

Half Yearly Examination 2018 – 19

Time: 3:00 Hrs.**M. M. 80****General Instructions :**

Section – A Reading	20
Section – B Writing & Grammar	30
Section – C Literature	30

Section – A [Reading]**Q.1 Read the following passage carefully and answer the questions:****1x8 = 8****Sleep**

Did you sleep well last night? Or did you wake up feeling fatigued and sluggish – perhaps even wondering if you really slept at all? Understanding your sleep behaviour and preparing for a sound slumber can help make sure every night is a good night for sleeping.

“Sleep is a behaviour and, like all behaviours, it varies greatly among people,” explains Dr Carol Landis, sleep researcher and associate professor in biobehavioural nursing and health systems at the University of Washington School of Nursing. “The greatest differences occur in the timing of sleep and the amount of sleep – the factors which are most important in determining whether you will wake up feeling rested.”

Nobody knows why we sleep, but we all need to. There are no rules about how much sleep is necessary but an average adult sleeps for 7 hours 20 minutes. About 8% of adults are happy with 5 hours or less and 4% want 10 hours or more. Babies need between 14-18 hours whereas the elderly need less than they did when young but often take a nap during the day.

If you miss a couple of hours of sleep, no harm is done. You may feel tired and irritable the next day but the body soon makes up for the loss. If you try to stay awake night after night however, you soon begin to behave strangely. You lose the ability to concentrate and your judgement is impaired. You begin to imagine strange things and your behaviour becomes deranged.

There are a number of causes for sleeplessness. Worry and depression are the most common. All kinds of things in the environment can affect sleep – noise, light, heat, cold, new surroundings, etc. Pain in illness can also keep people awake. Many people become addicted to their sleeping pills but sleeping pills do not deal with the causes of insomnia and it is better to avoid them if you can. It is much better to identify the problem and remove it.

1.1 Read the given questions and write the answer in a sentence.

- How can we ensure a good night's sleep?
- What is Dr Carol Landis' opinion about sleep?
- What are the factors that determine how we feel when waking up?
- Describe the sleep patterns of babies and the elderly.
- What happens if one loses a couple of hours of sleep?
- What changes occur if we keep awake all night?
- What are the most common causes of sleeplessness?
- Why are sleeping pills ineffective in treating insomnia?

Q.2 Read the following passage carefully and answer the questions:**12****Obesity Among Canines**

If you thought that overweight was a problem among humans alone, then think again. A recent study carried out in UK on the state of obesity among pets revealed startling facts. According to this report there are almost 45% pets in the country that are overweight.

According to the findings, what causes this overweight problem is the feeding of leftovers. In fact this custom is regarded as the biggest factor causing overweight, according to 200 vets and 1000 pet owners. The report found that nearly 45% of the dogs were overweight while the obesity rate

among cats was slightly lower, at 40%. Almost one in three rabbits (28%) and guinea pigs fell into the obese category, while 15% of caged birds were also found to be too fat. Of their owners, what the report revealed was that two out of every three owners believed their pets were the correct weight. Around three in four vets believe that pet obesity is on the rise.

When contacted by the researchers, vets came forward with the opinion that the root cause of pet weight gain was that the owners of these animals and birds were not following feeding guidelines. Along with feeding them with leftovers, these pets were not given adequate exercise. This problem was most marked among dog owners where also 78% of them were found to be indulged in by their owners.

Besides, lethargy and eating problems, these overweight pets suffer from a myriad of health issues according to Zara Boland, founder Vet Voice. These animals run the risk of osteoarthritis, cardiovascular disease, and diabetes. There is nothing 'cuddly' above an obese pet, she adds.

Obese animals have the same symptoms as obese humans. Their obesity causes them discomfort, and illness and can cause result in both emotional distress and financial pressures for owners, and has been proven to reduce actual life length.

These vets say that they are committed to continuing pushing the pet health message until overweight pets are no longer an increasing and widespread concern. To keep their pets in the best of health these vets advised their owners to exercise their dog for thirty minutes twice daily for adult dogs, and forty minutes for cats.

2.1 Read the given questions and write the answer in about 30-40 words.

- a) What were the findings of the UK study on animals?
- b) What according to the vets was the cause of pet weight gain?
- c) What are the health problems that overweight pets are prone to?
- d) How are vets trying to overcome this problem?
- e) Find words in the passage that mean:
(i) Grossly fat (ii) Pampered (iii) tiredness
- f) Explain the phrase : pushing the pet health message.

SECTION – B (Writing & Grammar)

Q.3 You recently lost an expensive wrist watch belonging to your grandfather. You are now feeling afraid to confess. Express your feelings of anguish through a diary entry. **8**

OR

You are Kashish/ Kailash, a strong believer in the theory that one must eat healthy food to live well. However, you are disturbed that your friends are junk food addicts. What is worse, are the advertisements that make eating junk food practical, easier and cheaper by way of attractive discounts, like the one given below. Write an article for your school magazine Awaz talking about the problems of unhealthy eating, leading to various body disorders like obesity, lack of concentration, lethargy, etc. Give a suitable heading to your article.

Q. 4 On the basis of the outline given, write a story in your own words. **10**

Outline: School fete – held annually – Ferris wheel major attraction – cancellation of Ferris wheel – last minute change – celebration as before.

OR

Write a story ending with the lines We all need to come out of our comfort zone to realize our potential.

Outline: Childless couple for longhad a boy pampered wouldn't walkplan madeleft alone in a roomcried and walked to the door.....step out of the comfort zone.

Q.5 Fill in the blanks with the correct form of verbs given in the brackets. **½ X 8 = 4**

A tall man (a) (be) friendly with a short man. Whenever the short man (b)(want) to (c)(eat) fruits, the tall man (d)(pluck) them from the tree for the short man. The short man in return would (e)(plant) seeds into the ground which (f)(grow) into beautiful trees and (g)(give) shade and fruits to the two of them and they (h) (remain) happy.

- Q. 6 Arrange the following into meaningful sentences. 1x4 = 4
- we want/if/see/in everything/beauty/can see/we
 - my parents/20th/anniversary/celebrating/today/their/are
 - broke down/in front/Geeti/the entire class/heavy pain/head/in the/due to a/of
 - associated/with/purple/royalty/the colour/is

- Q. 7 There is one word omitted in each line. Write the missing word in the middle blank and the word that comes before and after in the space provided for it. ½X8 = 4

		Before	Word	After
Jawaharlal Nehru was the Prime Minister	(a)	.....	.....	.....
of independent India. He was also as	(b)	.....	.....	.....
Pandit Nehru and called him Chacha	(c)	.....	.....	.....
Nehru. He the son of Motilal Nehru	(d)	.....	.....	.....
and Swaroop Rani. As Prime he set	(e)	.....	.....	.....
out realize his vision of India.	(f)	.....	.....	.....
He was on 14 th November, 1889	(g)	.....	.....	.....
and birthday is celebrated as Children's Day in India.(h)		.....	.....	.....

SECTION – C (Literature)

- Q.8 Read the extract below and answer the questions. 1x4 =4

*I will arise and go now,
for always night and day
I hear the lake water lapping
with low sounds by the shore;
While I stand on the roadway,
or on the pavements gray,
I hear it in the deep heart's core.*

- Where will the poet go?
- 'pavements gray' refers to
- What trait of the poet's personality is revealed here?
- Find out the rhyme scheme used In the above stanza.

OR

*Then she took a tiny scrap of dough,
And rolled and rolled it flat;
And baked it thin as a wafer-
But she couldn't part with that.
For she said, 'My cakes that seem too small
When I eat of them myself
Are yet too large to give away.'
So she put them on the shelf.*

- What did the woman do with the tiny scrap of dough?
- Why couldn't she give away even that thin cake to the saint?
- What did she do with the cake?
- Find out the poetic devices used in the given lines.

Q. 9 Answer these questions in 30-40 words.

2x4=8

- a) Why did Margie hate her school?
- b) 'To the little girl he was a figure to be feared and avoided.' Why did Kezia fear her father so much?
- c) What happened when the narrator returned home?
- d) What are the two strange things the guru and his disciple find in the kingdom of Fools?
- e) Describe the statue of the Happy Prince.

Q.10 Write a note on Albert Einstein's childhood.

8

OR

'Even the impossible can become possible with strong determination and hardwork'. Comment with reference to the story of Evelyn Glennie.

Q.11 Describe the destruction caused by the super cyclone as narrated in the story 'Weathering the Storm in Ersama'.

11

OR

Iswaran was a master storyteller. Describe his amazing capacity of narrating stories and anecdotes.

Half Yearly Examination 2018 – 19**Time: 3:00 Hrs.****M. M. 80**

iz1 fuEufyf[kr vifBr x|k{k dks i<dj uhps fy[ks iz'uka ds mRrj fy[kka

ixfr ,oa ifr;k{xrk ds bl n{g ea Hkkjr ds ifrHkk&IEiUu ;pk fon'skka dh v{g Hkkx jgs gA Hkkjro"lz ogha n'sk gS t{gk ukymk] r{kf'kyk] foOe f'kyk t's so' fon'sky; Fks v{g vucl Nk= ;gk mPp f'k{k iktr djus vkr's FkA bu fo'ofon'sky; ka ea lk/kj.k Nk=ka dk iz'sk ikuk Hkh v{lkko FkA vkt mlh Hkkjr ds Nk= fon'skka dh v{g iyk;u dj jgs gA mPpLrjh; ,oa ifr"Br l{Fkkuka l's f'k{k xg.k djus ds mijktur mudk ;gh izkl gkrk gS fd os fdlh rjg fon'sk pys tk,i v{g vf/kdkf/kd /kuktU djA ;g vR;r n{g[k dh ckr gS fd ftu fon'skFkz,ka ij n'sk dh turk dk bruk /ku [kpZ gkrk gS mul's n'sk dks dkbZ ykHk ugha gkrkA ,dk yxrk gS fd t's v{g k{x d {ks= ea fodflr n'skka ds fy, dke djus okys ifrHkk IEiUu ;pk Hkkjr ds [kpZ ij Hkkjr ea if'k{k gkr's gA

- 1- xn's; k{k ea izlrg l{L;k dks&lh gS 1
- 2- Hkkjro"lz ea iz';kr fo' fon'sky; dks&dks l's Fks 1
- 3- Hkkjr o"lz ds fo' fon'sky;ka dh D;k fo'k{krk,i Fkh\ 2
- 4- ;pkvka dk D;k izkl jgrk gA 2
- 5- Hkkjr ds fy, vR;r n{g[k dh ckr D;k gS 2

iz2 fuEufyf[kr dko;k{k dks i<dj uhps fy[ks iz'uka ds mRrj fy[kka

fgln&eflye fl D[k&bl kbZ lc ckgj ds uke gS
 l'cds Hkhrj cl's gq cl] ,d ljh[ks jke gA
 l'cds ;gh fl [krs Hk'sk xhrk v{g djku gS
 eu ds nekj [kys gS fQj D;k fglnw D;k bLyke gS
 efinj l;kjk] efltn l;kjh] l;kjs no&LFkku jA
 ljxe pks vyx&vyx] ij l'cds xhr l'eku jS
 gj ekuo dks xys yxkdj] i'Nks eu dh ckr jS
 l'f'ks miou dks n'ks r{e] l'kou dh cjl kr jA
 dk/ka dh ihMk ij j[kk] Qnyka dh e{dku jS
 dfy;ka ds ?kj igpk n's r{e] 'kcue dh l'k{kr jA
 frryh l;kjh] Hkpjs l;kj] l;kj gj mn'sku jA
 ljxe pks vyx&vyx] ij l'cds xhr l'eku jA

- 1- Ckkgj ds uke dk D;k vFkz gS 1
- 2- ^,d ljh[ks jke* ea jke dk D;k vFkz gS 1
- 3- /keZ dk Hkn dc feVrk gS 1
- 4- dfo us /keZ dh rgyuk l'xhr l's fd l' izdkj dh gS 2
- 5- izlrg dko;k{k ea D;k f'k{k nh xbZ gA 2

iz3 funð kkuð kj mðkj nhft, & 4x1=4
 1- fufozu 'kCn ea iz, Þr milxz vlsj ey 'kCn fyf[k, A
 2- iz milxz ls nks 'kCn cukb; A
 3- iðkf.kd 'kCn ea iz, Þr iR; ; vlsj ey 'kCn fyf[k, A
 4- vk iR; ; ls nks u, 'kCn cukb; A

iz4 fuEufyf[kr lelr inka dk foxg djds lekl dk Hkn fyf[k, & 3
 iR; {k y{; HkzV uhydB

iz5 ¼v½ vFkZ dh nf"V ls okD; Hkn crkb; A 2
 1- ;g iþrd dksu yk; k\ 2- lko/kku] vkxs [krjk gð
 ¼c½ funð kkuð kj okD; ifjofrþr fdft, & 2
 1- og vo'; thrskA ¼bPNkokpd½
 2- rþ vHkh pys tkvka ¼l dr okpd½

iz6 ¼v½ iðDr; ka ea iz, Þr vyðkj dk uke crkb; A 2
 1- yks ;g yfrdk Hkh Hkj ykbA 2- gjj eðk ekuks e/kgj e; ðA
 ¼c½ 1- 'yðk vyðkj dk mnkj.k fyf[k, A 1
 2- vfr'k; kðDr vyðkj dk mnkj.k fyf[k, A 1
 Hkkx&l

iz7 fuEufyf[kr ifBr x|kðk dks i<ðj uhps fy[ks iz'uka ds mRrj fy[kka
 uhyke gks tkus ds ckn nksuks fe= ml nf<þy ds lFk pyA nksuka dh cks/h&ck/h dkkj jgh FkA
 cpkjs ikp rd u mBk ldrs Fkð ij Hk; ds ekjs fxjrs iMfs Hkxs tkrs Fkð D; kðd og tjk Hkh pky /kheh
 gks tkus ij tkj ls MMk tek nrk FkA jkg ea xk; &cSyks dk ,d jðM+ gj&gjs gjj ea þjrk utj vk; kA
 lHkh tkvoj iðllu Fkð fpdus piyA dkbz mNyrk Fkð dkbz vkum ls cBk ikxj djrk FkA fdruk l[kh
 thou Fk budkj ij fdrus LokFkðz gS lca fdlh dks þark ugh fd muds nks Hkðz cf/kd ds gkFk iMs dS s
 nðkh gð
 1- nf<þy vkneh cSyks dh pky /kheh gksu ij D;k djrk Fkð 1
 2- jðM+ dk D;k vFkZ gð jðM+ ds tkvoj dS s Fkð os D;k djrs Fkð 2
 3- nks Hkðz dksu Fkð os fdl ds gkFk iM+ x, Fks vlsj D; kð 2

iz8 fuEufyf[kr ifBr i|kðk dks i<ðj uhps fy[ks iz'uka ds mRrj fy[kka
 dkufu nS vxjgh jfgcks tcgh ejyh /kfu em ctðA
 ekguh rkuu lks jl [kkfu vVk pf< xksku xðS rks xððA
 Vsj dgs fl xjs cztYkcfu dkfYg dksA fdruks l eþS gð
 ekbz jh ok eðk dh eð dkfu lEgkfj u tðj u tðj u tððA
 1- xkðdk ejyh dh fdl ckr ls vkdf"kr gð 1
 2- l[kh ls D;k lðkkYk ugh tk jgk gð 2
 3- d".k ið ea Mch xkðdk fdl ds l e>kus ij Hkh ykd&ykt ugha l e>rh\ 2

iz9 fuEu izuka ds mukj l'ksi ea fyf[k, & 4x2=8
 1- djhy ds dqt ij dfo jI [kku D;k U;kSkoj djuk pgrk gS
 2- cm nekj dh lkpy [kkyus ls dof;=h yy|n dk D;k vk'k; gS
 3- gFkdfM+ka dks xguk D;ka dgk x;k gS dfork ds vk/kkj ij Li"V dhft,A
 4- dfo dchj dh dk0;xr fo'ksrk,; fyf[k,A

iz10 fuEu izuka ds mukj l'ksi ea fyf[k, 4x2=8
 1- ikB ds vk/kkj ij crkb;s dh frCcr ea lcls [krjukd txg dk&l h Fkh\ vls D;ka
 2- lkfyv vyh ds fy, izfr D;k Fkh\ iRuh dh mud thou ea D;k Hkfedk Fkh\
 3- nks cSyka dh dFk ds ek;/e ls iepn us D;k ldr fd;k gS
 4- lfr dh pljfd fo'ksrk,; crkb,A

iz11 yf[kdk us Mkyfe;k uxj ea ukj&pruk txkus dk idkj fdl idkj fd;k\ 4
 Hkx&n

iz12 fuEu ls fdh ,d fo"k; ij 250 ls 300 'kCnka ea fudk fyf[k, & 10
 1- Hkjr; fdl ku% Hkjr df"k iz'ku nsk] fdl ku dk thou] lE;k,;] thou 'ksh] vlunkr ds mrd"q milgk
 2- jk"V fuezk ea fon;kfz oxl dh Hkfedk% Hkfedk] nsk fuezk] fon;kfz thou] ;pk'kDr dh pljfd fo'ksrk,; milgkA

iz13 vius fe= dks nhkoyh ij iV[k[ks vls vkfr'kckth ij vi0;; ugha dj ml /ku dk lnq;ks djus dh 5
 lykg nrs gq i= fy[kkA
 vFkok

ifjogu fuxe ds iz'kd dks viuh dkv/ksdh ds ckgj cl LVW cuokus dk vlxg djrs gq i= fy[kkA

iz14 QkLVQM ds fo"k; ij firki& ea gks jgh ckrphr dks ldkn ea fyf[k,A 5

- Q.6 Answer in Detail [**Do Any Five**] : **3×5=15**
- (i) Differentiate between compiler and Interpreter?
 - (ii) What is Software? Name the major functions of the operating system?
 - (iii) Differentiate between Bluetooth technology and Infrared Wireless technology.
 - (iv) What is operating system? Explain GUI AND Distributed OS?
 - (v) What is Ribbon in MS Office 2010. Explain its parts.
 - (vi) How many font case are available in word? Briefly explain each type of case.
 - (vii) What is CPU? Explain the different parts of a CPU?
- Cw / Hw **5** + Project **5** + Practical → **20**

Roll. No. Code No. 09/Computer/NLCS/126

Half Yearly Examination 2018 – 19

Time: **3:00 Hrs.**

M. M. **80**

Q.1 Multiple Choice Questions :

$\frac{1}{2} \times 10 = 5$

- (i) Which is the best example of technological convergence?
(a) DVD (b) Radio (c) Internet
- (ii) The smallest unit of memory is –
(a) Byte (b) Bit (c) Nibble
- (iii) Which of the following is not a storage device?
(a) CD ROM (b) Plotter (c) DVD
- (iv) GUI is used as an interface between ----- .
(a) Hardware & Software (b) User and Hardware
(c) Man and Monitor
- (v) A computer system, which can access a remote service from a server using a network is called a ----
----- .
(a) Server (b) Node (c) Bridges
- (vi) Operating system is a type of ----- software.
(a) System (b) Application (c) Utility
- (vii) Which of the following is not a Windows Accessories?
(a) Paint (b) MS Office (c) Calculator
- (viii) Which Tab menu contains the New option?
(a) Home tab (b) File tab (c) Ribbon

(ix) You can change the color of the text by using the ---
----- option.

(a) Font (b) Font color (c) Position

(x) Which is a vector based graphical printing device?

(a) Printers (b) Plotter (c) Scanner

Q.2 State True OR False : $\frac{1}{2} \times 10 = 5$

- (i) The function of a computer are Input, Process, storage and output.
- (ii) There are two types of printer.
- (iii) DBMs is utility software.
- (iv) Data communication means sending data manually from one computer to another.
- (v) Networking of computer reduce the redounding of the same data.
- (vi) Quick Lanuch bar is present on the task bar.
- (vii) You cannot delete an existing font.
- (viii) Superscript and subscript are different forms of Text margins.
- (ix) The page tab is used to edit the page by using the Ruler bars.
- (x) Sort cut key to select the entire document is Ctrl+A.

Q.3 Fill in the blanks : $\frac{1}{2} \times 10 = 5$

- (i) A computer compiles results using----- unit.
- (ii) The printed information on the paper is called ----- .
- (iii) The ----- prints its output on special heat sensitive paper.

(iv) The program in HLL is called ----- code.

(v) DTP stands for ----- .

(vi) The maximum range of LAN can be ----- km.

(vii) The first screen of Window 7 is called -----.

(viii) Status bar is located at the ----- of the Document Window.

(ix) The general arrangement and appearance of text in document is known as ----- .

(x) ----- is the best example of technological convergence.

Q.4 Write full forms : $\frac{1}{2} \times 10 = 5$

(i) PROM (ii) DRAM (iii) GUI

(iv) OS (v) CUI

Q.5 Answer in Brief [Do Any Six] : $2\frac{1}{2} \times 6 = 15$

- (i) What do you mean by formatting? Name the types of text formatting available in Microsoft Word.
- (ii) What is margin? Explain the different types of margin?
- (iii) Explain the feature of Word processor which helps us to send a similar piece of text to multiple addresses within a matter of minutes.
- (iv) What is Window Explorer? How will you open Windows explorer?
- (v) Explain the function of server and client in network?
- (vi) What is Modem? Mention its types.
- (viii) What is a Microphone? Describe its usage?

- Q.20 Write the function and structure of Golgi apparatus? 5
Q.21 Differentiate between striated, unstriated and cardiac muscles with diagram. 5

OR

Describe composite fish culture with advantages and disadvantages. 5

SECTION – B

- Q.22 While determining the density of a solid sphere a student noted down the following readings. Mass of sphere = 64 gm. Reading of water level in the cylinder without sphere in it = 62 ml. Reading of water level in the cylinder with sphere in it = 70 ml. On the basis of those observations. What should be the density of solid?
- Q.23 The density of tap water is less than that of sea water. If an object is immersed completely in both one by one. What will you conclude about its loss in weight?

OR

In which of two, glycerine or Kerosene the loss in weight of a solid when fully immersed in them will be more and why?

- Q.24 A mixture of NH_4Cl , sand and NaCl is given to you. How will you separate the three components?
- Q.25 X is a mixture of iron filings and Sulphur. Y is a product obtained by heating the mixture X and crushing it to a fine powder on bringing a magnet over both X and Y. What will happen?
- Q.26 When you cut the onion peel. What will you observe?
- Q.27 When you placed the seed in water. How can you observe whether it is dicot or monocot.

Roll. No.

Code No. 09/Science/NLCS/126

Half Yearly Examination 2018 – 19

Time: 3:00 Hrs.

M. M. 80

General Instructions :

- (i) The question paper comprises two Sections, A and B. You are to attempt both the sections.
- (ii) All questions are compulsory.
- (iii) All questions of Section A and Section B are to be attempted separately.
- (iv) There is an internal choice in three questions of three marks each, two questions of five marks each in Section A and in one question of two marks in Section B.
- (v) Question numbers 1 and 2 in Section A are one-mark questions. They are to be answered in one word or in one sentence.
- (vi) Question numbers 3 to 5 in Section A are two-marks questions. These are to be answered in about 30 words each.
- (vii) Question numbers 6 to 15 in Section A are three-marks questions. These are to be answered in about 50 words each.
- (viii) Question numbers 16 to 21 in Section A are five-marks questions. These are to be answered in about 70 words each.
- (ix) Question numbers 22 to 27 in Section B are based on practical skills. Each question is a two-marks question. These are to be answered in brief.

SECTION – A

- Q.1 Convert to Kelvin (i) $27^{\circ}C$ (ii) $373^{\circ}C$. 1
- Q.2 Define malleability. 1
- Q.3 What is the importance of universal law of gravitation? 2
- Q.4 What is the acceleration of free fall? 2
- Q.5 Why do you fall in the forward direction when a moving bus breaks to a stop? 2

- Q.6 Explain the following by giving examples – 3
(i) Saturated solution (ii) pure substance
(iii) Suspension

- Q.7 Define solution. Write four properties of solution. 3

OR

Identify the dispersed phase and dispersing medium in following colloid :

- (i) Fog (ii) Cheese (iii) Coloured gemstone

- Q.8 (i) What is osmosis?
(ii) How does Amoeba obtain its food? 3

- Q.9 What is “**Tyndall effect**”? Which of the following will show tyndall effect? 3

- (i) salt solution (ii) milk
(iii) copper sulphate solution (iv) starch solution

- Q.10 What is genetic manipulation? How is it useful in agricultural practices? 3

- Q.11 A poultry farmer wants to increase his broiler production. Explain three management practices he must follow to enhance the yield. 3

OR

How do good animal husbandry practices benefit farmers?

- Q.12 (i) Draw the diagram of nerve cell or Neuron.
(ii) How does cork act as a protective tissue? 3

- Q.13 State Newtons Second law of motion and find relation for force. 3

- Q.14 A car accelerates uniformly from 18km/hr to 36km/hr in 5 second. 3

- Calculate : (i) Acceleration
(ii) Distance covered by a car in that time.

- Q.15 Under what condition (s) is the magnitude of average velocity of an object equal to its average speed. 3

OR

State and prove Law of conservation of momentum.

- Q.16 Use graphical method to prove 1st and 2nd equation of motion. 5

- Q.17 A ball is thrown vertically upward with a velocity of 5m/s and an acceleration is 10m/s^2 . Calculate – 5
(i) The maximum height to which it rises.
(ii) The total time it takes to return to the surface of earth?

OR

A train is travelling at speed of 90 km/h brakes are applied so as to produce a uniform acceleration of -0.5ms^{-2} . Find how the train will go before it is brought to rest.

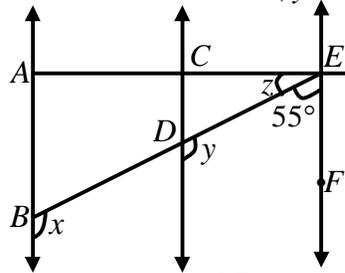
- Q.18 (i) Why is ice at 273K more effective in cooling than water at the same temperature?
(ii) What produces more severe burns, boiling water or steam.
(iii) Why does a dessert cooler cool better on a hot dry day?
- Q.19 (i) How are Sol., Solution and Suspension different from each other? 1
(ii) How will you confirm that colourless liquid given to you is pure water? 2
(iii) How can you separate cream for milk? 2

Q.28 If $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a - 6\sqrt{3}$. Find the value of a.

OR

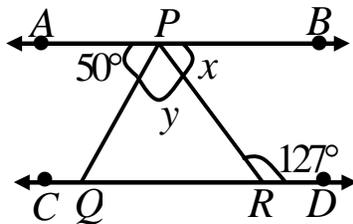
Find the value of a and b if $\frac{7+3\sqrt{5}}{3+\sqrt{5}} + \frac{7-3\sqrt{5}}{3-\sqrt{5}} = a + \sqrt{5}b$.

Q.29 In the given fig. $AB \parallel CD$ and $CD \parallel EF$. Also $EA \perp AB$. If $\angle BEF = 55^\circ$, find the values of x, y and z.



OR

In the given fig. if $AB \parallel CD$, $\angle APQ = 50^\circ$ and $\angle PRD = 127^\circ$, find x and y.



Q.30 Yamini and Fatima, two students of class IX of a school, together contributed Rs.100 towards the Prime Minister's Relief fund to help the earthquake victims. Write a linear equation which satisfies the data. Draw the graph of the same.

Roll. No.

Code No. 09/Maths/NLCS/126

Half Yearly Examination 2018 – 19

Time: 3:00 Hrs.

M. M. 80

General Instructions :

- All questions are compulsory.
- This question paper consists of 30 questions divided into four sections – A, B, C and D.
- Section A contains 6 questions of 1 mark each. Section B contains 6 questions of 2 marks each, Section C contains 10 questions of 3 marks each. Section D contains 8 questions of 4 marks each.
- There is no overall choice. However, an internal choice has been provided in four questions of 3 marks each and 3 questions of 4 marks each. You have to attempt only one of the alternatives in all such questions.

Section - A

- Find the value of $(343)^{\frac{2}{3}}$.
- Find the value of the polynomial $5x^2 - 3x + 7$ at $x = 0$.
- What are the co-ordinates of the origin?
- What is the maximum number of zeroes in a cubic polynomial?
- What is the measure of each angle in an equilateral triangle?
- Find the semiperimeter of a triangle with sides 13cm, 17cm. and 24 cm.

Section - B

Q.7 In the fig., if $AC = BD$, use an Euclid axiom to show that $AB = CD$.



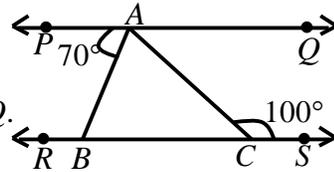
- Without actually calculating the cubes, find the value of $48^3 - 30^3 - 18^3$.
- On which axis the following points lie?
 $(0, 4), (-5, 0), (5, 0), (0, -3)$.

- Q.10 If $(2,0)$ is a solution of the linear equation $2x+3y=k$, then find the value of k .
- Q.11 The area of a rhombus is 84cm^2 and one diagonal is 12cm . Find the other diagonal of the rhombus.
- Q.12 Rationalise the denominator $\frac{1}{\sqrt{6}-\sqrt{5}}$.

Section - C

Q.13 Simplify : $\frac{1}{\sqrt{5}+\sqrt{2}} + \frac{1}{\sqrt{5}-\sqrt{2}}$.

- Q.14 In the given figure, $PQ \parallel RS$,
 $\angle PAB = 70^\circ$, $\angle ACS = 100^\circ$,
 Determine $\angle ABC$, $\angle BAC$ and $\angle CAQ$.



- Q.15 Prove that the sum of the angles of a triangle is 180° .

OR

Prove that exterior angle of a triangle is equal to sum of interior opposite angle.

- Q.16 Represent $\sqrt{9.3}$ on the number line.
- Q.17 Check whether $7+3x$ is a factor of $3x^3+7x$.
- Q.18 Factorise : $6x^2+5x-6$.

OR

Determine that $3x-2$ is a factor of $3x^2+x^2-20x+12$

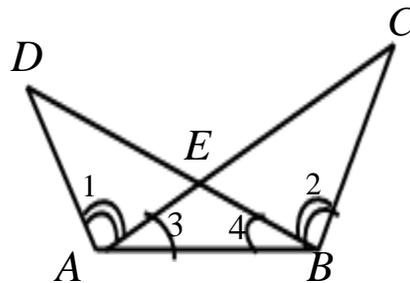
- Q.19 Write three solution of the following equation. $x=4y$.

- Q.20 Write any three Euclid's postulates.

- Q.21 ABC is a right angled triangle in which
 $\angle A = 90^\circ$, $AB=AC$. Find
 $\angle B$ and $\angle C$.

OR

In figure $\triangle ABC$ and $\triangle ABD$ are such that
 $AD=BC$, $\angle 1 = \angle 2$ and
 $\angle 3 = \angle 4$. Prove that $BD=AC$



- Q.22 Find the area of a triangle two sides of which are 18cm . and 10cm . and perimeter is 42cm .

OR

If area of a right angled triangle is 216cm^2 and the base is 24cm . find perimeter of the triangle.

Section - D

- Q.23 Factorise : $x^3+13x^2+32x+20$.

- Q.24 Verify : (i) $x^3+y^3=(x+y)(x^2-xy+y^2)$ and

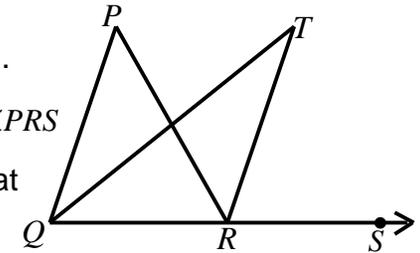
(ii) $x^3-y^3=(x-y)(x^2+xy+y^2)$.

- Q.25 In given fig., the sides QR of

$\triangle PQR$ is produced to a point S .

If the bisectors of $\angle PQR$ and $\angle PRS$ meet at point T , then prove that

$$\angle QTR = \frac{1}{2} \angle QPR.$$



- Q.26 In $\triangle ABC$, the bisector AD of $\angle A$ is perpendicular to side BC . Show that $AB=AC$.

- Q.27 A field is in the shape of a trapezium whose parallel sides are 25cm . and 10cm . The non-parallel sides are 14cm . and 13cm . Find the area of the field.

OR

A triangle and a parallelogram have the same base and same area. If the sides of the triangle are 26cm ., 28cm . and 30cm and the parallelogram stands on the base 28cm . Find the height of the parallelogram.

Roll. No. _____ Code No. 09/Social Science/NLCS/126

Half Yearly Examination 2018 – 19

Time: 3:00 Hrs.

M. M. 80

Note : Question No. 1 to 7 carry One Mark each.

Question No. 8 to 18 carry Three Marks each.

Question No. 19 to 25 carry Five Marks each.

Question No. 20,22, 23 and 24 have internal choice.

- Q.1 What was the Social structure of French society in old regime?
- Q.2 What was "Article 48" of Weimer Republic?
- Q.3 What is Military Coup?
- Q.4 Which river is known as "Dakshin Ganga"?
- Q.5 What is Bhangar and Khadar?
- Q.6 What is the size of India among the countries of the world?
- Q.7 How is Physical capital classified? Name it with example.
- Q.8 What was the Role of the Philosophers in the outbreak of French Revolution?
- Q.9 What was Hitler's foreign Policy?
- Q.10 How does Democracy enhance the dignity of the citizen?
- Q.11 "**China's famine of 1958-61 was a result of Governments Policies**". Explain.
- Q.12 Why do we need a Constitution?
- Q.13 Explain why 82° 30'E an odd value has been chosen as the standard Meridian of India.
- Q.14 How do the physical division of India complement each other?
- Q.15 Write difference between Himalayan and Peninsular Rivers?
- Q.16 What is the difference between economic and non-economic activity?
- Q.17 Why do educated parents invest more heavily in their children's education?

- Q.18 What is Green Revolution? What are its negative effects?
- Q.19 What do you know about "Triangular slave trade"?
- Q.20 How was democracy destroyed in Germany?

OR

What was Nazi World view?

- Q.21 Write the Merits and Demerits of Democracy?
- Q.22 "India emerged as Independent country amidst heavy turmoil" . Justify the statement.

OR

"The familiarity with political institutions of colonial rule helped to develop an agreement over the institutional design". Justify the statement.

- Q.23 Write the Plate tectonic theory with the help of diagram.

OR

Explain the various drainage pattern along with diagram.

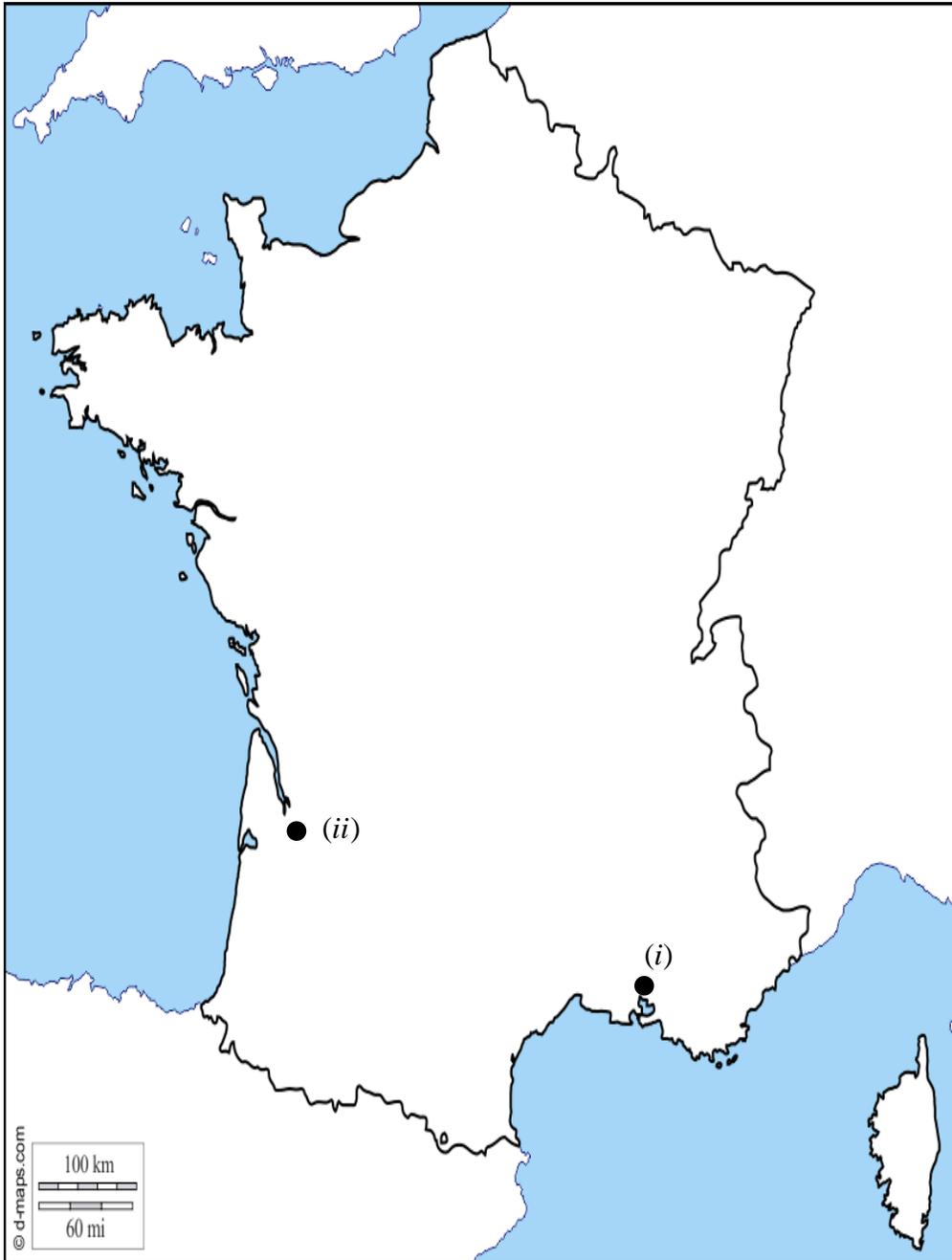
- Q.24 How is labour and capital arranged in Palampur.

OR

Distinguish between traditional and Modern farming method.

- Q.25 Mention the three sectors of economic activity with example.
- Q.26 On the map of France Mark.
- (i) The place where the National Anthem of France was sung for the first time.
- (ii) Ports of France related to slave trade.
- Q.27 On the Map of India Mark :
- (i) The standard Meridian of India.
- (ii) The Western and Eastern Ghats of India.
- (iii) Chilika lake

Roll No. _____ Class _____ Section _____
Q. No.26



Roll No. _____ Class _____ Section _____
Q. No.27

