii)   I wandered lonely as a cloud

That floats on high o'er vales and hills,

When all at once I saw a crowd,

A host of golden daffodils;

Beside the lake, beneath the trees,

Fluttering and dancing in the breeze.

b.   Read the following stanza carefully and answer the questions given at the end: (06)

Continuous as the stars that shine

And twinkle on the milkyway,

They stretched in never-ending line

Along the margin of a bay:

Ten thousand saw I at a glance,

Tossing their heads in sprightly dance.

Questions:

(i)   How do you compare daffodils with the stars?
(ii)   What is the meaning of the line "Ten thousand saw I at a glance"?
(iii)   Who is the poet of the poem "Daffodils"?

Q. 4 a.   Change the Voice of any FOUR of the following: (04)

(i)   The mason is building the wall.
(ii)   The letter has just been posted.
(iii)   Everyone loves him.
(iv)   My father will write a letter.
(v)   His teacher praised him.
(vi)   The cat will kill the mouse.
(vii)   Manners reveal character.

— ISA 1801 (L) —

Write a dialogue between two friends about the upcoming examination.

-OR-

Write a dialogue between a brother and a sister concerning time.

-OR-

Q.7 Translate any EIGHT of the following sentences into English: (08)

Q.6 Write a paragraph of about 60 to 70 words on the topic "The Quaid-e-Azam – Our National Hero" (05)

Write a letter to your father describing your illness and recovery.

-OR-

Q.5 Write a letter to your friend requesting him/her to spend his/her spring holidays with you. (08)

SECTION – C (Marks 21)

c. Punctuate and capitalize the following para / line(s): (03)

Sometimes I have thought that it would be an excellent rule to live each day as if we should die tomorrow

b. Provide correct form of Verb of any FIVE of the following sentences: (05)

(i) He (arrive) yesterday.
(ii) He (sleep) two hours before I awoke him.
(iii) I (suffer) from fever since Monday.
(iv) The boy (kick) the football
(v) He asked him where he (be) going.
(vi) Let your patients be (love).
(vii) Are pens (repair) by you?
(viii) My cousin has (draw) this picture.

وقت: 2:40 گھنٹے   کل نمبر: 60

انٹرمیڈیٹ اور سیکنڈری ایجوکیشن بورڈ

پرچہ (لازمی) اردو

سوال نمبر 1۔ مندرجہ ذیل اشعار/عبارت کی تشریح کیجیے۔ (12)   (34 نمبر)

(12×2=24)

(i) ...
(ii) ...
(iii) ...
(iv) ...
(v) ...
(vi) ...
(vii) ...
(viii) ...
(ix) ...
(x) ...
(xi) ...
(xii) ...
(xiii) ...
(xiv) ...

(5×2=10)

(i) ...
(ii) ...
(iii) ...
(iv) ...
(v) ...
(vi) ...

Right Page

اسلامیات (لازمی) ایس ایس سی-1

حصہ اول (کل نمبر:10)   وقت: 15 منٹ

نوٹ: حصہ اول لازمی ہے۔ اس کا جواب دیے گئے جوابی کاپی پر حل کریں۔

سوال نمبر1:

(i) نفس کے کتنی ہیں:
الف۔ سورۃ   ب۔ منزل
ن۔ آیتیں   د۔ لڑائی

(ii) نیک کے کتنی ہیں:
الف۔ بہنیں   ب۔ تالیاں
ن۔ کہانیاں   د۔ بیماریاں

(iii) گھڑ کی بان نکالے وقت فرشتے انہیں مارتے ہیں ایک:
الف۔ ہاتھوں اور چہروں پر   ب۔ چہروں اور چہروں پر
ن۔ ٹانگوں اور چہروں پر   د۔ چہروں اور پاؤں پر

(iv) پنجسہ کا مطلب ہے:
الف۔ سلامتی کے لیے   ب۔ اسلام کے لیے
ن۔ ایمان کے لیے   د۔ صلح کے لیے

(v) سورۃ نازل کے مطابق _____ ایک دوسرے کے دوست ہیں:
الف۔ لوگ   ب۔ مشرکین
ن۔ کفار /   د۔ عرب

(vi) حدیث کے مطابق سب سے بہتر دعا ہے:
الف۔ استغفار کرنا   ب۔ کلمہ ورد کرنا
ن۔ رزق مانگنا   د۔ اولاد مانگنا

(vii) قرآن مجید کا موضوع _____ ہے:
الف۔ کائنات   ب۔ انبیاء
ن۔ جنت   د۔ انسان

(viii) قرآن مجید کو پچھلی کتابوں کے لیے کہا گیا ہے:
الف۔ راہنما   ب۔ معلم
ن۔ مہیمن   د۔ مدرس

(ix) قرآن مجید کے مطابق _____ اللہ سے محبت کرتے ہیں:
الف۔ مومن   ب۔ منافق
ن۔ کفار   د۔ مالک

(x) نبی کریم ﷺ روزانہ _____ دیے والے علم کی دعا مانگا کرتے تھے:
الف۔ عزت   ب۔ نفع
ن۔ رزق   د۔ حکومت

Left Page

سوال نمبر3۔ سبق منتخب اور اس کے متن کا مختصر حوالہ دیتے ہوئے کسی ایک نثر پارے کی تشریح کیجیے: (1/2+1/2+1+4=6)

الف۔ "مرزا غالب کے اخلاق نہایت وسیع تھے۔۔۔ ہر شخص سے جوان سے ملتے وہ جاتا تھا، بہت کشادہ پیشانی سے ملتے تھے۔ جو شخص ایک دفعہ ان سے ملتا، اسے ہمیشہ ملتے کا مشتاق رہتا تھا۔ دوستوں کو دیکھ کر باغ باغ ہو جاتے تھے اور ان کی خوشی سے خوش اور غم سے غمگین ہوتے تھے۔ اس لیے ان کے دوست، ہر مذہب اور ملت میں، نہ صرف دلی میں بلکہ تمام ہندوستان میں بکھرے تھے۔ جو خط ان کے خانوں نے اپنے دوستوں کو لکھے ہیں، ان کے ایک ایک حرف سے محبت و غم خواری ٹپکی پڑتی ہے"۔

ب۔ "آپ مجھے نواز رہے ہیں مگر ایک خاص مقصد کی خاطر اور وہ مقصد یہ ہے کہ آپ سے ہماری نئی ذات چاہتے ہیں، دیکھیے میں نے ایک غریب اور مفلس مصور کو یہاں پناہ دی ہے۔ اب یہ جو کم مارا ہے مجھ میری سر پڑتی کا نتیجہ ہے۔ میں نے اس کی صلاحیتوں کو ندر دار کھا ہے۔ ورنہ یہ کب کی ختم ہو چکی ہوتیں۔ جس طرح بڑی بڑی دکانوں کے دروازوں پر انسانی پیکروں کو خوبصورت اور شفاف لباس پہنا کر انہیں الماریوں کے اندر سجایا جاتا ہے تا کہ لوگ ان حسین و جمیل مجسموں کو دیکھ کر دیکھ کر رک جائیں اور ان کی ذوق اور ان کی شان و شوکت سے مرعوب ہو جائیں"۔

سوال نمبر4۔ شاعر اور نظم کا حوالہ دیتے ہوئے کسی ایک نظم پارے کی تشریح کیجیے: (1/2+1/2+2+2=5)

الف۔ صبا ہے ٹلک آتی مدینے سے تو ہے
کہ تجھ میں مدینے کے پھولوں کی بو ہے
سنی ہم نے طوطی و بلبل کی باتیں
تیرا تذکرہ ہے، تری گفتگو ہے

ب۔ شاخ نمید سے ست اندوز ہو کر غم
نہ آشنا ہے قاعدۂ روزگار سے
ملت کے ساتھ رابطہ استوار رکھ
پیستہ رو شجر سے، امید بہار رکھ

سوال نمبر5۔ شاعر کا حوالہ دیتے ہوئے کسی ایک غزل کے دو کی تشریح کیجیے: (1+2+2=5)

الف۔ بلبل کو باغباں سے نہ صیاد سے گلہ
قسمت میں تھا لکھی تھی فصلِ بہار میں
ان حسرتوں سے کہہ دو کہیں اور جا بسیں
اتنی جگہ کہاں ہے دلِ داغدار میں

ب۔ دل ناداں تجھے ہوا کیا ہے
آخر اس درد کی دوا کیا ہے
ہم ہیں مشتاق اور وہ بیزار
یا الٰہی! یہ ماجرا کیا ہے

سوال نمبر6۔ گاہک اور دکاندار کے درمیان مہنگائی کے موضوع پر مکالمہ تحریر کریں۔   (5)
(یا)
سکول میں منعقدہ جشن آزادی کی تقریب کی روداد تحریر کریں۔

سوال نمبر7۔ چھوٹے بھائی کو خط لکھ کر سچ بولنے اور جھوٹ سے بچنے کی تلقین کریں۔   (5)

8.

وقت: 2:15 گھنٹے   کل نمبر حصہ دوم اور سوم 40

نوٹ: حصہ دوم اور سوم کے سوالات کے جوابات علیحدہ سے مہیا کی جانے والی کاپی پر دیں۔ حصہ دوم کے تمام سوالات اور حصہ سوم میں سے کوئی سا دو (02) سوال حل کریں۔ ایکسٹرا شیٹ (Sheet-B) طلب کرنے پر مہیا کی جائے گی۔ آپ کے جوابات صاف اور واضح ہونے چاہئیں۔

حصہ دوم (کل نمبر 24)

(3x3=9)

سوال نمبر ۱: مندرجہ ذیل قرآنی آیات میں سے کسی تین آیات کا باحوالہ ترجمہ کیجیے:

(i) ذٰلِكَ بِأَنَّهُمْ شَآقُّوا اللّٰهَ وَ رَسُوْلَهٗ ؕ وَ مَنْ يُّشَاقِقِ اللّٰهَ وَرَسُوْلَهٗ فَاِنَّ اللّٰهَ شَدِيْدُ الْعِقَابِ ۝

(ii) وَ اِذْ قَالُوا اللّٰهُمَّ اِنْ كَانَ هٰذَا هُوَ الْحَقَّ مِنْ عِنْدِكَ فَاَمْطِرْ عَلَيْنَا حِجَارَةً مِّنَ السَّمَآءِ اَوِ ائْتِنَا بِعَذَابٍ اَلِيْمٍ ۝

(iii) اَلَّذِيْنَ عٰهَدْتَّ مِنْهُمْ ثُمَّ يَنْقُضُوْنَ عَهْدَهُمْ فِيْ كُلِّ مَرَّةٍ وَّ هُمْ لَا يَتَّقُوْنَ ۝

(iv) مَا كَانَ لِنَبِيٍّ اَنْ يَّكُوْنَ لَهٗٓ اَسْرٰى حَتّٰى يُثْخِنَ فِي الْاَرْضِ ؕ تُرِيْدُوْنَ عَرَضَ الدُّنْيَا ۖ وَاللّٰهُ يُرِيْدُ الْاٰخِرَةَ ؕ وَاللّٰهُ عَزِيْزٌ حَكِيْمٌ ۝

(v) وَ الَّذِيْنَ كَفَرُوْا بَعْضُهُمْ اَوْلِيَآءُ بَعْضٍ ؕ اِلَّا تَفْعَلُوْهُ تَكُنْ فِتْنَةٌ فِي الْاَرْضِ وَفَسَادٌ كَبِيْرٌ ۝

(2+2+1=5)

سوال نمبر ۲: مندرجہ ذیل میں سے کسی ایک حدیث کا ترجمہ کر کے، اور تشریح کرتے ہوئے اس کا ہماری عملی زندگی سے تعلق واضح کیجیے۔

(i) خَيْرُكُمْ مَنْ تَعَلَّمَ الْقُرْآنَ وَعَلَّمَهٗ

(ii) لَيْسَ مِنَّا مَنْ لَمْ يَرْحَمْ صَغِيْرَنَا وَلَمْ يُوَقِّرْ كَبِيْرَنَا

(5x2=10)

سوال نمبر ۳: مندرجہ ذیل میں سے کوئی سے پانچ سوالات کے مختصر جوابات تحریر کیجیے:

(i) سورۃ الانفال میں کفار کو خطاب کرتے ہوئے کیا تنبیہ کی گئی ہے؟

(ii) سورۃ الانفال میں تقوٰی کے کیا انعامات بیان ہوئے ہیں؟

(iii) سورۃ الانفال میں فرعون اور آلِ فرعون کی ہلاکت اور بربادی کے کیا اسباب بیان کیے گئے ہیں؟

(iv) رشوت کی مذمت میں کسی ایک حدیث کا ترجمہ کر کے تحریر کیجیے۔

(v) رسول اللہ ﷺ کی اطاعت کے سلسلے میں کسی ایک آیت کا ترجمہ کیجیے۔

(vi) جمع و تدوینِ قرآن کے سلسلے میں حضرت عثمانؓ کا کارنامہ بیان کیجیے۔

(vii) سورۃ الانفال میں اللہ تعالیٰ نے جنگی تیاریوں کے بارے میں کیا فرمایا ہے؟

حصہ سوم (کل نمبر 16)

(2x8=16)

(کوئی سے دو سوال حل کیجیے تمام سوالوں کے نمبر برابر ہیں۔)

سوال نمبر ۵: تدوین و حفاظتِ قرآن پر تفصیلی نوٹ لکھیے۔

سوال نمبر ۶: زکوٰۃ کا مفہوم بیان کریں۔ نیز بتائیے کہ زکوٰۃ ادا کرنے والوں کو اللہ تعالیٰ نے کیا وعید سنائی ہے؟

سوال نمبر ۷: قرآن و حدیث کی روشنی میں علم کی اہمیت بیان کیجیے۔

PAKISTAN STUDIES SSC-I

SECTION – A (Marks 10)

Time allowed: 15 Minutes

NOTE: Section-A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 15 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1   Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) When did Urdu Hindi controversy start?
- A. 1861 AD
- B. 1863 AD
- C. 1865 AD
- D. 1867 AD

(ii) State Bank of Pakistan was inaugurated on:
- A. 1st July 1948 AD
- B. 5th May 1948 AD
- C. 14th August 1949 AD
- D. 1st October 1949 AD

(iii) The highest peak of Kohistan-e-Hindu Kush is:
- A. Malika Parbat
- B. Tirich Mir
- C. Nanga Parbat
- D. Everest

(iv) When did the Quaid-e-Azam join Muslim League?
- A. 1913 AD
- B. 1915 AD
- C. 1917 AD
- D. 1919 AD

(v) Shahrah-e-Resham connects Pakistan with China through:
- A. Khunjrab Pass
- B. Khyber Pass
- C. Tochi Pass
- D. Gomal Pass

(vi) The Objectives Resolution was passed in:
- A. 1930 AD
- B. 1940 AD
- C. 1946 AD
- D. 1949 AD

(vii) East India Company finally came to an end in:
- A. 1857 AD
- B. 1858 AD
- C. 1757 AD
- D. 1860 AD

(viii) The growth of an economy from backward to advanced economy is known as:
- A. Backwardness
- B. Employment
- C. Economic development
- D. Balance of payments

(ix) The national animal of Pakistan is:
- A. Chakor
- B. Markhor
- C. Deer
- D. Lion

(x) General Muhammad Ayub Khan imposed Martial law in the country in:
- A. 1956 AD
- B. 1957 AD
- C. 1958 AD
- D. 1969 AD

For Examiner's use only:

Total Marks: 10

Marks Obtained:

PAKISTAN STUDIES SSC–I

Time allowed: 2:15 Hours   Total Marks Sections B and C: 40

NOTE: Answer any Eight parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet I.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 24)

Q. 2   Answer briefly any eight of the following questions.   (8 x 3 =24)

(i)   What is meant by 'Toheed'?

(ii)   Give the location and area of Pakistan.

(iii)   Write three causes of land pollution.

(iv)   Which areas of Muslim majority, India got as a result of unjust division by Radcliffe?

(v)   What did Allama Iqbal mention in his famous Allahabad address?

(vi)   What is meant by Union Council and Union Committee?

(vii)   Write three points of Wavell plan.

(viii)   What is meant by Two Nation Theory in the historical perspective of the Sub-continent?

(ix)   What do you mean by Economic Development?

(x)   What were the Islamic Provisions of 1956 constitution?

(xi)   Write three proposals of Cripps Mission?

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks.   (2 x 8 =16)

Q. 3   Narrate the main points of 3rd June 1947 plan?

Q. 4   Describe the significance of forests?

Q. 5   Elaborate the ideology of Pakistan in the light of the pronouncements of the Quaid-e-Azam?

حصہ دوم (کل نمبر 24)

(8×3=24)

سوال نمبر: درج ذیل میں سے کوئی سے آٹھ سوالات کے مختصر جوابات تحریر کیجیے۔

(i) توحید سے کیا مراد ہے؟

(ii) پاکستان کا محل وقوع و رقبہ اور قبہ بیان کریں۔

(iii) زمینی آلودگی کی کوئی سی تین وجوہات لکھیں۔

(iv) ریڈکلف کی غیر منصفانہ تقسیم سے کون کون سے مسلم اکثریت والے علاقے بھارت کے پاس چلے گئے؟

(v) علامہ اقبال نے اپنے خطبہ الہ آباد میں کیا فرمایا؟

(vi) یونین کونسل اور یونین کمیٹی سے کیا مراد ہے؟

(vii) ویول پلان کی کوئی سے تین نکات لکھیں۔

(viii) برصغیر کے تاریخی تناظر میں دو قومی نظریے سے کیا مراد ہے؟

(ix) معاشی ترقی سے کیا مراد ہے؟

(x) 1956ء کے آئین کی اسلامی دفعات لکھیں۔

(xi) کرپس مشن کی تین تجاویز لکھیے۔

حصہ سوم (کل نمبر 16)

(2×8=16)

(کوئی سے دو سوال حل کیجیے تمام سوالوں کے نمبر برابر ہیں۔)

سوال نمبر: 3 جون 1947ء کے منصوبے کے اہم نکات بیان کریں۔

سوال نمبر: جنگلات کی اہمیت بیان کریں۔

سوال نمبر: قائد اعظم کے ارشادات کی روشنی میں نظریہ پاکستان کی وضاحت کریں۔

— 1SA 1829 —

PHYSICS SSC–I
SECTION – A (Marks 12)

Physics 2018

Time allowed: 20 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1   Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i)   The Least Count of a measuring cylinder is:

   A. $1m^3$ B. $0.01mL$ C. $0.1mL$ D. $1mL$

(ii)   Significant figures in a number are:

   A.   All the accurately known digits and the first doubtful digit
   B.   All the digits
   C.   All the accurately known digits
   D.   All the accurately known digits and all the doubtful digits

(iii)   When an object is moving with uniformly changing speed then the slope of the speed-time graph determines the magnitude of:

   A.   Displacement   B.   Velocity   C.   Acceleration   D.   Momentum

(iv)   A string is stretched by two equal and opposite forces F Newton each. The tension in the string is

   A.   Zero   B. $2F$ Newton   C. F Newton   D. $\frac{1}{2}F$ Newton

(v)   A body is said to be in equilibrium if:

   A.   Its velocity is not changing   B.   Its acceleration is uniform
   C.   Its velocity is changing   D.   Its acceleration is not uniform

(vi)   Moon completes its one revolution around the earth in:

   A.   27.4 days   B.   28.3 days   C.   655.2 hours   D.   3.96 weeks

(vii)   If the mass of a body is halved and the velocity is doubled, then its kinetic energy will be:

   A. $\frac{1}{2}mv^2$ B. mv^2 C. $2mv^2$ D. $\frac{1}{4}mv^2$

(viii)   SI-Unit for the thermal conductivity of a solid is:

   A. $Jkg^{-1}K^{-1}$ B. JK^{-1} C. K^{-1} D. $Wm^{-1}K^{-1}$

(ix)   How much heat energy is required to melt 250g of ice? (Latent heat of fusion of ice is $336000Jkg^{-1}$)

   A. $84000J$ B. $84000000J$ C. $1344J$ D. $1344000J$

(x)   Pressure of a liquid depends on:

   A.   Depth in the liquid   B.   Depth and density of the liquid
   C.   Depth and mass of the liquid   D.   Density and weight of the liquid

(xi)   If 100N force moves a body of mass 3kg through a distance of 3m then work done will be:

   A. $900J$ B. $600J$ C. $300J$ D. $100J$

(xii)   The value of the 'gravitational field strength' of the Earth at a distance R (where R is the radius of the Earth) from the surface of the Earth will be:

   A. $5Nkg^{-1}$ B. $10Nkg^{-1}$ C. $2.5Nkg^{-1}$ D. $1.1Nkg^{-1}$

For Examiner's use only:

Total Marks: 12

Marks Obtained:

— 1SA 1807 (L) —

Time allowed: 2:40 Hours   Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2   Answer any ELEVEN parts. The answer to each part should not exceed three to four lines. (11 x 3 = 33)

(i)   On closing the stud and spindle of a screw gauge, the zero of the circular scale is behind the index line and 8th division of the circular scale coincides with the index line. There are 50 divisions on the circular scale and the distance between two consecutive threads on the spindle is $0.5mm$. Find its zero error and zero correction.

(ii)   Define Atomic Physics and Nuclear Physics.

(iii)   A cyclist competes half round of a circular track of diameter $636m$ in 1.5 minutes. Find his velocity.

(iv)   Define inertia. Describe the factor on which it depends.

(v)   How much time is required to change $22Ns$ momentum by a force of $20N$?

(vi)   Can a small child play with a fat child on the see-saw? Briefly explain how?

(vii)   On the surface of the earth, the weight of a boy is $400N$ but on a mountain peak his weight is $360N$. Calculate the value of ' g ' on the mountain peak.

(viii)   State the law of gravitation.

(ix)   Make a flow-diagram of energy conversion for a hydroelectric power station.

(x)   Describe Hooke's Law.

(xi)   Describe the factors on which upthrust of a liquid depends.

(xii)   Why are a large number of slots made in radiators?

(xiii)   Convert $1gcm^{-3}$ into kgm^{-3}.

(xiv)   a.   Why does the temperature of a solid substance not increase during its fusion process?
         b.   Differentiate between boiling and condensation.

(xv)   How does evaporation differ from vaporization?

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks.   (2 x 10 = 20)

Q. 3   a.   i.   Draw distance-time graph for an object moving with variable speed.   (2.5)
              ii.   How can the slope of the graph be determined?   (1.5)
              iii.   What information does the slope provide?   (02)
        b.   State and explain Newton's first law of motion.   (2+2)

Q. 4   a.   Define three states of equilibrium. Explain these states with reference to the centre of gravity. (2+2+2)
        b.   A motor boat moves at a steady speed of $4ms^{-1}$. Water resistance acting on it is $4000N$. Calculate the power of its engine.   (04)

Q. 5   a.   Define Pascal's Law and name any four working systems (machines) of its application.   (1+2)
        b.   What is a bimetal strip? Name any two instrument where bimetal strip is used.   (1+1)
        c.   How much heat is lost in an hour through a glass window measuring $2.0m$ by $2.5m$ when inside temperature is $25°C$ and that of outside is $5°C$, the thickness of glass is $0.8cm$ and the value of K for glass is $0.8Wm^{-1}K^{-1}$.   (05)

— 1SA 1807 (L) —

CHEMISTRY SSC–I   CHEMISTRY 2018
SECTION – A (Marks 12)

Time allowed: 20 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1   Circle the correct option i.s. A / B / C / D. Each part carries one mark.

(i)   The empirical formula for caffeine ($C_8H_{10}N_4O_2$) is:
    A. $C_4H_5N_2O$ B. $C_4H_9N_2O$ C. C_4H_5NO D. $C_4H_5NO_2$

(ii)   How many atoms are there in 1.26 moles of Zinc?
    A. $6.53×10^{23}$ Zn atoms   B. $7.53×10^{23}$ Zn atoms
    C. $8.53×10^{23}$ Zn atoms   D. $9.53×10^{23}$ Zn atoms

(iii)   Identify the number of electrons that f-subshell can accommodate.
    A.   2   B.   6   C.   10   D.   14

(iv)   Keeping in view Auf Bau Principle, identify the energy level which the electrons fill first.
    A.   2P   B.   2S   C.   1S   D.   3S

(v)   The electronic configuration $1S^2 2S^2 2P^6 3S^2$ belongs to:
    A. $^{28}_{14}Si$ B. $^{24}_{12}Mg$ C. $^{27}_{13}Al$ D. $^{40}_{18}Ar$

(vi)   Identify the element which has the largest atomic radius.
    A.   Mg   B.   Ca   C.   Cs   D.   Fr

(vii)   Which of the element of the 3rd period has highest electronegativity?
    A.   Na   B.   P   C.   S   D.   Cl

(viii)   Identify the covalent compound.
    A.   KF   B. H_2O C.   MgO   D.   NaCl

(ix)   How many moles of Na atoms are present in 2.3 g of Na ?
    A.   0.15 moles   B.   1.5 moles   C.   0.1 moles   D.   1 mole

(x)   The oxidation state of B in H_3BO_3 is:
    A.   +2   B.   +4   C.   +3   D.   +5

(xi)   Galvanizing is:
    A.   Coating with Cr   B.   Coating with Cu
    C.   Coating with Zn   D.   Coating with Sn

(xii)   Consider the following reaction: $CuO + H_2 \longrightarrow Cu + H_2O$ In this reaction CuO behaves as:
    A.   Electrolyte   B.   Catalyst   C.   Oxidizing agent   D.   Reducing agent

For Examiner's use only:

Total Marks: 12

Marks Obtained: [ ]

— 1SA 1808 (L) —

CHEMISTRY SSC–I
(14)

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Answer any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

(i) Determine the molecular mass of:

   a. $(NH_2)_2CO$ b. NH_4NO_3 c. $C_6H_{12}O_6$

(ii) Define heavy water. Give the comparison of ordinary water and heavy water.

(iii) What is Carbon dating? How does Carbon – 14 dating work?

(iv) Define periodic table. What is its base?

(v) Define atomic size. Interpret trends in atomic size across groups and periods.

(vi) Draw Lewis electron cross and dot structures for the following molecules:

   a. CCl_4 b. $SiCl_4$ c. O_2

(vii) Enlist the main postulates of Kinetic Molecular Theory.

(viii) The boiling point of water on the top of Mount Everest is 70°C while in Murree it is 98°C. Give the reason.

(ix) Why tin plated steel is used to make food cans?

(x) Sketch out an electrolytic cell, label it and indicate the direction of flow of electrons.

(xi) Arrange the following in order of increasing acid strength: HCl, HI, HBr and HF

(xii) With the help of chemical reaction prove how breathing equipment keeps sea divers alive under water surface?

(xiii) Define oxidation and reduction in terms of loss and gain of electrons. Illustrate the concepts with the help of examples.

(xiv) Differentiate with the help of suitable examples:

   a. Atom and ion.

   b. Molecular ion and free radical.

(xv) How can oil tanks be prevented from corrosion? Support your answer with diagram and an example.

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks.

Q. 3 a. Make Bohr's models for the following elements: (2 x 10 = 20)

   a. Potassium ($^{39}_{19}K$)   b. Silicon ($^{28}_{14}Si$)   c. Argon ($^{40}_{18}Ar$)   (06)

   b. State postulates of Dalton's atomic theory. What is the basic contribution of this theory for chemical science.

Q. 4 a. Define ionic bond. Use electron dot and cross model to write the equation for the formation of an ionic compound. (04)

   b. What is hydrogen bonding? Explain hydrogen bonding in water by utilizing electron dot and cross structure. (06)

Q. 5 a. What is corrosion? Explain corrosion of iron with the help of chemical equation. (04)

   b. Sodium Chloride and Glucose both are soluble in water but the solubility of Sodium Chloride ($NaCl$) is greater than glucose. Why? Explain (05)

(05)

— 1SA 1808 (L) —

BIOLOGY SSC–I
SECTION – A (Marks 12) *Biology*

Time allowed: 20 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) Which of the following contains unicellular organization?

   A. Mustard plant   B. Human   C. Euglena   D. Frog

(ii) Who first time observed plasmodium in the malarial patient?

   A. Laveran   B. A.F.A. King   C. Ronald Ross   D. Aristotle

(iii) Which animal has NOT become extinct in Pakistan?

   A. Lion   B. Asiatic Cheetah   C. Marcopolo sheep   D. Tiger

(iv) Which of the following is correct for mitosis:

   A. Removal of chromosomes   B. Chromosomes number remains same
   C. Reduction of chromosomes   D. Increase in number of chromosomes

(v) A new organism is observed by a biologist; its characters are eukaryotic multicellular heterotrophy with multicellular sex organs and secretion of digestive enzymes on the food for internal digestion. To which kingdom does this organism belong?

   A. Animalia   B. Plantae   C. Fungi   D. Protista

(vi) When a plant cell is placed in a hypotonic solution, its vacuole increases in size due to:

   A. Plasmolysis   B. Osmosis   C. Turgor pressure   D. Diffusion of solute

(vii) Change in pH can alter the active site by affecting the:

   A. Ionization of amino acid   B. Shape of the substrate
   C. Ionization of cofactor   D. Ionization of coenzyme

(viii) The major energy currency of all type of cells is:

   A. DNA   B. RNA   C. ATP   D. Glucose

(ix) Which is NOT the accessory pigment for photosynthesis?

   A. Chlorophyll a   B. Chlorophyll b   C. Carotenoids   D. Melanin

(x) Which of the following vitamins is required for the formation of collagen?

   A. Vitamin A   B. Vitamin B   C. Vitamin C   D. Vitamin D

(xi) Process of conversion of simple absorbed food into complex compounds that become part of body is called as:

   A. Digestion   B. Assimilation   C. Ingestion   D. Absorption

(xii) Granulocyte is a type of white blood cells that contain granular cytoplasm. Which of the following is NOT the granulocyte?

   A. T lymphocyte   B. Eosinophils   C. Neutrophils   D. Basophils

For Examiner's use only:

Total Marks: 12

Marks Obtained:

— 1SA 1810 (L) —

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BIOLOGY SSC–I

Total Marks Sections B and C: 53

Time allowed: 2:40 Hours

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines.   (11 x 3 = 33)

(i) Define the following:
    a. Species   b. Population   c. Community

(ii) Write the name of host organism and disease of the following vectors:
    a. Female Anopheles   b. Culex   c. Aedes

(iii) Enlist three observations made by A.F.A King.

(iv) Five kingdom system of classification of Robert Whittaker was modified by Margulis and Shawartz. What are the bases for this system of classification?

(v) Draw a labeled structure of fluid – mosaic model of cell membrane.

(vi) What is the meristematic tissue? What are the types of meristematic tissues? Write down their location.

(vii) a. What is necrosis?
    b. What are the causes of necrosis?
    c. When does necrosis occur in a cell?

(viii) Write down the discoveries of following scientists:
    a. Oscar Hertwig   b. Walther Flemming   c. Thomas Hunt Morgan

(ix) Draw a labeled graph to show the working of an enzyme in lowering the activation energy of a chemical reaction.

(x) Write down major steps of Calvin cycle.

(xi) Describe the process of lactic acid fermentation.

(xii) What are the photosynthetic pigments? Write down their role in the process of photosynthesis.

(xiii) Describe the role of potassium ions in the opening and closing of stomata.

(xiv) How does human heart work as double pump?

(xv) Differentiate between the atherosclerosis and arteriosclerosis.

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks.   (2 x 10 = 20)

Q. 3 a. Define myocardial infarction. Give its causes, symptoms and treatment.   (01+02+02+02)
    b. Discuss the electron transport chain of respiration.   (03)

Q. 4 a. Liver is the largest gland in human body. It plays important role in digestion? Also write down other important roles of liver.   (02+04)
    b. Differentiate between cytokinesis in plant and animal cells.   (04)

Q. 5 a. Differentiate between diffusion, facilitated diffusion and osmosis.   (02+02+02)
    b. Write down principles of cell theory.   (03)
    c. Give scientific names of Star fish and House Crow.   (0.5+0.5)

— 1SA 1810 (L) —

MATHEMATICS SSC–I
SECTION – A (Marks 15)

Time allowed: 20 Minutes

(Science Group)

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q.1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) A matrix is skew symmetric if:
  A. $A' = A$ B. $A' = -A$ C. $(A')' = A$ D. $(A')' = -A$

(ii) Real part of $2ab(i + i^2)$ is:
  A. $2ab$ B. $-2ab$ C. $2abi$ D. $-2abi$

(iii) If $10^2 = 100$ then:
  A. $2 = \log 100$ B. $2 = \log_{100} 10$ C. $10 = \log_2 100$ D. $100 = \log_2 10$

(iv) $\dfrac{a^3 - b^3}{a - b}$ is equal to:
  A. $(a^2 - ab + b^2)$ B. $(a^2 + ab + b^2)$ C. $a^2 + b^2$ D. $a^2 - b^2$

(v) Factors of $x^2 - x - 6$ are:
  A. $x + 1, x - 6$ B. $x - 2, x - 3$ C. $x - 1, x + 6$ D. $x + 2, x - 3$

(vi) Product of two algebraic expression is equal to:
  A. $H.C.F + L.C.M$ B. $H.C.F - L.C.M$ C. $H.C.F / L.C.M$ D. $H.C.F \times L.C.M$

(vii) $x = 0$ is a solution of the inequality:
  A. $x > 0$ B. $3x + 5 < 0$ C. $x + 2 < 0$ D. $x - 2 < 0$

(viii) Which ordered pair satisfy the equation $y = 2x$:
  A. $(1,2)$ B. $(2,1)$ C. $(2,2)$ D. $(0,1)$

(ix) Midpoint of the points $(2,-2)$ and $(-2,2)$ is:
  A. $(2,2)$ B. $(-2,-2)$ C. $(0,0)$ D. $(1,1)$

(x) Two lines can intersect at _____ points.
  A. One B. Two C. Three D. Infinite

(xi) If two opposite sides of a quadrilateral are congruent and parallel, then it is a:
  A. Square B. Rectangle C. Parallelogram D. Triangle

(xii) Bisection means to divide into _____ equal parts.
  A. One B. Two C. Three D. Four

(xiii) Perpendicular to a line form an angle of:
  A. $30°$ B. $60°$ C. $90°$ D. $180°$

(xiv) If the hypotenuse of an isosceles right angled triangle is $\sqrt{2}cm$ then each of the other side is:
  A. $1cm$ B. $2cm$ C. $3cm$ D. $4cm$

(xv) The _____ altitudes of an isosceles triangle are congruent.
  A. One B. Two C. Three D. Four

For Examiner's use only:

Total Marks: 15

Marks Obtained:

— 1SA 1809 (L) —

MATHEMATICS SSC–I
(Science Group)

Time allowed: 2:40 Hours   **Total Marks Sections B and C: 60**

NOTE: Attempt any twelve parts from Section 'B' and any three questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet–B if required. Write your answers neatly and legibly. Logbook and graph paper will be provided on demand.

SECTION – B (Marks 36)

Q. 2   Attempt any TWELVE parts. All parts carry equal marks.   **(12 x 3 = 36)**

(i)   If $A = \begin{bmatrix} 1 & 1 \\ 2 & 0 \end{bmatrix}$ then verify that $A - A^t$ is skew symmetric.

(ii)   Two sides of a rectangle differ by $3.5cm$ and perimeter of rectangle is $67cm$. Find the dimensions of rectangle by using 'Cramer's rule'.

(iii)   If $A = \begin{bmatrix} 4 & 0 \\ -1 & 2 \end{bmatrix}$, $B = \begin{bmatrix} -4 & -2 \\ 1 & -1 \end{bmatrix}$ then verify that $(AB)^{-1} = B^{-1}A^{-1}$

(iv)   Simplify $\sqrt{\dfrac{(216)^{\frac{2}{3}} \times (25)^{\frac{3}{2}}}{(0.04)^{-\frac{3}{2}}}}$

(v)   Calculate $z - \bar{z}$ if $z = \dfrac{4 - 3i}{2 + 4i}$

(vi)   Find the value of 'x' if $\log_{64} 8 = \dfrac{x}{2}$

(vii)   Use Log to find the value of $\dfrac{(438)^3 \sqrt{0.056}}{(388)^4}$

(viii)   Reduce to the lowest form $\dfrac{9x^2 - (x^2 - 4)^2}{4 + 3x - x^2}$

(ix)   Solve the inequality $3x - 2 < 2x + 1 < 4x + 17$

(x)   Solve following pair of equations graphically $2x + y = 0$ and $x + 2y = 2$

(xi)   Simplify $\dfrac{2}{\sqrt{5} + \sqrt{3}} + \dfrac{1}{\sqrt{3} + \sqrt{2}} - \dfrac{3}{\sqrt{5} + \sqrt{2}}$

(xii)   Solve $\left| \dfrac{3 - 5x}{4} \right| - \dfrac{1}{3} = \dfrac{2}{3}$

(xiii)   Verify that the points $A(0, 7)$, $B(3, -5)$, $C(-2, 15)$ are collinear.

(xiv)   Factorize $(x + 2)(x + 3)(x + 4)(x + 5) - 15$

(xv)   Determine the value of 'k' if $p(x) = kx^3 + 4x^2 + 3x - 4$ and $q(x) = x^3 - 4x + k$ leaves the same reminder when divided by $x - 3$

(xvi)   Factorize by factor theorem $x^3 + 5x^2 - 2x - 24$

(xvii)   Find the H.C.F by division of $x^4 + x^3 - 2x^2 + x - 3$; $5x^3 + 3x^2 - 17x + 6$

(xviii)   Find square root of $(x^2 + 8x + 7)(2x^2 - x - 3)(2x^2 + 11x - 21)$

SECTION – C (Marks 24)

Note: Attempt any THREE questions. All questions carry equal marks.   **(3 x 8 = 24)**

Q. 3   Prove that mid-point of the hypotenuse of a right angled triangle is equidistant from its three vertices $P(-2, 5)$, $Q(1, 3)$ and $R(-1, 0)$

Q. 4   Any point equidistant from the end points of a line segment is on the right bisector of it.

Q. 5   In a correspondence of two triangles, if three sides of on triangle are congruent to the corresponding three sides of the other, then the two triangles are congruent.

Q. 6   If the square of one side of a triangle is equal to the sum of the squares of the other two sides then the triangle is a right angled triangle.

Q. 7   Construct the triangle PQR. Draw their altitudes and show that they are concurrent. $m\overline{RP} = 3.6cm$, $m\angle Q = 30°$, $m\angle P = 105°$

COMPUTER SCIENCE SSC–I
SECTION – A (Marks 12)

(Old Syllabus)

Time allowed: 20 Minutes

NOTE:- Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1   Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i)   An Assembler is a/an:
   A. Low-level language   B. System Software
   C. Application Software   D. Translating Machine

(ii)   Transistor was invented in:
   A. 1948 AD   B. 1947 AD   C. 1950 AD   D. 1952 AD

(iii)   RAM of a computer is a:
   A. Permanent storage   B. Secondary Memory
   C. Primary storage   D. Non-Volatile Memory

(iv)   Which of the following is NOT a semiconductor memory?
   A. ROM   B. RAM   C. PROM   D. Secondary Memory

(v)   Space bar on a keyboard is a part of the:
   A. Alpha Numeric Keypad   B. Numeric Keypad
   C. Function Keys editing keys   D. Screen Navigation and editing keys

(vi)   The numbers of tracks in one cylinder of hard disk with two platters is:
   A. 4   B. 16   C. 8   D. 32

(vii)   Which of the following is NOT an executable command?
   A. CLS   B. REM   C. REN   D. COPY

(viii)   Which of the following is DOS internal command?
   A. ERASE   B. EDIT   C. DELTREE   D. SYS

(ix)   The command is NOT present on edit menu of MS-Word:
   A. Font   B. Go To   C. Find   D. Ctrl + Z

(x)   A textbox is a type of:
   A. Command box   B. Menu box   C. List box   D. Dialog box

(xi)   By default, MS Word automatically saves your document after every:
   A. 5 minutes   B. 10 minutes   C. 15 minutes   D. 30 minutes

(xii)   Pressing Ctrl + Shift + A causes:
   A. To select whole document   B. To highlight the selected text
   C. To capitalize the selected text   D. Office assistance to appear

For Examiner's use only: Total Marks: 12   Marks Obtained: ☐

COMPUTER SCIENCE SSC-I

Total Marks Sections B and C: 43

Time allowed: 2:40 Hours

NOTE:- Answer any nine parts from Section 'B' and any two questions from Section 'C' on the separately provided answer-book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 27)

Q.2 Answer any NINE parts from the following. All questions carry equal marks. (9 x 3 = 27)

(i) Describe briefly PAN networking.

(ii) List the advantages of ring topology.

(iii) Give any three common symptoms of infected computers by malware attacks.

(iv) Why is operating system important software for a computer? Give any three reasons.

(v) Define Real Time System.

(vi) What is meant by CDMA?

(vii) State any three problems which may occur if peer-to-peer network is used for a large number of users in a large organization.

(viii) Compare Macintosh OS and Linux OS.

(ix) Write down a brief note on Asynchronous transmission.

(x) Briefly describe the page orientation in MS-Word program.

(xi) What is Inpage Urdu editor?

(xii) Differentiate between attenuation and amplification.

(xiii) What is network architecture? Name its different types.

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks.

Q.3 Discuss any four output devices. (2x8 = 16)

Q.4 Write a note on the following: (2+2+2+2)

(i) Router   (ii) Hyperlink

(iii) Bluetooth   (iv) ISDN

Q.5 Define computer ethics and write down some important moral guidelines for ethical use of computer technology. (2+6)