

# Half Yearly Examination 2017 – 18

Time: 3:00 Hrs.

M. M. 80

## SECTION (A) READING

**Q.1 Read the following passage and answers the following questions below:**

Everybody knows the ocean is salty. But why should an inland lake like The Great Salt Lake be salty? To understand this we have to know how lakes are formed and what happens to them.

Lakes are formed from the flow of water into low areas. Lakes water comes largely from rainfall and melting snow. The water enters a lakes basin through brooks, stream, rivers, underground springs and groundwater. Dissolved minerals matter is in the fresh water entering the lake. This dissolved mineral matter is obtained from the ground and from rocks in the area.

In places where the climate is dry, lakes lose water rapidly by evaporation. When the amount of water that flows into lake is matched up by evaporation, salty minerals are left behind in the lakes. Such lakes becomes salty, and the salinity increases with time. The Great Salty Lake is such a lake. The minerals matter there is been accumulating over the ages and now it contains over 20% minerals matters, most of which is common salt. Because of the high salt content only shrimps live in the lake. The Great Salt Lake is more than 1,220metres above sea level and is located in North-Western Utah in the USA.

The Dead Sea which lies in between Israel and Jordan is really another example of salt lake. It is 390mts below the sea level. The lake is fed by the Jordan River, but it has no outlet .this fact, plus little rainfall and high evaporation, cause the minerals matter to accumulate in the lake. It contains more than 24% minerals matter, one third of which is common salt.

**1.1 Answer the questions**

**8**

- (1) How are lakes formed?
- (2) Why are inland lakes salty?
- (3) From where do the lakes get water?
- (4) Through which sources does water enter the lake basin?
- (5) Where is the great lake located?
- (6) From where is the dissolved mineral matter obtained?
- (7) Where is the Dead Sea situated?
- (8) Why do only shrimps live in the Great Salt Lake?

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

1. A young man was getting ready to graduate from college. For many months he admired a beautiful sports car in a dealer's showroom, and knowing his father could well afford it, he told that was all he wanted. As graduation Day approached, the young man awaited signs that his father had purchased the car. Finally on the morning of his graduation, his father called him into his private study.
2. His father told him how proud he was to have such a fine son, and told him how much he loved him. He handed his son a beautiful wrapped gift box. Curious, but somewhat disappointed the young man opened the box and found lovely, leather-bound Bible, with the young man's name embossed in gold. Angry, he raised his voice to his father and said "with all your money, you give me Bible?" And storm out of the house, leaving the Bible.
3. Many years passed the young man was very successful in business. He had a beautiful home and family, but realized his father was very old, and though perhaps he should go to him. He had not seen him since his graduation day. Before he could make arrangements, he received a telegram telling his father passed away, and willed all of his possessions to his son. He needed to come home immediately and take care of all things. When he arrived at his father's house, sudden sadness and reverence filled his heart. He began to search his father's important papers and saw the still new Bible, just as he had left it years ago. With tears he opened the Bible and began to turn the pages. And as he did, a car key dropped from the back of the Bible. It had a tag with the dealer's name, the same dealer who had the sports car he had desired. On the tag was the date of his graduation, and words PAID IN FULL.
4. How many times do we miss God's blessing and answers to our prayers because they do not arrive exactly as we have expected?

**2.1 Answer the following questions:**

**8**

- (1) What did the young man want from his father?
- (2) Why did his father call the young man in his private study?
- (3) What was the reaction of the young man to see the present?
- (4) After many years, what did the young man realize?
- (5) What happened when he reached his father's house?
- (6) What was written on the tag?
- (7) What is the theme of the short story?
- (8) Comment on the Bible.

**2.2 Pick out words from the passage which are similar in meaning to the following:**

**2**

- (a) belongings/assets (para 3)                      (b) marked/printed (para 2)

**2.3 Pick out words from the passage which are opposite in meaning to the following:**

**2**

- (a) disrespect (para 3)                      (b) curse (para 4)

**SECTION (B) WRITING & GRAMMAR**

**Q.3.** Write a letter to the editor of a newspaper complaining about the frequent power cuts in your locality.

**OR**

Write a letter to the editor of a reputable national newspaper about the apathy shown by the local civic body towards cleanliness. **8**

**Q.4. Write a short story in 200-250 words using the following clues: 10**

Today was an ordinary morning of school for Geoff .He woke up late ,and took his shower ,and got on his bus to go to school.....

**Q.5 Fill in the blanks with the correct form of the verb: 4**

Mr. Sherlock Homes, who \_\_\_(a)\_\_\_ usually very late \_\_\_(b)\_\_\_ the mornings, save \_\_\_(c)\_\_\_ those not frequent occasions when he \_\_\_(d)\_\_\_ up all night was seated at the breakfast table.

**Q.6 In the following passage, there is one error in each line: 8x½ = 4**

One morning, the Nawab call a)\_\_\_ \_\_\_  
his minister and said him b)\_\_\_ \_\_\_  
that I wanted the length and c)\_\_\_ \_\_\_  
breadth from the earth d)\_\_\_ \_\_\_  
measured. He also feel the e)\_\_\_ \_\_\_  
need to have the stars on the f)\_\_\_ \_\_\_  
sky counted. The minister says g)\_\_\_ \_\_\_  
that the task he have been h)\_\_\_ \_\_\_  
set was impossible.

**Q.7 Rearrange the following words into meaningful sentences: 4**

- (a) are/ a reflection/ paintings/ the/ created/ of/ they/ times /in which/ are
- (b) man /so/ that/ could/ climb/ hill/ the/ was/ tired/ he/ not/ the
- (c) should/ we /be/ to/ grateful/ for/ it /God
- (d) God/ some/ remember/ people/ distress/ in/ only

## SECTION(C) LITERATURE

**Q.8 Read the extract given below and the question that follow:**

"I don't call that delicate, stepping into dead man's shoes

- a) Who is the speaker? 1
- b) When does the speaker say these words? 1
- c) What does the speaker mean by 'stepping into a dead man's shoes'? 2

**OR**

Higher and higher every day,

Till over the mast noon—

The wedding guest here beat his breast,

For he heard the loud bassoon.

- a) What came higher and higher every day? 1
- b) Why did the wedding guest beat his breast? 1
- c) What is the meaning of "Bassoon"? 1
- d) Name the poem and poet of the poem? 1

**Q.9 Answer the following questions in about 30-40 words: 8**

- (1) How did the villagers react to the tiger's death?
- (2) What message does "the two gentlemen of Verona" give?
- (3) Why does the narrator hesitate in playing the Ouija board?
- (4) How does the time destroy the monuments and memorials?

**Q.10 Answer the following in about 100-120 words: 8**

The postmaster realizes his mistakes only after Ali's death. Imagine yourself to be the postmaster, make a diary entry expressing your feeling of guilt and your determination to be humane in future.

**OR**

The frog calls the nightingale 'brainless bird '. Is she really brainless? Give reason in support of your answer.

**Q.11 " My teacher is so near to me that I scarcely think of myself apart from her". Do you think Helen is exaggerating or speaking truth? Give reasons in favour of your reason. 10**

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iz1 fuEufyf[kr x|k'k dks i<ej fn, x, izuka ds mRrj nhft, &  
 f'kjh" k ds Qyka dh dkeyrk n[kdj ijortz dfo;ka us le>k fd mldk lc dN dkey gA ;g  
 Hkoy gA bl ds Qy brus etcir gkrs gA fd u, Qyka ds fudy vkus ij Hkh viuk LFkku ugha NkMfA tc  
 rd u, Qy&iRrs feydj] /kfd;kdj mlga ckj ughs dj nrs rc rd MVs jgrs gA ol r ds vkxeu ds  
 le; tc lkjh ouLFkyh i'q'i= ls ee'jr gksh jgrh gS f'kjh" k ds igkus Qy cjh rjg [kMf-kMf'rs jgrs  
 gA e'ps budks n[kdj mu uskvka dh ;kn vkrh gS tks fdlh izkj tekus dk : [k ugha igpkurs v'k' tc  
 rd ubz ik'k ds ykx mlga /kDdk ekdj fudky ugha nrs rc rd tes jgrs gA e' l kprk gW fd igkus dh  
 ;g vf/kdkj&fyllk D;ka ugha le; jgrs lko/kku gks tkrh\ tjk v'k' eR; ; s nkska gh txr ds vfr&  
 ifjpr v'k' vfrikf.kd lR; gA e' f'kjh" k ds Qyka dks n[kdj dgrk gW fd D;ka ugha Qyrs gh le>  
 yrs ckck fd >Muk fuf'pr gS Lkqrk dks' gS

- 1- f'kjh" k ds Qy d's gA 1
- 2- f'kjh" k Qyka ds ek;/e ls fdl ij 0;x; fd;k x;k gS 1
- 3- y[kd us dfo;ka dh D;k Hkoy crkbz gS 2
- 4- y[kd ds vuq kj fpj&ifjpr i'ekf.kd lR; D;k gS 2
- 5- vfrikf.kd 'kCn ea milx&iR; ; crkb,A 2

iz2 fuEufyf[kr i|k'k dks i<ej izuka ds mRrj fyf[k, & 7

vkt dh nfu;k fofp= uohu] izfr ij loz= gS fot;h iq "k vki huA  
 ga c/ka uj ds djka ea okfj] fon; r] Hkki gDe ij p<fk&mrjrk gS iou dk rkiA  
 gS ugha ckdh dgha 0; o/kku] yk'k l drk uj lfjr} fxfj] fl U/kq ,d lekuA  
 'kh'k ij vkn'sk dj vo/kk;Z izfr ds lc rRo djrs gA euf' ds dk;A  
 Ekkurs gS gDe ekuo dk egko: .ksk] v'k' djrk 'kCn xqk vEcj ogu lms'ka

u0; uj dh e'V ea fodjky] gS fleVrs tk jgs fnDdkyA  
 ;g ixfr fufllheA uj dk ;g v'v'z fodkl A pj.k ru Hk'ksyA e'v'bh ea fuf[ky vkdk'kA  
 fdrq gS c<fk x;k e'lr"d gh fu%'ksk] NWdj ihNs x;k gS jg gn; dk n'sk]  
 uj eukrk fur; uru cf) dk R; k'kj] ik.k ea djrs n'k[kh gks n'rk fprdkjA

- 1- vkt l'k'k ds uohu v'k' fofp= fn[kkbz n'ss dk dkj.k g&  
 1/2 d' euf; us ixfr dh gS 1/2 k' igys dh r'guk ea l'k'k cMk gks x;k gS  
 1/2 izfr ij euf; us fot; i'kr dj yh gA 1/2 foKku ds {ks= ea fodkl fd;k gS
- 2- ^NWdj ihNs jg x;k gS jg gn; dk n'sk\* i'Dr dk Hkkokf'z gS %  
 1/2 d'gn; dk n'sk ihNs jg x;k 1/2 k' cf) ds {ks= ea fufllke ixfr  
 1/2 euf; dh ixfr fufllk gS 1/2 k' Ck' d n'k' ea eu dk l'k'k ihNs NW x;k gA
- 3- ^Ck' dk R; k'kj\* dk D;k r'ri;Z g&  
 1/2 d'gj R; k'kj cf) iw'd eukrk gS 1/2 k'R; k'kj ds fnu uru cf) gksh gA  
 1/2 euf; cf) cy ls iz'lu gk'rk gS 1/2 k' buea ls d'kbz ughA

- 4- ekuo dk gDe dku ekurk gS  
 $\frac{1}{4}d\frac{1}{2}ekuo$        $\frac{1}{4}[k\frac{1}{2}]zdr$        $\frac{1}{4}x\frac{1}{2}Hlxoku$        $\frac{1}{4}k\frac{1}{2}fnDdky$
- 5- fl dkg dk i ; k; okph gS &  
 $\frac{1}{4}d\frac{1}{2}l kxj$        $\frac{1}{4}[k\frac{1}{2}]j$        $\frac{1}{4}x\frac{1}{2}tyn$        $\frac{1}{4}k\frac{1}{2}uhjt$
- 6- in; kkk ea iz Dr jl crkb, &  
 $\frac{1}{4}d\frac{1}{2}Hk; kud$        $\frac{1}{4}[k\frac{1}{2}]ksz$        $\frac{1}{4}x\frac{1}{2}ohj$        $\frac{1}{4}k\frac{1}{2}vnHkq$
- 7- ^uj eukrk fuR; unru\* i fDr ea iz Dr vydkj crkb, &  
 $\frac{1}{4}d\frac{1}{2}vuqkl$        $\frac{1}{4}[k\frac{1}{2}] : id$        $\frac{1}{4}x\frac{1}{2}miek$        $\frac{1}{4}k\frac{1}{2}; ed$
- iz3  $\frac{1}{4}d\frac{1}{2}jpuk dh n^v$  ls okD; ka ds izdkj crkb, A 2  
 $\frac{1}{4}1-\frac{1}{2} vki lR; ds i\{kikrh gS ; k v l R; ds l e f k z d A$   
 $\frac{1}{4}2-\frac{1}{2} vki ykbu ea yxdj fvfdV [kjhn, A$
- iz4  $\frac{1}{4}[k\frac{1}{2}] valkj gvk vks mUgkaus ?kkr yxkbA okD; dks feJokD; ifjofr^r dhft, A$  1  
 $fun^z kkuq kj okP; ifjofr^r dhft, &$  4  
 $\frac{1}{4}v\frac{1}{2} mUga lR; cksyus dh ij.kk nh xbz FkhA \frac{1}{4}dr^z kP; \frac{1}{2}$   
 $\frac{1}{4}c\frac{1}{2} vki dj l drs gA \frac{1}{4}de^z kP; \frac{1}{2}$   
 $\frac{1}{4}l \frac{1}{2} l kjs Ldny cm dj fn, tk, \frac{1}{4} okP; ifoku dj fyf[k, \frac{1}{2}$   
 $\frac{1}{4}n\frac{1}{2} og ?k^e us ugha tk l drhA \frac{1}{4}HkkookP; \frac{1}{2}$
- iz5  $js[kkkDr ink^a dk ifjp; nhft, &$  4  
 $\frac{1}{4}v\frac{1}{2} gk; ] ; g D; k gks x; k\$        $\frac{1}{4}c\frac{1}{2} vki dh n^pku dgk\ gS$   
 $\frac{1}{4}l \frac{1}{2} vki ogk\ c^s B, A$        $\frac{1}{4}n\frac{1}{2} ckj dkbz [kMk gA$
- iz6  $fuEufyf[kr i fDr; ka ea iz Dr jl , oa LFkk; h Hkko fyf[k, &$  3  
 $\frac{1}{4}v\frac{1}{2} fdydr dkuq ?k^y: ou vkorA$   
 $efue; dud un ds vkkku fc^e idfjcs /k^r oA$   
 $\frac{1}{4}c\frac{1}{2} l keus fvdrs ugha kujkt io^r Mksyrs g^s$   
 $dkk^r k gS dqMyh ekjs l e; dk 0; kyA$   
 $\frac{1}{4}l \frac{1}{2} J^akj jl dk , d mnkgj.k fyf[k, A$
- iz7  $fuEu x|k^a k dks i < e j izuka ds mUkj fyf[k, &$  5  
 $dkfr^z v k; k ugha fd ckyxk^s cu Hkxr dh i Hkkfr; k; 'kq g^p] tks Qkxq rd pyk djrhA bu fnuka og$   
 $l cjs gh mBrA u tkus fdl oDr txdj og unh Luku dks tkrs & xkp ls nks ehy nj^A ogk; ls ugk$   
 $/k^d j yk^s rs vks xkp ds ckj gh ik^k js ds ^ps fHk^s ij viuh [k^t M^h y^d j tk cBr s vks vius xkus$   
 $Vjus yxrA es 'kq ls gh nj rd l kus okyk g^p fdrq , d fnu ek^k dh ml nkr fdV fdVkus okyh Hkq$   
 $ea Hkh mudk l^chr ep^s ik^k js ij ys x; k FkA$
- 1- i Hkkfr; k; dk D; k vFz gS ckyxk^s cu Hkxr i Hkkfr; k; dgk^a xkrs Fk^s
  - 2- i Hkk^rh xkus ls igys ckyxk^s cu Hkxr D; k djrs Fk^s
  - 3- y^k d ds h Hkq ea ik^k js rd x, \

- iz8 fuEu fyf[kr izuka ds mükj fyf[k, & 8
- 1- iku okys us fdl dk etkd fdl izkj mMk; k\
  - 2- uokc lkgc ds Fkddj yv tkus dk dkj.k y[kd us D; k crk; k\
  - 3- ^Qknj c[ds l dYi ls lU; kl h Fkš bl dFku ea fufgr Hkko Li"V dhft, A
  - 4- Ys[kdk eluw HkM/kjh dh Lorærk vknksyu ea Hkfiedk dks Li"V dhft, A
- iz9 fuEu i|kåk dks i<ej izuka ds mükj fyf[k, 5
- fdarq dfg , d k u gks fd rø gh [kkyh djus okys  
vius dks le>kj ejk jl ys viuh Hkjus okyA  
;g foMæuk! vjh l jyrš rjh gj h mMkÅ; eA  
Hkmys viuh ;k iøpuk vkska dh fn[kykÅ; eA  
mTToy xkFkk dš s xkÅ; e/kj pknuh jkrka dhA  
vjs f[kyf[kyk dj gj rs gkus okyh mu ckrka dhA
- 1- ^ejk jl ys viuh Hkjus okyš i dR dk vk'; Li"V dhft, A 2
  - 2- dfo us mTToy xkFkk fdl s dgk vksj og dš h gš 2
  - 3- ^vjh l jyrš\* fdl ds fy, iz D r gvk gš 1
- iz10 fuEu fyf[kr izuka ds mükj fyf[k, & 8
- 1- xkš; ka us Jhd".k dks ledkyhu jktulfrK ds leku D; ka dgk\
  - 2- dfonø dh HkM"kkxr fo' kškrk, j crkb; A
  - 3- ^vV ugh jgh gš dfork ds vk/kkj ij crkb; s fd Qkxq dh izdfrd 'kkškk dk dfo ds eu ij dš k iHkko iMk\
  - 4- ^;g nrñjr e[dku\* dfork ea dfo us ekuo thou ds fdl lR; dks izv fd; k gš
- iz11 ftrsu uxš us flfDde ;k=k ds nkšku cksk /keZ ls tMh dbZ jkpd tkudkfj; k; nhA ikB ds vk/kkj ij 4
- Li"V dhdt, A
- iz12 fuEu ea ls fdl h ,d fo"k; ij fucak fyf[k, & 10
- 1- ykdræ ea ehfM; k dh Hkfiedk& iLrkouk] ehfM; k dk mükjnkf; Ro] ykder dk fuekZk] ykdræ ea ehfM; k dk egrRo ,oa dÜk; ] Li)kZ dh nkM+ ea dÜk; ghu ehfM; k] mil gkj
  - 2- fodkl ds exZ ij gekjk nš k Hkjr& iLrkouk] fodkl ds fofHku l ki ku] fodkl ea ck/kd rRo] mil gkj
  - 3- ;ksx vksj Nk= thou& iLrkouk] ;ksx ls ykHk] ;ksx ea /; ku j[kus ;kk; crk; Nk= thou ea ;ksx dh mi ;kšrk] mil gkj
- iz13 vius fe= dks Nk= ifj"kn ea v/; {k pqs tkus ij c/kkZ i= fyf[k, A
- vFkok
- vkidk uke l qkj gš vkidh cšd ikl cšd [kks xbZ gš cšd esstj dks i= fy[kdk ysu&nsu ij jkd rFkk  
ubZ ikl cšd tkjh djus dk vxg dhft, A 5
- iz14 LoPNrk vfHk; ku ij Lyksu rFkk lfp= foKkiu rš kj dhft, 5

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Roll. No.  Code No. 10/So. Sc/NLCS/112

## Half Yearly Examination 2017 – 18

**Time: 3:00 Hrs.**

**M. M. 80**

- |      |   |   |
|------|---|---|
| Q.1  | When did the first Printing Press come to India?  | 1 |
| Q.2  | Who said, “Printing is the Ultimate gift of God and the greatest one”?  | 1 |
| Q.3  | Define the terms :<br>(i) Individualism                      (ii) Reclamation                                     | 1 |
| Q.4  | What were the basic causes of Town-Planning in both Bombay and London?  | 1 |
| Q.5  | What is Feminist movement?  | 1 |
| Q.6  | What is Resource? How resources could be classified on the basis of exhaustibility?                               | 1 |
| Q.7  | What term is used for the value of all final goods and services produced with a country during a particular year? | 1 |
| Q.8  | How was the condition of women workers, changed from 19 <sup>th</sup> and 20 <sup>th</sup> centuries in London?   | 3 |
| Q.9  | Will it be correct to say that “French Revolution” was the effect of print technology?                            | 3 |
| Q.10 | Explain the major forms of Power-sharing in modern Democracies?   | 3 |
| Q.11 | What measures were taken by Sri Lankan Govt. to achieve majoritarianism?  | 3 |
| Q.12 | How does the Indian constitution make India a <u>Secular</u> state?   | 3 |
| Q.13 | “Planning of resources is very important for a country like India”, Justify by giving three reasons.              | 3 |



- Q.14 What is water scarcity? What are major reasons of water scarcity? 3
- Q.15 What are multi-purpose projects? Evaluate their role in the development of the country? 3
- Q.16 “Money cannot buy all the goods and services that one needs to live well”. Explain. 3
- Q.17 Why is Tertiary sector becoming so important in India? Give at least four reasons. 3
- Q.18 Compare working conditions prevailing in the organized & unorganized sectors. 3
- Q.19 Explain the various land reclamation projects launched in Bombay, which helped in its expansion? 5
- Q.20 Throw light on the rich heritage of manuscripts in India. 5
- Q.21 “Three factors are crucial in deciding the outcome of politics of social division”. Which are these factors explain? 5
- Q.22 What is Decentralization? What is the need of decentralization? 5
- Q.23 Explain between renewable and non renewable resources with example? 5
- Q.24 What is the role played by Banks in economic development of the country? 5
- Q.25 Explain the factors on which the quality of life depends? 5
- Q.26 On the outline map of India locate and label given Dams (a) (b) (c) : 3
- Q.27 On the outline map of India mark : 2  
 (a) Arid soil area (b) Black soil area

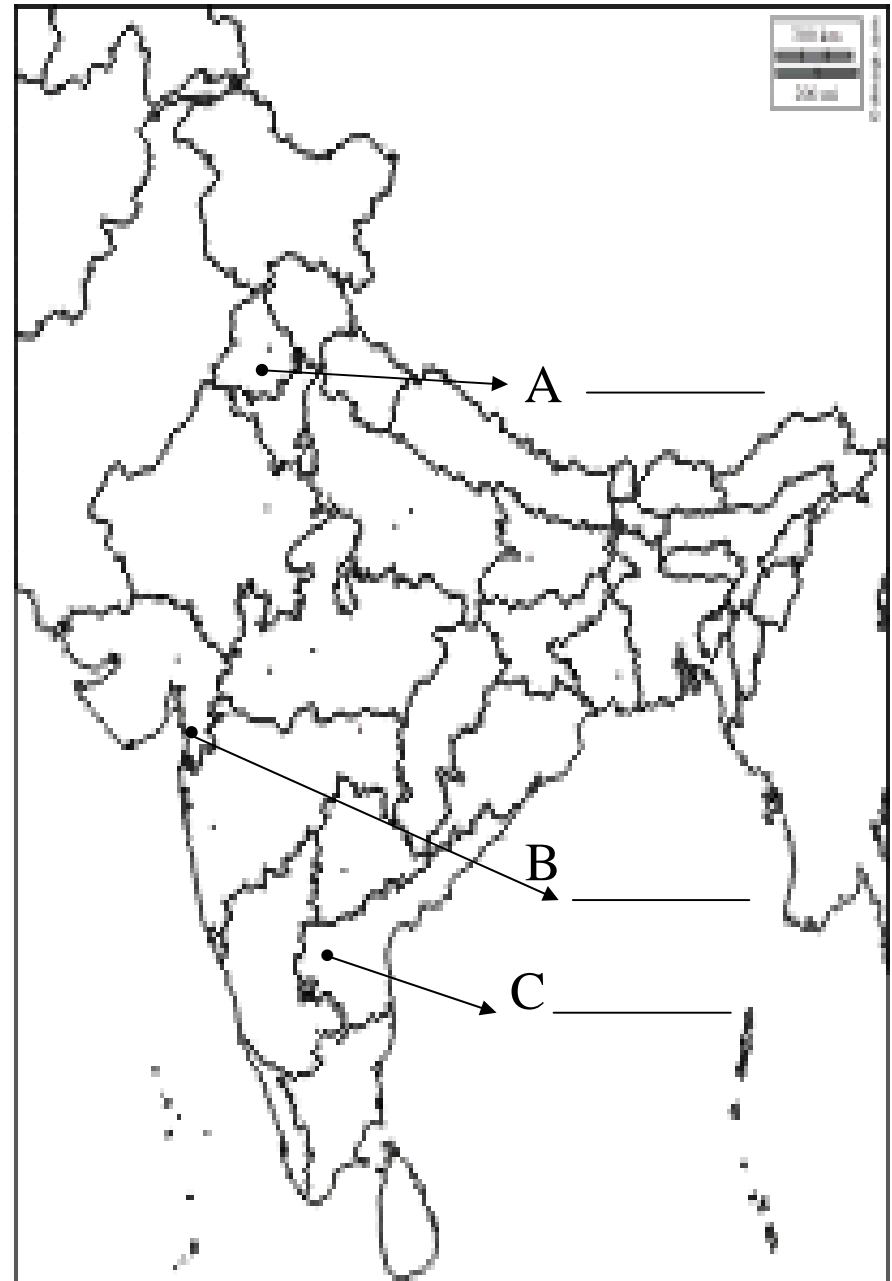
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Roll No. \_\_\_\_\_ Class \_\_\_\_\_

Q.26 On the outline map of India locate and label given Dams

(a) (b) (c) :

3



- Q.24 (i) Write the Lewis structure of : (i)  $MgCl_2$  (ii)  $C_2H_6$  1  
(ii) What do you mean by thermit reaction? 1  
(iii) What are amphoteric oxides? 1  
(iv) Write two difference between calcination and roasting.2
- Q.25 (i) Why rain water conduct electricity but distilled water doesn't? 1  
(ii) What is the role of Ph in self defense of animals & plants? 1  
(iii) Why carbon does not able to form  $C^{+4}$  ion or  $C^{-4}$  ion?1½  
(iv) What is the reason behind the versatile nature of carbon. 1½
- Q.26 (i) Why walls of artery is thicker than veins? 2  
(ii) What is reflex action? Explain with the help of Example? 3
- Q.27 (i) Write the functions of the following in human female reproductive system : Ovary, Oviduct, uterus  
(ii) How does the embryo get nourishment inside the mothers body. Explain in brief. 5
- OR
- (i) Define the term gene?  
(ii) Define the term natural selection?  
(iii) The gene for red hair is recessive to the gene for black hair. What will be hair colour of a child if he inherits a gene for red colour from his mother and a gene for black hair from his father? Explain with the help of flow chart?

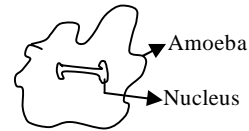
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Roll. No.  Code No. 10/Science/NLCS/112

## Half Yearly Examination 2017 – 18

**Time: 3:00 Hrs.**

**M. M. 80**

- Q.1 What is bleaching power? 1  
Q.2 Identify the substance oxidized and reduced in the reaction  
 $3MnO_2 + 4Al \rightarrow 3Mn + 2Al_2O_3$  1  
Q.3 Name the factors which are responsible for speciation. 2  
Q.4 Write the observation when we heat ferrous sulphate crystals. 2  
Q.5 Write the reaction of Zinc metal with HCl & NaOH. 2  
Q.6 (i) Which process is shown here? 2  
(ii) Give reason. 
- Q.7 What is meant by radicle and plumule? What are the function of plumule and radicle? 2  
Q.8 State the function of pancreatic juice and from where it is secreted. 2  
Q.9 Calculate the resistance of 1 metre of copper wire that has a cross section area about  $0.02m^2$ , where the value of resistivity of copper is  $\alpha = 1.6 \times 10^{-8} \Omega m$ . 2  
Q.10 The magnification of a plane mirror is  $m=+1$ . What does this signify? 2  
Q.11 What happen when a light incident normal to the mirror surface? Explain with suitable diagram. 2  
Q.12 State ohm's law. How can it verified experimentally? 3  
Q.13 Draw the image for ; 3

- (i) An object placed at focus of concave mirror.  
 (ii) An object placed at  $2f$  for convex lens.  
 (iii) An object placed at  $C$  for convex mirror.
- Q.14 Why is the colour of clear sky blue? 3  
 OR  
 Is the position of a star as seen by us, its true position? Justify your answer.
- Q.15 Write balanced equation : 3  
 (i) Dilute Sulphuric acid react with Aluminium powder.  
 (ii) Reaction between plaster of paris and water.  
 (iii) Decomposition of lead nitrate.
- Q.16 Explain : 3  
 (i) Rancidity (ii) Catenation  
 (iii) Reactivity series of metal  
 OR  
 Write the reactions of metal with water.
- Q.17 Draw a diagram of human brain and label its following parts and also give the one-one function: 3  
 (i) Mid-Brain (ii) Cerebrum (iii) Medulla
- Q.18 How does feedback mechanism regulate the hormone secretion? 3
- Q.19 In the process of reproduction as used in spirogyra, the organism splits itself into small pieces. 3  
 (i) What is this process of reproduction called?  
 (ii) Will this type of reproduction be asexual or sexual reproduction? Answer with reason.  
 (iii) Is this process same as regeneration. Give reason.

- Q.20 Anita had a huge scar on her cheek after she met with an accident during her school days. She is worried if her baby would inherit the scar she had acquired. Her doctor, a sincere medical practitioner explained and successfully convinced anita.  
 (i) What are acquired traits?  
 (ii) How is it different from inherited traits?  
 (iii) Mention the values the doctor exhibits. 3
- Q.21 (i) Why does dry HCl gas not change the colour of the dry litmus paper? 1  
 (ii) How can a farmer rectify its basic soil? 1  
 (iii) What is the difference between baking soda and baking powder? 1
- Q.22 A student finds the writing on the blackboard as blurred and unclear when sitting on the last desk in the classroom. He, however, sees it clearly when sitting on the front desk. 5  
 (i) Identify the type of defect.  
 (ii) Write its cause.  
 (iii) Give correction with suitable diagram.
- Q.23 (i) A concave mirror produces three time real and enlarged image of an object placed at 10cm. in front of it. Calculate the focal length of the mirror.  $2\frac{1}{2}$   
 (ii) Show the formation of the image with the help of a ray diagram, when object is placed 6cm away from the pole of a convex mirror?  $2\frac{1}{2}$

Roll. No.  Code No. 10/Computer/NLCS/112

# Half Yearly Examination 2017 – 18

**Time: 3:00 Hrs.**

**M. M. 80**

Q.1 Multiple Choice Question :

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

- (i) Name the protocol used for WWW –  
(a) HTTP (b) FTP (c) W3C (d) None of these
- (ii) Tim Berners-Lee developed the WWW in -  
(a) 1988 (b) 1989 (c) 1990 (d) 1991
- (iii) Which internet service is an easy to create web site and consists of a signed and dated log of individual posting -  
(a) Face book (b) Blog (c) Chat Room (d) News group
- (iv) Which key is pressed to save the data base?  
(a) Ctrl +S (b) Ctrl+V (c) Ctrl +C
- (v) Which property is used to add Tag into a field?  
(a) Smart tag (b) Validation text (c) Validation rule
- (vi) How many default column headers are present for tables in Design view?  
(a) One (b) Two (c) Three
- (vii) Which option creates simple select query?  
(a) Select (b) Create (c) Wizard
- (viii) What does the top section of a query window display?  
(a) Design Grid (b) Table (c) Both
- (ix) How many sections are there in a query window?  
(a) Two (b) Three (c) Four
- (x) Which key defines a relationship between two tables -  
(a) Foreign key (b) Primary key (c) Secondary key

Q.2 Write True OR False :

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

- (i) Query Windows is divided into three panes.
- (ii) Once a relationship is set, it cannot be deleted.
- (iii) Run button is present on the Home tab.
- (iv) Sorting can only be done through ascending order.
- (v) A table can have a maximum of 55 column.
- (vi) Two table can have the same name in a database.
- (vii) The overall purpose of a Database is to perform Mathematical calculations.

- (viii) If more than one attribute forms the primary key it is called composite key.
- (ix) IMAP is suitable for offline use.
- (x) The AND operator narrow down your search result.

Q.3 Fill ups :

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

- (i) A collection of related Web Page is called a ----- .
- (ii) A ----- is a PC or workstation that sends request for any information or service to the ----- .
- (iii) Search engine use an extremely efficient software called spider which is also known as ----- .
- (iv) ----- can be used to impact training to a large group of students at a time.
- (v) ----- process arranges the data in a proper sequence.
- (vi) ----- type of database stores all the data in a single tables.
- (vii) A table is a database object which consists of--- and --- .
- (viii) Records can be searched through ----- buttons.
- (ix) Queries are made on ----- .
- (x) The bottom pane of Query window displays ----- .

Q.4

- (i) What do you understand by cross tab query? 1
- (ii) Name the type of queries available in Access. 1
- (iii) What is the use of Action query? 2
- (iv) How will you rename a field? 2
- (v) Define concurrency control. 2
- (vi) Define Tables, list the different elements of a table. 3
- (vii) Why is E-Mail so popular over conventional mail. 2
- (viii) Expand the terms HTML, URL, TCP / IP and WWW. 2
- (ix) What do the terms Web Browser and Web Server mean. 4
- (x) What is the function of chat? 2
- (xi) Describe the feature of Backup and Recovery Management. 2
- (xii) Explain the Datasheet view and Design View. 2

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Q.29 A solid consists of three parts. The middle part is a right cylinder of radius 3.5cm. On one side of it there is a hemisphere of the same radius and on the other side there is a cone of same radius. The height of the solid is 26cm. Find the outer surface area of solid. Height of cone is 12cm.

**OR**

Some students arranged a picnic. The budget for food was ₹ 240. Because four students of the group failed to go, the cost of food on each student got increased by Rs. 5. How many students attended the picnic.

Q.30 Calculate the missing frequencies from the following frequency distribution table if the mean of this distribution is 472.

Income (In Rs.)	No. of Workers
200-300	5
300-400	$x$
400-500	$y$
500-600	16
600-700	9
700-800	6
800-900	4
Total = 100	

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Roll. No.

Code No. 10/Maths/NLCS/112

## Half Yearly Examination 2017 – 18

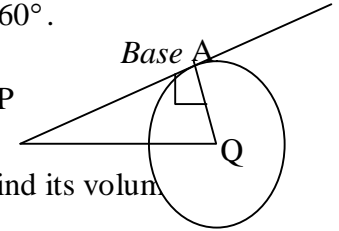
Time: 3:00 Hrs.

M. M. 80

### Section – A

**Question No. 1 to 6 carry One Mark each.**

- Q.1 If  $p(x) = 3x^2 + 5x - 7$  has zeroes named as  $\alpha$  and  $\beta$ , then write value of  $\alpha + \beta$  and  $\alpha\beta$ .
- Q.2 If  $x = -2$  and  $y = 3$  is a solution of equation  $2x + my = 5$ , then find  $m$ .
- Q.3 In AP 2,5,8,11.....98. Find the 18<sup>th</sup> term.
- Q.4 Evaluate  $\sin 60^\circ \cos 30^\circ + \sin 30^\circ \cos 60^\circ$ .
- Q.5 In the given figure, PA is tangent. If AP=8cm. AQ=6cm. Find length P of PQ. Here Q is centre of circle.
- Q.6 If in a cone  $r=4.5$  cm.  $h=7$ cm. then find its volume.



### Section – B

**Question No. 7 to 12 carry Two Marks each.**

- Q.7 Find the HCF of 741 and 1131. Using it find LCM also.
- Q.8 If one root (zero) of quadratic equation  $2x^2 + Kx - 6 = 0$  is 2, find the value of  $K$ . Also find the other root (using relationship of roots).
- Q.9 The angle of elevation of top of a tower from a point 30m away from its bottom is  $60^\circ$ . Find the height of tower ( $\sqrt{3} = 1.732$ ).
- Q.10 A sphere of radius 4.2cm. is melted and recasted into a cylinder of radius 6cm. find the height of cylinder.
- Q.11 Find the median of first ten prime numbers.
- Q.12 A card is drawn randomly from a deck of playing cards. Find the probability that the card is (a) Red card (b) A face card.

### Section - C

**Question No. 13 to 22 carry Three Marks each.**

- Q.13 Use Euclid's Division Algorithm to show that the cube of any positive integer is either of the form  $9q, 9q+1$  OR  $9q+8$ .
- Q.14 Divide  $p(x) = 3x^4 + 5x^3 - 7x^2 + 12x + 21$  by  $g(x) = x^2 + 3x + 1$ , then write quotient and remainder. Check your result using division algorithm.
- Q.15 Solve for  $x$  and  $y$ :  $\frac{11x-6y}{x-1} = 3$ ,  $\frac{8y-5x}{x+1} = 5$ .
- OR**
- Solve for  $x$  and  $y$ :  $\frac{14}{x+y} + \frac{3}{x-y} = 5$ ;  $\frac{21}{x+y} - \frac{1}{x-y} = 2$
- Q.16 A train travels 360km at a uniform speed. If speed had been 5km/h more it would have taken 1 hour less for journey. Find speed of train.
- Q.17 Find the sum of all the three digit numbers which leave the remainder 2 when divided by 5.
- OR**
- Find the sum of first 51 terms of an AP whose second & third term are 14 & 18 respectively.
- Q.18 If  $\sin(A+B) = 1$  and  $\cos(A-B) = \frac{\sqrt{3}}{2}$  where  $A, B$  are acute angle. Find values of  $A$  and  $B$ . Using these values calculate  $\tan(2A-3B)$ .
- OR**
- Evaluate, (using table)  $\frac{5\cos^2 60^\circ + 4\sec^2 30^\circ - \tan^2 45^\circ}{\sin^2 30^\circ + \cos^2 30^\circ}$ .
- Q.19 Prove that the parallelogram circumscribing a circle is a rhombus.
- Q.20 A bucket is in the form of a frustum of a cone. Its radii of the circular ends are 28cm. and 7cm. and its height is 45 cm. Find the cost of milk that can be filled in it at the rate of Rs. 40 per litre.

- Q.21 The distribution below gives the weights of 30 students of a class. Find the median weight of the students.

Weight (in kg)	40-45	45-50	50-55	55-60	60-65	65-70	70-75
No.of Students	2	3	8	6	6	3	2

- Q.22 A box contains 20 cards, numbered from 1 to 20. A card is drawn from the box at random. Find the probability that the number on the drawn card is (a) Even (b) Prime number (c) multiple of 3.

### Section - D

**Question No. 23 to 30 carry Four Marks each.**

- Q.23 Prove that  $\sqrt{5}$  is a irrational number.
- Q.24 If in a rectangle the length is increased and breadth is reduced by 2 units each, the area is reduced by 28 square units. If the length is reduced by 1 unit and breadth is increased by 2 units, the area is increased by 33 square units. Find the area of the rectangle.
- Q.25 Solve for  $x$ :  $\frac{x+1}{x-1} - \frac{x-1}{x+1} = \frac{5}{6}$ .
- Q.26 From your pocket money, you save Re.1 on day 1, Rs. 2 on day 2, Rs.3 on day 3 and so on. How much money will you save in the month of March 2016?
- Q.27 Prove that:  $\sqrt{\frac{1+\sin\theta}{1-\sin\theta}} + \sqrt{\frac{1-\sin\theta}{1+\sin\theta}} = 2\sec\theta$ .
- OR**
- Prove that:  $\frac{\tan A + \sec A - 1}{\tan A - \sec A + 1} = \frac{1 + \sin A}{\cos A}$
- Q.28 The angles of depression of the top and bottom of a 8m tall building from the top of a multi-storeyed building are  $30^\circ$  and  $45^\circ$  respectively Find the height of the multistoreyed building and the distance between the two buildings.