

PANJAB UNIVERSITY, CHANDIGARH-160014 (INDIA) Est n rt n n rs t A t o n t t Go to n

SYLLABI

FOR

EEE E THO DADF TH

i.e

Third Semester : November/December, 2020 Fourth Semester : April/May, 2021 \mathbf{C} \mathbf{E}

Sr. No. Particulars Page No.

1	En s ₁ Co p sor	or B A C n	s on ᢏ	1
	En s ₁ Co p sor	or B C n	s on 💂	
	n Co p sor_	or BACn	s on	

A AB E Y CHA D GA TH

E F E Y AB A D C É F TEÂD G A D B EC F D B A B GE E TÂD E E E E D Y E H D E E E E D ECE BE TA A D F TH E E E TÂD TH EXA. A

E G H Co p sor

F BACA D DA E Y

To s

To or

To n rn

Ass ss n

To r s

Y t .

To pinrn n so n propinn r ppropi

To mn n N r n s

Fo q r nd o ros rry sp s nro n n wh n p s n o nr n n r ry s

To por r s n n s p v En sp rnn os p s r

EX = TE'C TBED

En s or E po r nt Es D o r D n W r rnr r B

o tr t on

o A n

7 o o **7** n

on n ss

_ Too

ros t on

r n**8** s

E G H Coop sor E E E

F JEA CA D DA E Y

n m Ass ss n

୬ t i

To To propring for the propring the propring

Fo q r ns no o En s s n n s ros or s n o o po n or n rs vn n n so ros Town snssonsusno rs n whin ho hu u Z Z

To min m Nirns

Po qr nd o ros rr sp s wro nn whn p s n o nr nn r rr n r r s

To par r s n n s n N T En so rnn o s p s r n or

EX TE'C TRED

En s or Export Es Dor Dn Wrrrr r B

→ o tr

This s moorpho

ros t on

o nsnsn

Fr o o h rss

BA/B EEA EC DYEA EETDE YTDE 1 Y AB

E G CHE E

t on A



ot

The rW on ppro rs rs rs rs r rs r rs r or n n n Ass ss n n or n r or To s

For n prsr s r t so E prss on

ot

The rwonpprors reserve or men Assess no or men and the second of the sec

To ppr so ons so to ns n w sp n n so w r n sp so Co n ons n n s s

n t

ros prs Dr Dr s

n t

ot o oo sro n orn Woosh s orns n r s

Writing Skills T_n s s on S_n o s on pr S_n r n rr T_n shor or r por s no n T_n or s n T_n s n s r n o pro T_n pro o on

Modern Forms of Communication: r sp pp s s sp n o p n p or o E s

F ss s A o s A s n v r on r s n ons Ap r

ro p s p s ss n on r Co n on v o r p r or n n r

ro p D s ss on

rt ori

Three senso pro or proving a senso number of s

ot: In case of private candidates and students of University School of Open Learning, the marks obtained by them out of 40 will be proportionately increased out of 50).

st n

 $\mathbf{n} \ \mathbf{t}$ s s n orr spons on $\mathbf{n} \ \mathbf{y} \ \mathbf{s}$ s

r s

n t

yor r por 1 WorsWyn rn yo

D n on/For o o rn or so o n on o s o on rn n

BA/B EEA EC DYEA EE DE YDE IYAB

gikph (bkzwh)

;w;No qljw

 $\begin{array}{c} \text{eb nel 50} \\ \text{fbyshL} & \text{45} \\ \text{fJNoBb} & \text{n;;wNL 5} \\ \text{;w/L3} & \text{N!} \end{array}$

gikph (bkzwh)

; w ; No cQw

eb nel 50

fbyshL 45 fJNoBb n'; |; wNL 5 ; wkL3 N! pwTkm 4 ! 2 , 4 D !≠ " E \$ %!!& krs 3 !<! -) #) +4! * #) 345**6** # /0) 10 2) 3456 Xint Aq Qlm 8BB94 **4*&!8 9 2 *** =>? @' .; ! 8B B 9! 8 9 2 + !! A # /,! # /,! ! ! # 4 4*&! 2 A E 4 D!+ 44'# /, # 2% /, # /, $C \quad 0 \qquad /, \quad \# \quad <F) <)$ 0 ; & ,B 7 + ÷ , !, A %!! & ? **% #4!!** #)) < ! <#!) # 5 < + # & & # /, +!; 7 # + + # 2% В ! & . 0

H YADC E AB For BA n t s on E E E E

ts Fonro hs nsomhsor o hhsor o hr on nh r pro

F HE A E D E E A D CA D DA E F A E D E E E D

The system of th

o D op nsi i An o n rs Ann on on n

St nsi
ny rp

History and Culture of the Punjab, r
on Br n n rs

B The rqr n pulso on or one r nows ny o sr

This ook so or y sso y sor ny rq sons

The Sikhs of the Punjab, To C r s or o n

Gopr r A Social, Cultural & Economic History of India o n
B, n D s
D y, i
ss n Y s
Glimpses of Medieval Indian Culture, As y, n o s Bo
i r p

BA/B EEA EC DYEA EE DE Y DE 1 Y AB

rs in rn Ass ss n in Inrs

🤏 t s

To pro r s ns o p n r n n 7 n rs n n o r r r s on p s n nr s o 1 1 0

BA/B EEA EC DYEA EE DE Y DE I Y AB

E G H E t

ЕЕЕЕ

rs

rs

rs

rs

rs

rs

rs

rs

rs

hrs

🤏 t s

To proper sins on n n n n rs n n o rr rs on ps n nrs o

y s ns o opyrr o ppr n n n rr rs on ps n nrs o

po po ry s ns or n n n r o n n n p n n n nr

po n n s ns os r on n ons ppropr

po y rp n y r n s s s or r on n ons ppropr

po n rs i ns por s ssr p pr ss y r s o ri i ps i i

E G CHE E

t on A

Frequency of the second of the

t on B

r s r n i r s

n n r s o sp n n s n n s ns n on Ep n oron Ep r on it r s The examiner will set ten different lines with an instruction to identify the figure(s) of speech in each sentence. The sentences should be examples of different figures of speech as mentioned above. The students are required to answer all. There will be no choice.

r r

Choos h orr nnoh wor rs
Cop h nop snns
nwors s on rs

Co pr h ns on ns np ss o o 1 N or s 1 r s (The examiner will set an unseen passage of about 1000 word for comprehension. The passage will be followed by 5 questions to be answered in not more than 20-30 words each.)

```
1 Y AB
```

1

```
'?8+
      Α
            SS
      Affidavit
                                                . < )(+ )U(
1
11
      Agent
                                                 * B
                                                       + ,
      Agitation
                                                    )(
                                                    + * (=:+
      Agreement
      Allowance
                                                BG
1
      Amenity
      Anti-Corruption Officer
                                                B? 1 (: *:
1
                                                * )+* )
1
      Appeal
      Appointment
                                                 (=0
                                                 ( =0
      Appoint
                                                         (
1
                                                *(= (
      Approval
 1
      Article
                                                 *(= +(
      Association
                                                  %+
      At Par
                                                    L
      Attendant
                                                   1
                                                      (+ * (=?
      Attestation
                                                  J
      Audit
                                                )6
      Ballot Paper
                                                          1
      Ban
                                                 ? -:+
      Bonafide
                                                   B
      Book -Fair
                                                       )
 1
      Bureau
                                                    ) +0
                                                     2)
      Cabinet
      Candidate
                                                 *B < + ?< + E5
      Care-taker
                                                    ) + * :
      Cashier
                                                    2#
      Censure
                                                             (
      Certificate of edical Fitness
      Character Certificate
                                                           @
      Charge !heet
                                                       @+U+,=
      Circular
                                                            18
      Circulation of "raffic
                                                          1)(
 1
                                                9 2# '+ '
      Circus
                                                           2
                                                      +EV +*()6(
      Citation
                                                ('
      City Booking Office
                                                         % + (' -= '
                                                                         )
```

```
EEA EC DYEA EE DE YDE
44
           City Compensatory Allowance
                                                      BG
                                                   ('
            Civil
            Civil Pole
                                                      (1(
                                                        B (
            Civil !ense
                                                  * ;(
            Civil-air-craft
            Claimant
                                                                 )( + )0
            Collector
      1
                                                     +E ( .
           Colony
            Colosal
                                                    . )+ QG
            Colour Blindness
            Communi#ue
                                                    W >
           Complaint
           Complementary
           Completion $eport
           Certified Copy
                                                         ? )
           Complementary Copy
                                                        ? + (< ?
                                                  Ε
           Composite
                                                    ), + 5X
      1
           Comprehension
                                                  C
           Contingencies
                                                          C
                                                  7
            Contractor
                                                        (+*:
            Confiscate
                                                  , 0
                                                                    (
           Corporation
                                                   ('
           Custody
                                                   * B J
            %ecorum
                                                       +.)(
            %efacto
                                                        +1
            %efaulter
                                                  @=
                                                               ( ) +-
           %efendant
      1
           %epreciation Charge
                                                   LΥ
                                                  * B L + * B L (+Z (+ 2, #K(
           %esign
                                                   ? + (' + ? (+ (
           %ispatch
```

```
B
         BA/B
                  E E A
                          EC D YEA
                                     EETDE YTDE
                                                          1 Y AB
 1
       %issent
                                                    5
                                                 * T
       %is#ualified
       %ivision
                                                   B , (+ 2) + X + B' + 2 , (
      &ligible
      &mergency
                                                 EG?
      &migrant
      &mployment
                                                       +(; +(,(
      &mployment &'change
                                                                      U
      &mployment Officer
                                                      +, 🕽
      &n#uiry
 1
      &nrolment (umber
                                                      ( 6
       &nrolled
                                                  (
                                                  (9
       &vacuee
      &'ecutive &ngineer
                                                                       ) K, (
      Faculty
       Finance
                                                   [ + Z>
       ) a*etted Officer
                                                      @
      ) a*etteer
      ) a*etted post
                                                  * (= (+
1
       ) rant
                                                                 (
1 1
      +ncentive
                                                  ?G
                                                     (
       +nde'
                                                   1 + * (9
1
       +nitials
                                                  * /J
      +nsured ,etter
                                                           *
1
       +nterim
1
                                                       +* 1(
       +ntelligence
                                                  ?¥ '+-=V,
      +ntelligentia
1
      +ntensive reading
                                                 ' (7(
1
1
       +ntention
                                                  * B ? + * .
      -udgment
11
                                                  (
                                                 *:
111
       -urisdiction
                                                         J @
       ,edger
11
                                                 6
                                                   8
11
       ,essee
11
       , iaision Officer
                                                 * (=J + B
11
         aintenance
                                                                  + 6 6
                                                     +- )'+ , + > G
11
         a.or
```

L BA/B EEA EC DYEA EE DE YDE I Y AB

3<4 Copy forwarded for information and ?) 1(< * . (ecessary action) ? ;4
Case may be kept pending

pjwbl (ielkit !bl"e" (jnrl ! #w\$ %3 5(5381(t)-7.60366()5.04165(!)4- 8.04 Tf1 0 0 1 162.24299)-9.

pjwbl (ielkit !
bl"e" (jnrl ! #w\$ %jw& Apl* mel'('+ % iemiq) wn lel
smstr cQw

 $\begin{array}{ccc} & \text{eb nel "00} \\ & \text{fbyshl} & 20 \\ \text{fJNoBb n; ;wNl "0} \\ & \text{; wKl} & 3 & \text{N!} \end{array}$

BA/B EEA EC DYEA EE PE Y PE ; Y AB

OK);O

- & & , ()

E E E

Paper - Sanskrit:

!!"#\$" \$""

"#\$% &-'(%)\ &-+(,

- .-/ 0123

%456 8 9:3-

- <= > ? %A @B C 9D E ? -FGH %A H I J . KLB M3BN O P @B C
- %Q%8Ft BO . 57FR 3K% . LT U "V 8/MK? ., N/% %5 %4X F8 H Y . B

 NVZ . B [NNE #V 94 % H%%0\ < 3]4.] 8]4 @^_`%5 % P. E K? . 4

 4 C
- _- 3K%%a @% 7b) S %Q%R -FG 3% [%I G 4C
- -FG RC 4 %4d0P@CK!%Q%8R B-FG 3 \ \W.4. E JBe 4C
- > K?.4 .4f %.g"<%012,<%-h@@BH%- M4 %.g i BM 74 32f C3
- -0 <= [17] <% 7 K8 %4% jk% I #;. @rch

nopq-p

٠.

 $/'|_{-}$ "-2 $_{T}$ ")c t $/_{-}|9J24-9$ R t //|0-<-e4

/_"|%) -%) t /†|5™ "¶V5\$e 4 H5\$ V

BA/B EEA EC DYEA EE DE Y DE I Y AB

Q K);0 -&&,() E E E

Paper - Sanskrit:

42

! +(«' ({' ((

"#\$% &-'(H%)\\ &-+(,

- .-/ 0123

%15 8 9:33-

- <= > ? %A @B C 9D E ? FGH %A H I J . KLB M3BN O P @B C
- -FG4¬%Q 3x' < %D.E-3%%V 4C
- _- 3K%%a @% 7b) S %Q%R -FG 3:% [%VI G 4C
- -FG R]:%4

BA/B EEA EC DYEA EE DE Y DE I Y AB

D E t E E E 1

ros n o tr



n ţ

Epnono rss nr F q r m r D r rn Z q r As n n n n o n n n
o n sr on n n p n Frq or np r
r s

Ginr¶rrrC 11 ji 1

T 11 **T** 111 1 n 1 1 **T** 11 C 1 1 1 1 /

E A E t

nstr tons to t pprs tt r- nr

The rW on pprn y sr rn sro rs y nn nrn Assss no irs or s ssono

prA ros								r s
-						n rn	Ass ss	n 1
							7 5	ho rs
	7.							
1 Torns on o psnoEn Epnono psnoEn	91	r	n (or	rs n			r s
Ennono psnoEn	so n	r	n	or	rs n			r s
								1 5
r _y or nr o y	pr s r	s n D	S 11/1	₹	h			r s
p r q s ons on 🔑				•				r s

Boosprsr 🔭

s Frs

y B

r ss B

r n D y

n

o M

n por ons ro ros on

The rW on pprn μ sr r n n sro r s μ n n rn Ass ss n o i rs or μ s ss on o i

prB otr

r s

F E CH E EC E

E E E S'

E C TEHE A DEX. TE' G TE', A S' C EX A D C TEÀ E

r s ; r s ;

st ons

 $F_{\stackrel{\bullet}{\nabla}} \quad \text{s ons } n \quad n \quad n \quad r \quad n \quad s$

rosi, ntnA + tCsr n

BA/B EEA EC DYEA EE E F

GE A E t E E E

o so on r s

rs rs fo prA for rs n rn Ass ss n i rs

s ons n pp r r n n n n s on or n o pr s r oo n G p r s i i p o p q s ons

s ons on C r C on ro prsr oo oo Ch p rs 11 pop r s o o q s ons o p

GE A E t

rs Fo
En s rE p r B Fo or
r s
n rn VAss ss n on r_v s s ons n pp r r n n n n k n s on r n o pr s r oo n Ch p rs i r s q s ons s ons on C r C on ro p prsr oo n G p rs i o o q s ons o p r n r no n on stor sor r s r oo F - s n n
n r n r n o p s i 7 i r s rs ot r , o E n t on nt rn Ass ss. nt Con n o s E on A n n ot ı n prB rsr too. n rs n 1 E ton r r A rs r r o G p rs i

T - s n n n r n n r n p i i pp nt r 4 oo i n Ar s n z r A rsr o G p rs i

BA/B EEA EC DYEA EE **T**E Y **T**E i Y AB

A E t

Е Е Е 🔀

A E t E E E ;

prBGnr rns ton Gr r Co poston n Co pr nson, rtt n

B EC 1

A ABCE t

BE GA E t

 \mathbf{A} \mathbf{E} \mathbf{t}

E G \$ 4 \$ 4 4 1 1 t

HY CA ED CA B₄A₄ GE E ²A³ H ²D³E E E ²E²XA A 11.11

rs

rs

rs

rs

rs

rs

rs

Fryn nn q s ons n spr o r r n s

rns ro rnnı

• nn n ons psn ors n rns ro rnn

•

BA/B EEA EC DYEA EE DE Y DE 1 Y AB

Cr B "Psychology and Physical Activity" En W oo C s r n 1

o n r E

BA/B EEA EC DYEA EE TOE Y TOE i Y AB

nr str tr − ts n pportn prsonn ı

For m n ro on/o on n w m m s s o s m o w n n or r q r n s

n rn Ass ss n

F THE A E TE E TO D

The rynnnq sonsn sprograms

q s on ro μ n

A q s ons/ n & rr q r s

r n snhs nsoh ners hooo pn mn

1 rs

Enrs, s n n μ n s o μ o r os s shor n r p q s ons n r s q s on n o μ q s on p p μ μ μ s o p sor

1 r s

spr tor st

- nno spron pso spron rnso n spror 5
- F n onso p spror p p n s sr n
- yn ns n r Conro o spr on

D st st

- nn porn n rnso D s 🔻 🤻
- Fn ons prosss was nar r orso Ds r

1 rs

Cr tor st

- nnohr orss rssrrnonsnonroohhrr
- ros pso oo sssn nr n ons
- C r C

Boo

- nn n ons n o pos ono oo
- n n n o oo s pp
- Boo rops n pr por n
- Boo Co n

Con Ds ssi

nnoon ssCon ssssps /AD rpsAB Cnpnsprosornsssonn posopronon

Yo ı

- nn n o Yo

- poss sn rsn n ysn yr yng pr onsn s/ n s sn By n sn r, n sn n Dynrsn yr ryng pr onsn yng pr onsn s/ n s sn sn sn sn r, n sn n Dynrsn yr ryng pr onsn s/ n s

$\mathbf{B} \mathbf{s} \mathbf{s} \mathbf{o}$ nn sı

- s or 50 h n s
- Eq p n n sp ons
- rn/ooor snroonsnropprsron

ports n r si

- B s s o por s n r s
- Co on pors nrs s 🗗 s spr ns sr ns r s o r s ons on son rs nns 🕅 🏗 r sspr_n nr
- n n r CE o spors n r s

Ds t n tton

- nn ps ssnpr n s r s o s ro so'n s n's A' 77 n'n n' or s

rn sı

- B D "Handbook of General Anatomy", CB 91 rs n Dsr ors Frs E on G₁ rs 1 1
 - D n E of 1 r ZY r A "Health Education and Community Pharmacy", on pryn pr V Dp pr n n l
 - "Occupational Diseases: A Guide to Recognition and Notification", Go A s r nsr_vo orn E po_v n V D μ 1
 - "Text Book of Preventive and Social Medicine", 1 " E on 1 Ε r B₁ no pr n
 - "Anatomy and Physiology for Physical Education Assistant Professors", rro Arno
 - "A Review of Occupational Health Research in India", C n r nDn 1
 - son "Foundations of Anatomy and Physiology", " E on 1 1 pr n "Complete Guide to Sports Injuries", Frs n n E on 1 n Boo W Dn Co .
 - r B "Human Anatomy & Physiology", Frs E on 1 ри Βr ons D *n*
- n F "Rehabilitation and Remedial Exercise", B 11 þг on on 1
- r An n "The Complete Book of Yoga: Harmony of Body and Minds", r n p r B
- "Preventive and Corrective Physical Education", For E on 1 or F E nD s on r ss Co Y Yor
- Tyn n "Kaivalyadhama", on Bo 1
- n r r p "A Teacher's Guide for Beginning Yoga", Frs E on 1
 nns_n A Fo n ons 1 mns nns
- n r ns on "Health Hazards of the Human Environment", n 1

ED CA B₄A₄ GE E A EC DYEA EXA A E E E E

pr. YCH G CA F DA F ED CA

GE E A C F HE A E E E E

In q s on p p r ons s o n s n n n n n on s o
q s ons ro n r sp n o n s s s n rr i r s n n o ons s o
t soor n r p q s ons n n r s s s n or n n rr i
r s Th s n s r r q r o p s or n r p q s ons o o n n n n n n
o p sor Th q s on p p r n o p r r rr n rn s on o r s or n s q s ons
o on n q s on r r s n r r s n n r

Frence DDA E.

The sense of the CADDA of the CADDA E.

The sense of the CADDA E.

The sense of the cadda of the CADDA E.

The sense of the CADDA E.

The sen

1 To n h s n s o n r s n h p r sp r o s o h r r n n r on n n on op n o h

To n y s nsonrsny on poprson n sp nE on

To hs us ns who on pso Eoons rss n rss n n on os ns

C ZEC E

BA/B EEA EC DYEA EE TOE Y TOE I Y AB

E o ons n rss Con p \overline{p} pso rss \overline{p} s shoo n o rss n \overline{p} \overline{p}

BA/B EEA EC DYEA EE DE YDE IYAB n ţ

o o for nn r or rr s n o rr s

n ţ

• AnsoA E on ornnnr.

gisn h Aşı h TWO rs A Co prin ns A E on pro r n n A E Asso on W D in i

o o rr s n o rr s n A s n A r ror s on o os rr Fo W p n Con n n E on o o rr s n o rr s n A E on

To r C p n s Con p n r s
os r 7 ro nn n A n s r on ppr ss on
A n s n o n r A E on o rn n n on o rn n
o rsp s on A E on

rpron n nnn o A E on rors Connn E on Airnss nrn rors D op n n n n rs rors
A E on n s n N n D op n n
D ns on o on rn n
O rn n o on rn n r or Ass rn n n s
A r on o ns ons

r s r s E rn r s n rn rs

rt p t on o t t nts n t o o n i

i ssou o rn n n on o rn n A n s A r por nu or o o s nu pr rn n A s s or b u n A s

Boo s 0 n 1

i D C

A E on n n n n A E on Asso on W D n 1

To nnoAE on ror 1
To nnoAE on Fnonrs DAE 1

A E on rnpsr sn rospssrn SnrsDyn i

A B Fr s n C D

op on E on or h Yo n r n r on F nn n Asso on o n Bo 7 on Asso on o n n n A E on Asso on h n n A E on

* * * * * * * * * * * * *

BA/B EEA EC DYEA EE DE Y DE 1 Y AB

C O

BuAu GE E A EC DYEA LEXA A 11.11

E E E E

Gnr nstr tons

n soppr n spr

i not o Apn s rosors Epny o Un p y BoBn y r n not o y nso s n o m ro

n t

1 Br s psopr srso s n pronr ons s A y n n
By s n osy

n t

1 Dsrponno onso poprsr sn To s

nrynnonnr n

Town r h n n on o h prsr r s ns Bh r h Apn

Tool r prsr r sons ShinApn Tons
Tool r n no ono To n p Gorn n n r D
Tool r n srpono n non s Gonr ns n

, q $\pm \pm n$, q $\pm \pm \pm n$ q $\pm \pm t$ q \pm , q $\pm \pm q$, q

1 Sangeet Visharad

Rag Parichaya Part II

Sangeet Kaumudi Part IV (Punjabi)

Hamare Sangeet Ratna

Sangeet Sar Part II

Kramik Pustak Malika Part I to IV

Rag-Vigyan Part I to VII

Sangeet Shastra Vigyan

n jn s

n ry y hrs

n r_v v hr s

Tr n n r n

nn r n

nn r

, **C** o

E E E 🔀

Gnr nstr tons

n sompr n shr non rn ssss n n h r so n n h rn ssss n n h r so n n h rn ssss n n h r so n n h

The rwo pons nsnons on npr ss

The rynono or penns nsn peoppr non ron N no N sopn n no sym sn n A n rs

To n n o s on N n s or To

The n nso nsr n s W is T or o s

y snn y s sopprs rn y or y s prsr or y pr ppr y o soo sn or D n Brn y

n nine q s on so s to q s on p p to no n s For n so on q s on ro n n n n q st on o n t s o p sor t on s sts o s ort ns rq st ons o rn n tr s s s q t or n pr t o to st nts to tt pt q st ons o r s

r s

HE V or on Drton nts prt dorprospr

prB r t n s r on r s

r s r s r s

n rn Ass ss n **b** or r

n ţ

1 Br s pso r srso s n pronr ons

s Arµn µ s F h n h n r h h r

n ţ

D s r p on n o onso n pr s r s n T s

To r n no on r n n n n n n pr s r o n s s

To r n no on n n n pr s r r o n s s

To r n no onso T s op T

BA/B EEA EC DYEA EE $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,$

Boo s To The state of the state



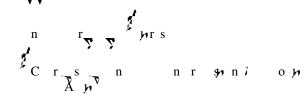
1 Sangeet Visharad

Rag Parichaya Part II

Sangeet Kaumudi Part IV (Punjabi)

Hamare Sangeet Ratna

Sangeet Sar Part II



u L Z Z ML s
L L b M Z u u L L Z Z

rs n n r n \$9 rs
A Ton n r C To

BAA GE E A EC DYEA E E E Y DE ; Y AB

C nstr nt

BAA GE E A EC DYEA EXA A 11.11

Gnr nstr tons,

n sompr n smr non rn ssss n n m rso n n m rn ssss n n m rso n n m

To rW o pons nsnons on npr ss

The ryno no or yen ns nsn

n ţ

A Som M GM n n n n n r r r sn s s D n ons n p n ons o m s r s no or m n i W or s p n n m s Z - r n n

n t

1 Br s µsor srso s n µronr ons s A Shun Zrun

nn

n

Sangeet Kala ka Itihas

Gnr nstr tons,

n sompr n shri non rn ssss n n h rson n h
rn ssss non pr n on sh propor on n rs
n nn q sonsi s ro h ho s son sh o o h h h n s r o
p on q son ro h n n sop sor onsssoishor ni rq sons
o rn n r s s h or n pr o o h h s n sh o p q sons
rr n i r s h
ron / rn h o p / hr o ron h h n h
orpr n on
r prsh s ro h s sor p r B r

prAi HE V

s psn onr onsopod n
s Arssnpn
s Bprnp

•

BA/B EEA EC DYEA EE TOE Y TOE ; Y AB

, s n n C ss D n

BAA GE E TAP EC DYEA TEXA A B

E E E 🔀

Gnr nstr tons

n sopr n syrvo nonrn ssss n ny rson ny rn ssss n ny rson ny rn ssss n o y pr n on sy proporon nr s

The rvo pons ns non son npr ss

The rvo no or y n y s ns n y or pr n on on or ron ns r nsv v or y r npr n on on

The n n n D n s on v p o s

The n n so ns r n s v y D n

y s n n y s s opprs r n y or y s s sprs r or y pr ppr

y o so s n

n n n q s on v s s p q s on p p v no n s For n sv

on n v o q s on s y n y n s s r r q r o p o r q s on s s n s

on q s on ro y n The n n y q s on o n s o p sor on s s s o i y or

n r q s on s o r n n r s s s y or n pr o o v y s n s y o

p q s on s o r n n r s s s y or n pr o o v y s n s y o

p q s on s o r n n r s s s y or n pr o o v y y s n s y o

HE TO FOR PORS

rs

n rn Ass ss n For or n r

prA HE 💖

n ţ

I D n ono n o W n
r n F sr r n Cn sr r n r
Br n O o n
por n o n n roo n n D n

n ţ

i prnso p Dn nproprson rsn rso p Dn Conrono nrnnp o p Dn n ţ

1 nW oyr r
nW oGyn r
nW o rn nsr nss n y Dn

n ţ

i o ono To n Bo To rnE n D n n 1, n rs n A 1, To n n E o ono Grent For Grent print on nA Grent on ono Grent production of nA Grent on one of nA Grent one of nA Grent on one of nA Grent one of nA Grent on one of nA Grent

n ţ

i In nny q s on o n s o p sor on s s o i shor no rq s ons o rn n r s o o o w n y s

F EA S

BAA GE E A E E E E S

EC E E E S

prAi or Hstor o Art

EC , $E \stackrel{\text{def}}{\sim} B$ C E $\stackrel{\text{def}}{\sim} E$ AY.

st 🧀 n sı

rrsy ryo nnny D nrn Boos Corpor on V Dy i
r C or The sor n C ronnop o n prn
nn ons on The Arn Ary ron n n Boos r Brn i
r V A ryonn n pr ny r non r sy rs W Dn 1 **7 7** /

H Y FA Y B₄A₄ GE E A EC DYEA EXA A 11.11 E E E E

r s o rs

ot 1

EupprCrrsi rs
The pprs rsrqr os q sons n The n so p q sons sprhe
nsr ons n n h q s on p p r

nsr ons nnh q sonppr

The rs q son so o shor no r p on nn i q sons spr o rh who s s E h q s on s o no r n o o wors shor r r s n sh

n ţ

BA/B EEA EC DYEA EE TOE Y TOE I Y AB

r s fi

ot 1

EmpprCrrsi rs

The pprs rsrqr os q sons n

The n so p q sons spruns r ons n n y q sonppr

The rsq son so o shor nor p on n n i q sons spruns r sq son so o shor nor n o son n n i q sons spruns r sq son so o nor n r n o

The snarp or saling rors as no noosas and range

nson r n r n n o r n E z n

To rn r n

A W

A W

st on si

History of Art, The s son on on i

Art Through the Ages, ror Br Co A i i

The Story of Art, y on r ss W Yor 1

The Dictionary of Art, n 90 rs W Yor

Indian Art

pr H WADC BF DAF SAAD. AD.

, • 1 r h r s S

1 rrs Chh ns

1 h s

1 91 r s Gio s

Ess nt in si

1 A r A

Rastrakutas and Their Times,

F HE A E E N D HE DE

Note: 1 The rW on prorpero rs Then rn ss ss nW o 1 rs
The prorper proper proper not rp q s on on nn 1
q s ons o rs prorper proper not rp q s on on nn 1
q s ons o rs prorper proper not rp q s on on nn 1

BA/B EEA EC DYEA EE TOE Y TOE I Y AB

EC ,

r or n on n B To pinq so pi Ar 7 n r pir n n pi

BA/B EEA EC DYEA EE DE YDE i Y AB

EC A r t st

, r sı

ot 1

1 Torw progsons n rrn rs n n sw rqr o

Brr ng An n Ar o r os Brr n o 1
B o r sor o n s rn or o 1 D C po r ss 1
F r FC Ar n n s or D C po r ss V Yor 1
F r FC Con o r E r po V oo 91 r r Br n 1

D s A Social Background of Indian Nationalism n n rs n on B r n B Making of a Nation: India's Road to Independence, 1 o 1 1 n 1

H Y' E E E ;

F HE A E E A D CA D DA E

This shis n no or ns
Thirs, shis n no or ns
on nn i shor q sons sprogram those so ns rn o o wors
n The n srrqro p n shor ntr p q sons rr n i rs
rso n son p pron or n n s E n n shin to ss

BA/B EEA EC DYEA EE TOE Y TOE I Y AB

pr np1

BA/B EEA EC DYEA EE DE YDE 1 Y AB

CA CE CE

B₄A₄ GE E A EC D YEA EXA A

E E E E

 $DAGE \stackrel{\bullet}{\smile} E A \stackrel{\bullet}{D}_{\leftarrow} C$

t s To sp p r pro ss n So n s n s n n n n n s n ns onso o n n n po s n pro ss s n n on n n n n s n ns onso GE E A TO CADDAE.

The syllabus has been divided into four units:

The rest of sons in the rest sons of poor in the store in the rest of the rest

1

Pure Theory of International Trade: C ss n spr n n n n or s n propose of Trade: Con p n propose s p o propose on ssp op Connercial Policy: Fr pr s room ssp op Conr s

n ţ

Balance of Payments: nn Con p n Co ponnso B n o ns Ds q r ny B n o r s r s o orr

EC, C

B₄A₄ GE E A EC D YEA EXA A 11,11

prı A A E. E H D

Cors y t

The open ors sornings and in some one of the solution of the s

F THE A E TE E TO D CA D DA E

The syllabus has been divided into four units.

The rest of sons in Aqsons rrq restricts requestions of the sons rrq restricts responsible restrictions of the sons restricts responsible restricts restrict

Boo s vo. n

Ar n C n ps 7 p C 1 n o BW n 11 D C 1 n þ poor Y n To 1

An Introduction to a Mathematical Treatment of Economics, En 🦫 n Boo o n n o son 7 Business Mathematics, n G, n ons W D n E ono ss rn

C GY

CA SC TEA D CA CHA GE

rs rs rs rs rs n rn Ass ss n rs o rs

F HE A E HE E A D HE CA D DA E

For r nppr n s n s rq r o p q s ons n s on o v o p sor o prs n o i s or n r p q s ons o rs n n v o r

 \mathbf{C} $\mathbf{G}\mathbf{Y}$

B₄A₅ GE E A EC DYEA EXA A 11.11
E E E E

C A

F HE A E LE D HE CADDAE

For r nppr y s ns rqro pqsons n son o

op sor oprsnoisnorm rpqsons ors y n or or

n nrs s p son s ns rrqr o p sor n rpqsons o i

r s

n on o son os o XV ons so on n rs p qsons o o
qsons ro y n n y n rn y o rr n r rs y rs

B CAD.

A E L E E AD. A H ECA THE TE CE DA

rs rs rs rs rs n rn Ass ss n rs o rs

totopn

The open spprso prospprsop

n ţ

or C s so δ or n s r s or pro_ n Corr p on n A n s r on C s s n A nsr pr ns nn prsA n s n Ds n s

Ess nt in si

D r 1 Personnel Management and Industrial Relations. W D n s n rs Public Personnel Administration. W D y r n sy rs

Public Personnel Administration. W D y or n B T A 1 Public Administration: Principles and Practice D y A n ons St rs

A E F A C A AD A E E A EFE E CE D A

🤻 t sot 🚁 pn

The operation of spprso the solution of the spprson of the spprson

F 3/A E 3/E E 3/A D CA D DA E

For r / n rs y noo o p n rn n s n s n n n n o n ss ss r r or n n rn y ss ss n n r r s s

BA/B EEA EC DYEA EE TOE Y TOE

n ţ

•

pn, E E 🗲 H C

A s n + t sı Finsppr s n ns n non n ro En

→ YCH GY BA GE E A EC DYEA EXA A 11.11 E E E

🖣 t s

The ors nro somes nsh nr on psnhsor ponsn prn pshoo The snsho so nn rsn noh ros s s shopps s rnn The sors so nn sh nopshopps ss s s n on spso sphoo 4

ss n ns s ss on ns nrs n ss

p n EX. E D E A YCH GY

To or r Ass ss n r s

FHEAE'E EAD HECADDAE.

The results of sone of the results of the r

YCH GY AC CA

r sz

Forpr sy opror oos

I I o on Thr \$10 r r son

Drn Forson

rnn
Brfsns roffrnn

st 🤣 n sı

I Bron A spoon N D n rson E on

C r D n ro on o spoon D n rson

D s i n or n n An n ro on o spoon N D n

F n i n rs n n spoon N D n T r

rr E i s s n spoon n E on N D n s F r n ons

rr E i s s n spoon n E on N D n s F r n ons

:4 or n Fr n r B i i F n n

\$

YCH GY, AC CA

r s

GE G A HY E E E :>

pr GEGAHY F DA

To osrnnrsnno prpps n rnspon nh on o oh As As nh or r s r n on so s r s n ţ

r s

Agriculture: Con r r s s n pro or rops r sonnr r rr on s r n o on n Foo s r y y sp r r n o n Natural hazards in India F oo Dro y n n E ryq r s r s

n t

Population:

r t s

Co rs Cont nt

Introduction: n

Physiography:

Ess nt 🥩 n.

India: A Regional Interpretation, n n Co n o o n s r n D n i

genson B C India: Resources and Development, Arno n nn on on i

genson B C South Asia, n nn on on i i

n r D India: A Comprehensive Geography, n sn rs W D n

pr CA G HY

BA/B EEA EC DYEA EE DE Y DE 1 Y AB

For r pp r/ pro n n s l 10 1 no n ss ss r r or n rn Ass ss n p q s on p p r s n p r s p n o rs o o p p r s on rn p p r s p t not p t p st on p p p r

sto 🥩 n s

Ess nt 🥩 n s

noo Drynnny

Geography of Punjab, 4^{th} Edition, n

 $Geography \ of \ P\ 3.4241(f)0.8916\ Tf\ 24342657(u)6.69126(e)8\ 9.\ /R16\ 2(i)0.89126n-0.89126(e)-1.78252\ vi, J\ 1\ 447.72\ 598.08\ TTd\ Gabgraph$

pr CA 🕻 G 🐼 HY

r s ors

Dstr tono, rs

r nppro yors r on

n r r or

1 rs

r s

Dr f c.

- Propprs hs ns hs o one rn pso orph n pono
- Topro rnn npp ono rosrph hoso pn orph
- For n is n son rpr is opor pis s rns s

Co rs Cont nt

Foporpi ps on r C ss on n n n n App on n or pi s (4 lectures, 4 lab sessions)

(8 lectures, 16 lab sessions)

E nr, o ns n D n on Con p s or App on Ar s n pso p or s (10 lectures, 8 lab sessions)

nro on o Conpo n CoprCrorpy
D n on D op n D s p n on p

Coponns r r r o r n

App on
r p r on o n r p s B r s n Q r s s n Cop r s.

(10 lectures, 10 lab sessions)

ot i

s p r n on n n o so on n on r spo o s ns spr ppro rssp prpr on n spo y n nrs ro n prs r s s

r non presposson on connern non runner promotes promotes presposson on connern non runner promotes presposson on conversion of the promotes presposson on contract the promotes presposson on the presposson of the presponsibility of the prespon

64 Fors nso Wrnhorppror rssh on prpr 7 n n rs on s ns ro prs r s s pro rssh prpr 7 n n rs on prpr 7 n n rs 7 or

 Frtr 🔰 ns

i Bryn **T** M

G n n Et s

E on

To or o C on

or n on

G n n o st

GA DH A D E

B₁A₁ GE E A EC DYEA EXA A 11.11

E E E

CA H GH F, AHA, AGA DH

> rs 1 rs n rn Ass ss n 1 g r s o rs

Cors 🤻 t sı

The ppresence of the presence o ot Cors or i

rs n n pr rs

1 n ss np ss ss n ns n n n ssroo pr p on

The same she s noor ns Note: 1

The ryn q sons n

Find resident of the solution of the solution

sohpprs, on nor nsn hn sh h voq sons n h n ssn vn nrn ho h n ssn pon

1 1 1 <u>7</u>1

1 11

on n ot s

rh nn Ess n s For s n n

rh ss s s n

pr — on o o s

Cont por r n

Co n r on

Ass ss n n Con por r n

Ess nt n s

By hr By

Bron h

D₁¥ n

n þ

n þ

n 🌶

sor An D

r

Gandhi's Rise to Power: Indian Politics 1915-1922 on on C r n rs r rs i

Political Philosophy of Mahatma Gandhi, An nosing nosing nosing E on

An Autobiography or The Story of My Experiments
with Truth An V n sin

Satyagraha in South Africa An

Mind Swaraj An ¬n ¬n ¬n ¬n

Reading Gandhi, W D M Dor n n rs rson 1

The Political Philosophy of Mahatma Gandhi & Sarvodaya, A r r n A 1 1

E E A TAD G

i Br D Do s A An rson

BA/B EEA EC DYEA EE TOE Y TOE 1 Y AB

To or n rn Ass ss n rs

To rs

To rs

Tr s

Ang Prtsi
To ors Winros nsom syngsown prsnnorm ron
To

F HE A E E D HE CA D DA E

The rest of sons in the residue of sons in the rest of sons in the rest of sons of the rest of

BA/B EEA EC DYEA EE TOE Y TOE 1 Y AB

CE AD.

BA/B EEA EC DYEA EE TOE Y TOE

BA/B EEA EC DYEA EE TOE Y TOE I Y AB

CE AD.

n ţ

BA/B EEA EC DYEA EE TOE Y TOE

BA/B EEA EC DYEA EE DE Y DE

nt, on n or i

Frt r 🔰 n sı

i A Arn As ser n o n n o n n or s n rr W D n
A A-r As n r E-r n o F ns A-on n n, s o o n i i

BA/B EEA EC DYEA EE DE YDE I Y AB

н А АН В

B₄A₄ GE E A EC DYEA EXA A

E E E 🖈

A E H A CH D E DA

rs i rs

BA/B EEA EC DYEA EETDE YTDE IYAB

Ess nt 🥩 n s

1

BA/B EEA EC DYEA EE DE Y DE 1 Y AB

H A A B D E

E E E

A E TH A TH E DA

🤏 t i

Find be a second to a second t

F THE A E TE E TO HE CADDAE.

For r nppr h s ns rqr o p q sons n son o o p sor o prs n o i sor ns rqr o p n n sor ns r p q sons o rs h n n o q sons o o i r s

n on o sons o o XV ons so on nV r Ess 7 p q sons q sons ro y n V y n rn yo rr n 1 r s y 7 1

i H , A A H AB

Bon or nor nor or Gror

BEAD, AC H, A CH

 $\begin{array}{ccc} u & b & 2 & u \\ o & L_{L} & 2 & \end{array}$

H . A \mathcal{L} H C \mathcal{L} A CE

1 **1** E**1** q **1**

TE¹ G H DE

B₄A₄ GE E A² EC DYEA EXA A 11.11

E E E E €

AE D H B G ADH D

rttn intrn is rsq

🤏 t s

F A E L A D CA D DA E

o For r nppr y s n s rqr o p q s ons n s on o

v o p sor o pr s n o i s or n rp q s ons o rs y n v o r n

n r s s f s n s r r q r o p n n n r p q s ons o o s on o

o v o r i r s X

o wo rr i rs X

n on o sons o o X ons so ton no r Ess T p q sons in n

r n r n o o r n s n n n n n toq stons o ns r n rn no o

n n n n n q son n n s son s n rr r r s x i

Co rs Cont nts

nt,

 $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,0){10$

Thuns n Conron ron ron rr rrynn r To Burn ron nu rroo r Toubur

n t

To pins n Conron By s n By s

nt,

Cop ono p Adi Granth Fon ono p p s

Ess nt in s

- nfwşgkb e'b, vka (wiy ; gka) y'i gfsæk, pkDheko ftùù næ-57 wkou 2003, gpbheùB fpUo', gi kph
 : Bhtof; Nh, gfNnkbk
- ni wb f; x, vka (; gka) y'i gfsæk, gæn: 'ykb; k ftùù næ, gpbheùB fpUo', ga kph : Bhtof; Nh, gfNnkbk

•

AE D H E A TAD

r tt n 1 nt rm 1 8 rs

To orsssn orpsn Nown o

Ess nt n s

- Bfordo e'b GkNhnk ns/ i ; ftrdo e'b fYbA, vka (; gka) gqv[y f; ly ; z EktK, r[x] BkBe d/t
 : (Bhtof; Nh, nfwqs; o
- skoB f; x, rppkDh dhnK ftnkfynk gDkbhnK, gpbheÙB fpUo', gi kph : Bhtof; Nh, gfNnkbk
- doùB f; x, vka, Xow nfXnB ns/f; ly nfXnB, gpbheùB fpUo', gi kph : Bhtof; Nh, gfNnkbk
- pjwirdhù f;x, igjih, ftukoXkok, gpX s/gkm, tko; ùkj ckT(vùB, nfws; o
- okw f; x, vka i g|i h d/gi yw, gpbheÙB fpTþ', gi kph : Bhtof; Nh, gfNnkbk
- gofwdo f; ⋈, feogkb f; ⋈, uwh dh tko, bkj 'b p[e Ùkg, b[XnkDk
- osBf; x i lrh, uwh dh tko, rþwfs gækùB gfNnkbk
- jop; f; x frnkBh, uwh dh tko; Nhe, ; fjrb fg¶No~ i bXo
- r The Sikhs of the Punjab, The New Cambridge History of India D n

BA/B EEA EC DYEA EE TOE Y TOE i Y AB

E S. E C EA

AC CA

Poprpr sr₇r por on no s po on no ro

BA/B EEA EC DYEA EE TOE Y TOE I Y AB

pn r n A Cors o p An ss Ch n n

BA/B EEA EC DYEA EE DE YDE IYAB

pri AD A CED CA C

r s o rs

oti 1 This siss nsp nowons n n n Forqsons s
ro yn n
As nw s o p q sons n swoqsons ro
n n Enqson rr rs
pros n s n prpprp w n n
or
n rn 1 1 1 s p

BA/B EEA EC DYEA EE DE YDE I Y AB

BA/B EEA EC DYEA EE DE Y DE 1 Y AB

Micrprocessor: Ary, ro / rossor o nsr on Arssn os srs s n roprossor

Assembly Language: F rso Ass n n n s Ass n s o nsr on s o Ass or pro rs A on r on p on s n Bs np / p

System Maintenance: nro on o rospis o ponnso o prins nsp on n D nos son C pso sp s n on rprpir s sns n sol r Fin on srp on o rosn rn n E rn r's rss pso Co pr rss D on o rss ro on ro rss n o i i inC o ii is is is i Bp/ psi ii i prince by the solution of t

1

prC trnt-ror n sn C

t ot t st nts t p ton o ros d't ornt pror n on pts tro C pror n

Basic Concepts of Object Oriented Programming(OOP)

The renework of Object Oriented Programming(

Structure of a C++ Program: n s D r on o ss n n on / sr s

Classes: C ss D r on D rs rFn ons r n rs y n n n ps on rr y n ss

Objects: Cr n s A ss n ss rs A ss n r n ons ho s o p ss n r n s o n ons

Object Concepts: Arr s o s s s n on r n s ss r n on r n s ss r n

Functions in C++: r n on n on ns y ss r on n o s y ss r on s op r so on op r or r n on r n on s n o r n ons n Fr n n ons

Constructors and Destructors: Cons r ors D r on n D n on D Cons r ors r Cons r ors Cop Cons r ors Destructors D n on n s

Inheritance – Extending Classes: Con p o no r n s ss r ss nn r n pr r n pr r r

BA/B EEA EC DYEA EE F E Y F E F Y AB

st 🥩 n sı

o r

Ess nt .

i rosrp The C++ Programming Language, A son, s

E B r W Object Oriented Programming with C++, . H

OOP in Turbo C++,

Frt r 🥩 n i

pr.C Dt tr trs

ort s st nts ros t streters n oprtonspror on t smoot st streters n oprtonspror on t smoot streters n oprtons sn n pror on n

Note: The q s on p p N on s s o Forns

En N s o o Eq s on s o p r s n q s on s ro n n n

E o p sor q s on o shor n n r p o r n n n o p sor q s on

A q s on s rr q r o p Eq s on ro n n n n o p sor

B s Con pts nro on o Co p D r r n D r r op r ons App ons o D r r B s r r s Arr s nro on F p s o Arr on App ons n op r ons t s nro on or r pr s n on App ons n op r ons

n st pr ons r rs n s r n n s r n n op r ons on n r n s r r n n s r r n n on App ons po no n p on n r on n r on App ons po no n p on n r on n r on App ons

rnBnrn 10 Tr 1 or 11 r 1

A C

BuAuBu GE E A EC DYEA EXA A 11.11
E E E E

oti i An sporpss snBA/B on p/sporpss

pri A CA FE TE CE

or nt rn Assess nt

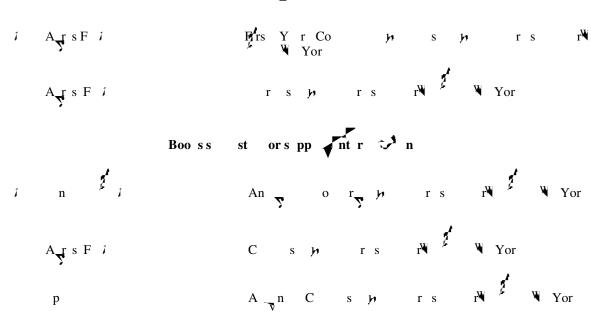
BA/B EEA EC DYEA EE TOE Y TOE ; Y AB

or sno pr n pr n pr n pr n ps o sn s sns C D BD D n pr n ss

∵³rn s

oon A p Ds pB Fn nso ss

Boo s, r s r



p

ED A C

s r s o sso on n on n n r orr on n n r r r ss on r o r s

BA/B EEA EC DYEA EETDE Y TDE i Y AB

prB CADAE

\$ Hrs■

prC A HY C.

\$ Hrs_¶

BA/B EEA EC DYEA EETDE YTDE i Y AB

st o E p r nts

A ttst s s s n r o n s i

BA/B EEA EC DYEA EE BE Y DE 1 Y AB

D nt s s

D n n r n

HY C E E E S

prA s n s n b r o n s fo f n n n r s p r B p s n s r s fo f n n n r s p r C n n s s fo f n n n r s f n n r n r s f n n n r s f n n n r n n r s f n n n r n n r n n r n n n r n

prA A CA HY CAD HE DY A C.

§ Hrs∎

s nononrop nn o nrop o ss n ron ron rop o nrop o nr s
o nrop r rs n rr rs pro ss s n r p s or on n r rs pro ss
E p so nr s o nrop nn r pro ss s Enrop n sor r
Br r v o n r s n v s o h r o n s C rno s C
App onso n r o n s o n r o n s o n r o n rop o p r s Eq on o s o s ro s p s s
ons r on nrop o p r s Eq on o s o s ro s p s s

 Dr_{∇} on O V s p r O p r ons n pp ons oo n pro

BA/B EEA EC DYEA EE DE YDE IYAB

prBi CADAE

\$ Hrs■

Laser Fundamentals:

prC A HY C,

§ Hrs_■

rns ons sonr sn s

prongron o

or n n pr n D nr o o n r s n sr r E ron

n ron n rors rq n ron spn n ron n o n o n ro n pr n

rn pr n spn or o pn ron n o n o n ro n pr n

sr r p so on rons s s Ano o s Z n n or so D n s

sn n B E r E

Grprs o Boo 1 Grprs 1 o Boo

r n Ans r on ons son prn p n ron os r r n n E ron on r ons n s on r s

Xr sp r no n on r on s sos A o r sp r s on r s

o r on n on n o s Cop o s o r sp r s on r s

r sr r sr r s ro on r on s s n sp r o o s r on r on n proport on n E n r son n pr n s.

Goprs o Boo 1 Gopr1 o Boo

Boo s st 1

CHE Y B_q q GE E 22 EC DYEA 2EXA A 11.11 CHE Y E E E 🖈

pr Cors

X nor n G sr A

X r n G sr A

X sr S G sr A

X or or r r n Hrs

prosp N

prosp N

prosp N

prosp N

ot pros-

pr X GA CCHE SA

n rn ss ss n n rn ss ss n

n rn ss ss n

nstr tons orpprsttrs n n ts

1

- i. Examiner will set total of <u>NINE</u> questions comprising <u>TWO</u> questions from each unit and <u>ONE</u> compulsory question of short answer type covering whole syllabi.
- ii. The students are required to attempt <u>FIVE</u> questions in all, <u>ONE</u> question from each unit and the Compulsory question.
- iii. Compulsory question carries six marks and remaining all questions carry four marks each.

Boo s st

i Co on FA nson s B s nor n G_n s $r_{\overline{\Sigma}}$

Hrs∎

A o os n nos
C ss on n no n r
ondo 7 dos o n r hoso or on 7 on o 7 s on s ro

Hrs

Third Law of Thermodynamics: rns p p or s n n on p o r s n rop on o so n rop ro p p s n p o n ons s n on n n p o r s n on o n ons A s p r o n q n s A s r r or p r o n q r n spon n p r n o r n rop p n n r on o n A n n p

nstr tons orpprsttrs n n ts

- i. Examiner will set total of <u>NINE</u> questions comprising <u>TWO</u> questions from each unit and <u>ONE</u> compulsory question of short answer type covering whole syllabi.
- ii. The students are required to attempt <u>FIVE</u> questions in all, <u>ONE</u> question from each unit and the Compulsory question.
- iii. Compulsory question carries six marks and remaining all questions carry four marks each.

Boo s s st

1

prX AB W W CA

nor n C str
n An s s

o r An s s
Es on o on n n n n s o pr n no r
Es on o rros n rr
Es on o oppr s n so n oppr s n so no p os pn

r - r An s s

E E E S

pr Cors

n Hrs

X nor n G sr B

X r n G sr B

X r n G sr B

X prosp N

x prosp N

n rn ss ss n

n rn ss ss n

ot pros-

prX GACHE B

Hrs

on q os o nts

proprso so n so so ns n pr nr pr rs s r ons n non q os so n pr r n o q n q

nstr tons orpprsttrs n n ts

- i. Examiner will set total of <u>NINE</u> questions comprising <u>TWO</u> questions from each unit and <u>ONE</u> compulsory question of short answer type covering whole syllabi.
- ii. The students are required to attempt <u>FIVE</u> questions in all, <u>ONE</u> question from each unit and the Compulsory question.
- iii. Compulsory question carries six marks and remaining all questions carry four marks each.

Boo s st

1 Co on F o C s on

Compinir.89126(.)25emarrp tttt 9(s).35849(s).365-1.822(l)0.8912J21(t)0.8912LxFge tncFgw cio.wht,s 71.52()-30r.8915662

prX HY CA CHE YB

Hrs. 1 Hrs.

r si 11 s

Hrs. 1 Hrs.

r o s.

BEC E F HEC A

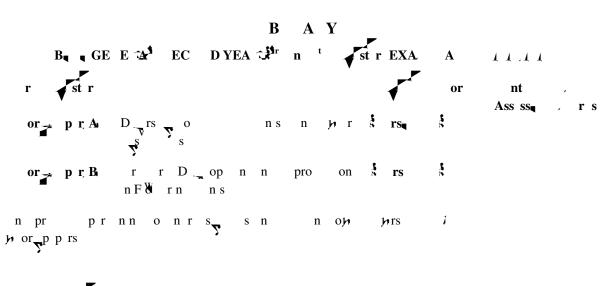
prX AB W W CA

ros-

r n C str or or T hnq s D r n ono s n n ono or n o pons prono so r r o rho n prnron n snh n n h 7 Er ono u vo

An ss D yono ns n n on rops p no ro s rs r on r s n s s n ro n n n s p or n o po n s r on

Gnr nstr ton to t E n rs



Fort str

D s s o Let or b t y ns n h r

rr Dopn n pro on nFW rn ns To or prB hrs

n pr prnn o nrs_v s n n oh hrs 1 y or p p rs

or p

ot

o

The n round or nor presers with the preserve r sp 🔻 🔻

Thr Won or pprs ABn ns sr Enpp Wonsso q sons s on o ill opsor nel ons so prson r no prsn C
n nrs prsl o nn nsorn n nrs snon n no prsn C
A B Thr nn q s ons np prs A B sn n oq s ons ro
C n s sn r q r o p on q s on ro n n s on o ill rr
r s n n r s o q s onsl o r s n B A Y
B Gnr r strE ntonD r A

HE A E A D E Y Y F EED, A A D HE Y E A C,

The sppre swift of one sppre swift on one sppre sppre sppre spread on one sppre sppr

n, tooo i To hin

st 😘 nı

By n r n or A nosprs W A n rn on Dy i
Gropr To oo o nosprs n Dy i
Dy n s so p r opy Tr n ons ny r i
n B Co Bo n o Gy n Co p n W Dy i
ny n C n n D A To Boo o Bo n Dy rs n s so
ns so ons r i
porn Th orphoo o nosprs y nson Co sy rs on on i

st 🥩 n sı

i Birdin n Birnr The Eroo o Anosprs on s sin o n n A An osprs r r D op n n pro on Fr n Boo Co n M n An o 7 n E roo 7 o An osp r s o ons D M 1

o ons o root st n

Thro h pr p r on o p r n n s s o ono o

A E A D E Y Y F EED, A A D HE Y E A C.

nr yar rso Anosprs nno n r n 1 T6 1 n 1 1111 1 T6

n r o n n nos r s o y o 🕅 n s n ono por n

Co pos As r
As p
o n
Solanum n Petunia
Ocimum

st 🧀 n s

G1 nopo

Grope An ospers s n C r p ons nyri

Dyn s so propy Fr n ons nyri

y s r For o Dyn C V Dyn i

ny n s s Fror or n B 7 i i F i i BE i

Chenopodium

A E B C TEDE E E A D TE DC F E C G

snnropopnsonry Thors rousppr Sinnrnsrro os pnprsyrrilyprnsnnor snsrr opn Thors ron on nysropopnspro spor os nsor qrn sndr o drnpns

n, tooo, pho noon ssrso rs n so hrs rnsprn s CD osssspr onsrons nson rsro prs ssssssssq op ons npr ss nso pro hrspipes rsro prs ss sor hr orphoo n no sss nso rosops n no rs n h nson oos/qp n

Ano oss sr r n Boerhaavia Nyctanthes Mirabilis n Dracaena ros hoso $\frac{1}{\sqrt{2}}$ prop on roprop on s hnq n s por n

or on D op n o n osp r n r op n r on n p r n n o r p n n o s p n n on o o p on n sp rs s r s \overline{z}

st 🤣 n s

Es Ano o ns n on on on on Yor i

Fin A n Ano o n E on r on rss or i

o n n A Anosprs r r D op n n pro on Fr n Boo Co

n n n C n n D A To oo o Bo n r r D op n n pro on

n An osprs s so ons r i

r s r r D op n n pro on n F to rn n s o r p

ons n n r i

s n C A To oo o n Ano n Co D n i

st ror tor E rss

rpronoprnnsnssos, W

Ano osnrnsrros n*Boerhaavia, Nyctanthes, Mirabilis* n*Dracaena* To s roo Helianthus
To ono o s roo Zea mays
To so n on

Dsrpono W rs n nn rs rwn FD To rn FF nr rn on rrsp so n nr non n rn s n or s n or s s

pr
Bors Gors Eo on
rs
pr
Bon sr Nsoo
rs
Corn n n rs
so nors r on
rs
ot r

ot in n robors or thor n r prw so bors n bors r sp

BEC E F HEC A

The same of the spring of the same of the

ors on nsr so n srss or rs on/ rps o Zoo o rs

ONNERS OF CONTRACT OF COMMENT OF CONTRACT OF CONTRACT

st 🧀 n s

1 **T** n

or rrn 7
Or rnn 7
on A
son D n Co

Boo o pn soo mon on property on sr on n rn on n rn on n r

print r rn p so Bon sr on Fr n n Co p n Yor

AC CA Fr t r s on or prs Z s s 1 Z 1

4 4

s Tops Dn onn s

Ornithorhynchus, Echidna, Didelphis, Macropus n roo Loris, Macaca, Manis n r Hystrix por p n Funambulus q rr Panthera, Canis, Herpestes on oos Capra, Pteropus

st 🧈 n s

rrFn 2 A

Co r E

 $E \circ \text{on o} \quad \text{r r s n} \quad \text{on} \quad \Sigma^{E \text{ s rn}}$

rrs Gnn Co W D n i

Con s Eo on An o on

A E S B CHE YA D HY GY Z

r s

To or E

n rn Ass ss n

r s

To or s

o nqsonsros sonoisopsoronssnosorn rp qsonsorn nhoos sonoisopsorons no shorn no rp ros ro nn nqsonso pro nn n F qsonsro pn no psoron on qsonsro sp

AC CA r t r s on or prs Z 1 Z 11

4

1 Css on poor rsp sp s sn pr rsn ono por n no por n n n n n s

Chelone **F** r n Testudo **P**or o s Hemidactylus, Calotes, Draco, Varanus, Phrynosoma, Chamaeleon, Typhlops, Python, Eryx, Ptyas, Bungarus, Naja, Hydrus, Yip4drus, n 1 to n CBct.891(n)-6.024723(w)11.1569

B CHE 💅

F F E E A D DE

To ooq sons nn Aqsons rrq rs
o N op sor vons so storq's ons orn nn rs
Bs sqson rin rv sons o sons v
A on rq sons on n prs
s ons sto n or spr o rn n rs
rq r o pq's ons n n n oin sonq son ro
n o n s ons

prAC to rt p tros

* t. To rno sonn sorpono rongr s n ps n or opy s

B CHE Y $B_{\parallel} \oplus GE \to 2^{\bullet} \oplus EC \oplus DYEA \to 2^{\bullet}XA \oplus A$ E E E

F AEEE END

To o o o q s ons in A q s ons rr q r s
o in o p sor in ons s o stor q s ons o rn in n r s s
B s sq s on ri n r s
o o n r n r n r s
s ons o q s ons in
A on rq s ons o n n p rs
s ons stor rq r o p q s ons n n n n o i n s on q s on ro

hoh s ons

prAA n Bo nqs 🐧 t i Ponrsn pi prnpsn pponsoo oo pinqs sprosop r oso op sp ro $r_{\mathbf{x}}$ \not n q s

EC

trs

Gnr Fortor nq s

 \mathbf{EC}

For s n sp tros op prn p p p ons o or s n or s n n s n r or s n n or s n sor n FAC r n

 \mathbf{EC}

o sotop t nq s

trs

rosoops nrosoops o ropons nrosoops o ropons nrosoops ropons nrosoops ropons nrosoops ropons nrosoops

 \mathbf{EC}

trs

Boo s st 1

Bon pinqs prorg n r gon F o n Brnr y Co son Co A

Bon sr App on o Bon sr n o r Boo 7 7 7 7

Fr n n Co p n A

Bon sr o n n ABooss orn psn pynqsor Boy sr n son E₩ r Arno

prB. Frn Bo str

t o s nsw rosr r n non sp so rns h n n n s n n o μ r o pos on μ ro n ∇ n o ∇ ro s n ons

t r s

ntro ton rnsr rnorn-onpos noo oso rnssr r
ro n p n r ons n rns os o o rnsr r s rs n rs
Cons n so o o rns n pro ros n ros As roo o rns r r o BC rn

EC

trs

rn n s h s prop r s o rn p s rn h s rns ons oo on pro s n ho s o s rn s or rn rnspor f p prop r s o rn rnspor p s s s on rn s on C rr r rnspor o o Af s C Af s Af s onophor s n s rophor s s r n n ons

 \mathbf{EC}

trs

, rn n ss

BA/B EEA EC DYEA EE TOE Y TOE i Y AB

, C 🏕 GY

B_q q GE E 22 EC DYEA 25 n t st r EXA A 11.11

ot. 1 As nWhohspss h n on n

 $\begin{array}{cccc} \cdot & \mathbf{C} & \mathbf{B} & \mathbf{G} \mathbf{Y} \\ & \mathbf{E} & \mathbf{E} & \mathbf{E} & \mathbf{S} \end{array}$

MIC 301: I) TRO* +CTIO) TO ME* IC#\$ MICRO, IO\$O- Y-I

M#. / M#RO%: 31/2 M#RO%

THEORY: 33 M#RO%

I) TER) #\$ #%/E%/ME) T: (/2 M#RO%

TIME: 3 HR%/

- ote. "he /uestion paper Oill consist o+ +our sections (, 1)). "here Oill be nine /uestions an! +i2e /uestions ha2e to be attempte!. 3uestion 'Oill span the complete syllabus an! Oill be compulsory. 4est eight /uestions Oill be +rom !i++erent sections o+ the syllabus. "here Oill be tOo /uestions +rom each o+ +our sections an! one is to be attempte!. 5ach /uestion Oill be sub!i2i!e! into 14 sub1parts.

6ection,

7rie+ intro! uction to terminology o+ in+ectious !iseases 9re/uency o+ !isease8 4ecognition o+ in+ectious !isease 8 \(\text{ hectious ! isease 8 \(\text{ hectious ! isease cycle.} \)

6ection 7

MIC 302: I) TRO* +CTORY IMM+) O\$O- Y-I

M#. / M#R**0%**: 3**1/2** M#R**0%**

THEORY: 33 M#R**0%**

I) TER) #\$ #%/E%/ME) T: (/2 M#RO%

TIME: 3 HR%/

- ote. "he /uestion paper Oill consist o+ +our sections (, 1)). "here Oill be nine /uestions an! +i2e /uestions ha2e to be attempte!. 3uestion 'Oill span the complete syllabus an! Oill be compulsory. 4est eight /uestions Oill be +rom !i+erent sections o+ the syllabus. "here Oill be tOo /uestions +rom each o+ +our sections an! one is to be attempte!. 5ach /uestion Oill be sub!i2i!e! into 14 sub1parts.

6ection,

\$ntro! uction an! history o+ immunology8 - on1speci+ic !e+enceC Physical barriers8 %hemical barriers8 %ellular8 Phagocytosis8 \$n+lammatory barriers8 \$n+lammation8 9e2er8 "ypes o+ \$mmunity8, cti2e an! Passi2e \$mmunity8\$mmunological memory

6ection 7

@umoral \$mmune 4esponse8, ntibo!iesD \$mmunoglobulins86tructure8+unction an! type o+ antibo!ies

6ection %

%ell #e!iate! mune 6ystem (%#\$)8 #echanism o+ %#\$8 "ypes o+ e+ector " cells8 @elper " cells8 6uppressor " cells8 %ytotoxic " cells8 Biller " cells8 \$nteractions betOeen " an! 7 lymphocytes

6ection)

, ntigen1antibo! y interactions& Precipitation reaction& \mmuno! i+usion test& \mounter current \mmuno electrophoresis&\mounter current \mounter current \mount

Reco ended, oo3&:

- '. ".A. Bin! t8 4., .; .7., . Osborne8 A. Buby (&&()8 \$mmunology8 > .@. 9reeman an! %ompany8 E6, .
 - . .6hetty (&&5)8 \text{\sigma}mmunology8 \text{\sigma}ntro! uctory "ext \text{\gamma}oo*8 eO , ge \text{\sigma}nteplati359.55384(n) 2.45.47

MICRO, IOSO- Y , /%c/ 4 E) ER#\$5%ECO) * YE#R E. #MI) #TIO) MIC (01: I) TRO* +CTIO) TO ME* IC#\$ MICRO, IO\$O- Y-II

%e e&terl'

M#. / M#RO%: 31/2 M#RO%

THEORY: 33 M#R**0%**

I) TER) #\$ #%%E%%ME) T: (/2 M#RO%

TIME: 3 HR%/

- ote. "he /uestion paper Oill consist o+ +our sections (, 1)). "here Oill be nine /uestions an! +i2e /uestions ha2e to be attempte!. 3uestion 'Oill span the complete syllabus an! Oill be compulsory. 4est eight /uestions Oill be +rom !i++erent sections o+ the syllabus. "here Oill be tOo /uestions +rom each o+ +our sections an! one is to be attempte!. 5ach /uestion Oill be sub!i2i!e! into 14 sub1parts.

6ection,

=irulence an! mo!e o+ transmission85merging an! reemerging in+ectious!iseases8; lobal tra2el an! health consi! erations8- osocomial in+ections

6ection 7

Origin o+ normal +lora8; erm +ree an! gnotobiotic li+e8) istribution an! occurrence o+ - ormal +lora o+ s*in8eye8 respiratory tract8 mouth8 intestinal tract an! genitourinary tract

6ection %

52ents in in+ection +olloOing penetration8 #icrobial 2irulence +actors

6ection)

, ntibacterial !rugs 2i:. sulphonami!es8 3uinolones8 Penicillins8 %ephalosporins8 "etracyclines 5 frythromycin 2 an! %hloramphenicol 2) rug resistance 3, nti+ungal an! anti2iral!rugs

Reco ended, oo3&:

- 7ergeys #anual o+ 6ystematic 7actriology. =ol1\$ (&&')8"he, rchae an! the) eeply 7ranching Phototrophic 7acteria8) a2i!8 4. 7oone an! 4ichar!8 > . %astenhol: (author); eorge; arrity (e!itor).
- Prescott8?.#.8@arley8A.P.8Blein8) ., . (&&)8 #icrobiology8 #c; raO @ill.
- "ortora8; .A.89un*e87.4.8% ase %.? (&&4)8 #icrobiology8, n \$ntro! uction8 Pearson 3. ucation.
- #ims8%.8Play+air A.84oitt \$.8 > a*elin) .8 > illiams 4.8 (&&&)8 #e! ical #icrobiology 8 4. #osby8?on!on86t. ?ouis.

n ţ

pornprso proro n prsprnpr nnn Sockros r roos n p ns

AC CA

rs rs
r n rn Ass ss n rs
for hors

s o o r FrsFs on s Apr Dr Frs sn rosorn n Wrso rns sons n n n o rss W ns

Boo si

Ar r En n r n o n o A n F n n Bron r N D n

sproo r n i r n A n n

n Boo o Ar r CA N D n

Fr n n r An Appro n C n n r n ps n r n r sn r D sr or N

Fn n s o D r Gn s r on nn ss n n n r n i CB sn r sn

D sr or N D n

n ţ

s posorAr r worrsn n no n Goqr n r D on

A A BA/B E E A EC DYEA E E TOE Y TOE I Y AB

H, E C E CE B₄A₄B₄ ₄ GE E A EC D YEA EXA A 11.1 E E E E A

EC A

Eqp n spp s s or Conn onsr on n r s r

W n h n

rso win pinns s ssors
Co on snswin pin pirr s
Cro win pin

EC , B

ornoo srns ro My no srns
rprono roronsron sprnnnnsrynnn

Poo so Drn ps no nrn ro srn o rn onsron ponso
p n n y n

Torssnonsr on A Win Es Dr rnn ys µn

EC , C

Con on rs

r n roprsors

Co on oo rs

 \mathbf{EC} , \mathbf{D}

Drn pso rms

por n pro ryrns

Fr Consr on

A n rso oo rossow n pro so n Bs

n rso n Bs

n rso n Bs

\boldsymbol{H} , \boldsymbol{E} \boldsymbol{C} \boldsymbol{E} \boldsymbol{CE}

```
rpronos pso 🎙 n D 🛪 Born n
  Dr n n onsr ono po o br n r ns
       rn Boosi
                             rW Z
                                   Boo Co p n n Y Yor Foron o
    n r W n Boo r Bro s B p n
1
    on on I
   Bs rosss Comn Consr on mr Doon sin D sip n
   D n Forn s
     rnDr n o Drss n r 1,100 $1 n Co To o p n i
    F n E on
   A no Grrn Corn r non ns
    r Drss Ds n rnps o Fnn rn n DEN n 🎉
   Co p n Yor ny rn n 1
   n nE ro r s r Grrs vr n F vo o E on Bs Boo o W n E rW op s Boo s on o
                                             n s B ro 1
                           op s Boo s on on
     p Dr ss n r n W orm s Boon on on
   En \nabla op o Dr ss n r$\sqrt{n} C \tau_n n D \$\sqrt{n} Boo s on on
   Frankr ons Bn rn n En Woo Cs 1
1
   Fn n so p s n y r C r y D n r on ns Bo r
11
   rs Dy prn / osyo F sn nr or Dr D rA
    sorFrrnnnD<sub>x</sub>noop r<sup>f</sup>ChrsCrnrs W Yor 1
          o To s Frs r<sub>e</sub>son rn on
                                                 $1 n
   To so n
                     ron rpn os r Cr
                                        p
   Fsnonn Dsn
1
   ynn n synoff
   n oo o F sh on n T
1
                   D s n n
   \mathbf{F}r on \mathbf{E} ro \mathbf{r}_{\mathbf{v}}o n
1
                     h u D
```

Con pts o tr nt rorn Css En ps on D n n

The rent of t

 t
 t
 r
 r
 fine
 fine
 r
 fine
 fine