



**PERPUSTAKAAN SULTAN ABDUL SAMAD**

# **DASAR PERKEMBANGAN KOLEKSI**

**Edisi ke-2**

**Tarikh Kemaskini : 5 Ogos 2021**

UNIVERSITI PUTRA MALAYSIA

# **DASAR PERKEMBANGAN KOLEKSI**

## **LATAR BELAKANG**

Dasar Perkembangan Koleksi disediakan sebagai panduan untuk mengukuhkan koleksi Perpustakaan dan memenuhi objektif Perpustakaan dalam menyediakan keperluan maklumat Universiti bagi menyokong kegiatan pembelajaran, pengajaran, penyelidikan dan perundingan.

## **TUJUAN**

Dasar ini bertujuan untuk:

1. Menggariskan panduan kepada Perpustakaan untuk membuat pemilihan bahan.
2. Memaklumkan kepada pengguna Perpustakaan mengenai prinsip-prinsip pemilihan bahan.
3. Membantu pemohon dalam membuat keputusan pemilihan bahan dengan bijak untuk menentukan koleksi yang berkesan dan seimbang.
4. Menentukan keluasan dan kekuatan koleksi bagi tiap-tiap bidang yang ditentukan.

## **TAKRIF**

Bagi maksud pemakaian dasar ini:

1. “Bahan” merujuk kepada koleksi Perpustakaan yang terdapat dalam pelbagai bentuk, termasuk bahan monograf (buku), terbitan bersiri, risalah, peta, bahan media dan bahan elektronik.
2. “Pemilihan” merujuk kepada keputusan yang harus dibuat sama ada untuk menambahkan sesuatu bahan dalam koleksi atau menyimpan bahan yang telah ada dalam koleksi.
3. “Perolehan” merujuk kepada kaedah mendapatkan bahan sama ada melalui pembelian, hadiah dan pertukaran.
4. “Penyediaan” merujuk kepada pemprosesan dan penempatan bahan yang diperoleh.
5. “Pegawai Akademik” meliputi pensyarah, tutor, pensyarah sambilan dan Profesor pelawat.
6. “Perpustakaan Sultan Abdul Samad” meliputi Perpustakaan Utama dan Perpustakaan Cawangan.
7. “Perpustakaan Cawangan” meliputi semua cawangan di Kampus UPM Serdang dan Kampus UPM Bintulu, Sarawak.

## SKOP

Dasar ini meliputi proses pemilihan, perolehan dan penyediaan koleksi yang terdiri daripada bahan monograf, bahan media, bahan terbitan bersiri dan bahan elektronik di Perpustakaan Sultan Abdul Samad.

## PEMILIHAN

### Tanggungjawab bagi pemilihan bahan Perpustakaan

Pemilihan bahan-bahan Perpustakaan menjadi tanggungjawab warga Universiti seperti berikut :

#### 1. Pegawai Akademik dan Pustakawan

##### i) Pegawai Akademik

Pegawai akademik bertanggungjawab untuk mengesyorkan perolehan bahan-bahan dalam bidang pengkhususan mereka. Permohonan boleh dibuat melalui emel kepada Bahagian Pembangunan Koleksi/ Perpustakaan Cawangan untuk tindakan. Bahagian Pembangunan Koleksi/ Perpustakaan Cawangan juga mengedarkan katalog penerbit dan pengumuman penerbitan kepada pegawai akademik untuk pemilihan.

##### ii) Pustakawan Bahagian Pembangunan Koleksi/Perpustakaan UPM Kampus Bintulu, Sarawak (UPMKB)

Pustakawan di Bahagian Pembangunan Koleksi/ Perpustakaan UPMKB bertanggungjawab untuk menyemak katalog penerbit dan pengumuman penerbitan untuk memilih bahan-bahan dalam bidang yang berkaitan. Mereka juga bertanggungjawab untuk menentukan kesesuaian bahan, bilangan naskhah yang harus dibeli dan menyelaraskan perkembangan koleksi keseluruhannya.

##### iii) Pustakawan Penghubung

Pustakawan Penghubung bertanggungjawab membantu pegawai akademik dalam pemilihan bahan dalam bidang berkaitan.

##### (iv) Lain-lain Pustakawan di Perpustakaan

Lain-lain pustakawan di Perpustakaan juga membantu dalam proses pemilihan dari semasa ke semasa.

#### 2. Pengguna Perpustakaan

##### i) Pelajar

Pelajar boleh mencadangkan pembelian bahan yang berkaitan dengan bidang pengkhususan mereka melalui pegawai akademik.

##### ii) Pegawai Pengurusan dan Profesional (bukan akademik)

Pegawai boleh mengemukakan permohonan melalui Ketua Jabatan untuk pembelian bahan yang berkaitan dengan bidang tugas mereka.

### **Faktor-faktor yang Mempengaruhi Pemilihan**

Memandangkan kepada pelbagai keperluan pembelajaran, pengajaran, penyelidikan dan rekreasi, faktor-faktor berikut haruslah dipertimbangkan dalam pemilihan bahan-bahan perpustakaan:-

1. Kepakaran pengarang dalam bidang berkenaan.
2. Bersesuaian dengan masa dan penting bagi masyarakat semasa.
3. Kepentingan perkara berkenaan.
4. Keputusan maklumat dan data.
5. Nilai kesusasteraan dan mutu seni.
6. Nilai penyelidikan.
7. Penyusunan bahan dan isi yang baik.
8. Kredibiliti penerbit.
9. Kaitannya dengan bahan-bahan lain dalam koleksi.
10. Kedapatan bahan tersebut di tempat lain di dalam negeri.
11. Kekurangan bahan-bahan dalam perkara berkenaan.
12. Nilainya kepada koleksi.
13. Kemungkinan penggunaannya oleh pembaca.
14. Format yang sesuai.
15. Harga.

### **Garis Panduan dan Kriteria untuk Pemilihan/Pesanan**

Perpustakaan hendaklah merancang untuk memenuhi keperluan-keperluan berikut:-

1. Memperoleh bahan-bahan yang menyokong kegiatan pembelajaran, pengajaran, penyelidikan dan perundingan Universiti ini.
2. Memperoleh bahan-bahan penting yang berkaitan dengan sejarah dan kemajuan Universiti Putra Malaysia.
3. Memperoleh bahan-bahan bercorak umum dalam bidang perkara yang diliputi oleh program-program pengajaran, penyelidikan dan perundingan.

#### **i) Garis panduan pemilihan umum**

Disebabkan oleh sumber kewangan yang terhad, besar kemungkinan keperluan yang tersebut di atas tidak dapat dipenuhi sepenuhnya oleh Perpustakaan. Dengan itu, garis panduan berikut perlu diberi perhatian dalam pemilihan bahan-bahan perpustakaan.

- (a) Penerbitan dalam Bahasa Malaysia dan Bahasa Inggeris diberi keutamaan. Walaubagaimanapun penerbitan dalam lain-lain bahasa boleh diperoleh atas keperluan fakulti.

- (b) Penerbitan-penerbitan terkini dan berkaitan dengan keperluan pengguna akan diberi keutamaan untuk menggantikan penerbitan-penerbitan lama atau yang tidak diulang cetak.
- (c) Bahan-bahan akan diperoleh dalam bentuk lain yang sesuai (misalnya bentuk elektronik) jika penerbitan asal tiada dalam pasaran, terlalu mahal atau atas kehendak pemohon.
- (d) Sekiranya Perpustakaan telah mempunyai bahan dalam bentuk elektronik, naskhah bercetak tidak akan dibeli melainkan ada sesuatu sebab yang tertentu.
- (e) Naskhah tambahan akan dibeli hanya apabila bahan-bahan tersebut sangat diperlukan dan kekerapan pinjaman sekurang-kurangnya 5 kali setahun, terutama buku teks untuk kursus-kursus tertentu. Naskhah tambahan juga akan dibeli berasaskan kepada kemungkinan bahan berkenaan tidak diulang cetak, terutamanya bahan-bahan tempatan.
- (f) Pembelian buku teks sekurang-kurangnya 3 naskhah bagi setiap judul. Walau bagaimanapun ia bergantung kepada peruntukan semasa yang diperoleh.
- (g) Perpustakaan akan memperoleh bahan-bahan untuk membantu sesuatu penyelidikan yang dijalankan oleh pegawai akademik atau pelajar pasca-siswazah, jika bahan tidak terdapat dalam sumber maklumat lain seperti jurnal dan pangkalan data elektronik.
- (h) Buku yang dibeli hendaklah edisi terbaru melainkan terdapat permintaan daripada pegawai akademik untuk membeli edisi lama dan juga yang dipohon itu merupakan teks klasik.
- (i) Buku yang dibeli hendaklah mempunyai kertas berkualiti dan berkulit tebal (*hardcover*) supaya tahan lama dan boleh dirujuk ramai pengguna melainkan jika ianya diterbitkan hanya dalam kulit kertas/nipis (*paperback*).
- (j) Buku-buku yang berharga melebihi RM1,000.00 mestilah mendapat kelulusan daripada Ketua Bahagian Pembangunan Koleksi/Ketua Bahagian Perpustakaan UPMKB.
- (k) Semua buku terbitan luar negara hendaklah dibeli melalui pembekal buku kontrak kerajaan melainkan bahan media dan bahan elektronik. Walau bagaimanapun bahan terbitan tempatan termasuk peta tidak semesti dibeli melalui pembekal kontraktor kerajaan.
- (l) Harga buku ialah harga yang diambil daripada katalog penerbit atau sumber-sumber lain. Jika butiran tidak dapat ditentukan di mana-mana, maka harga anggaran (*estimation*) dibuat. Jika terdapat perbezaan harga, pihak pembekal buku perlu menyokong harga baru dengan invoice penerbit asal. Perbezaan ini tidak boleh melebihi 7% daripada harga asal.

- (m) Harga buku yang dibekalkan hendaklah mengikut pertukaran mata wang terkini (*current Currency Exchange Rate*) bagi buku DO (*Delivery Order*) manakala bagi buku FO (*Fresh Order*) perlu mengikut pertukaran mata wang yang diterima dari sebutharga.

ii) **Garis Panduan Pemilihan Khusus**

(a) **Format**

Selain daripada garis panduan yang tersebut di atas terdapat beberapa jenis bahan seperti terbitan bersiri, bahan media dan elektronik, peta topografi, peta berdigit dan gambarfoto udara yang mempunyai format tertentu. Bahan-bahan ini memerlukan garis panduan yang tertentu untuk pemilihan. Garis panduan untuk bahan-bahan ini ialah seperti berikut:-

- **Terbitan Bersiri**

Terbitan bersiri adalah penerbitan yang dikeluarkan secara berkala. Penerbitan ini terdiri daripada bahan bercetak dan elektronik yang merangkumi jurnal, e-buku, pangkalan data, majalah, suratkhobar, penerbitan tahunan (laporan tahunan, laporan statistik, buku tahunan dan sebagainya). Sila rujuk Dasar Perolehan Bahan Terbitan Bersiri untuk garis panduan terperinci.

- **Bahan Media**

Bahan-bahan media seperti CD-ROM, DVD, VCD, Audio CD, pita audio, pita video, kaset, slaid, carta, mikrofilem, mikrofis, transparensi, gambar foto, filem jalur, kits, disket diperoleh oleh Perpustakaan mengikut garis panduan berikut:-

- Kaitan dan hubungannya dengan keperluan pembelajaran, pengajaran, penyelidikan dan perundingan Universiti.
- Harga bahan-bahan tersebut.
- Terdapat peralatan untuk menggunakan bahan-bahan tersebut.

- **Peta dan Foto Udara Bercetak/Digital**

Perolehan bahan tersebut berdasarkan garis panduan berikut:-

- Kaitan dan hubungannya dengan keperluan pembelajaran, pengajaran, penyelidikan dan perundingan Universiti.
- Memperoleh peta Malaysia terkini.
- Borang Pesanan untuk peta dan foto udara mestilah ditandatangani oleh Ketua Pustakawan.

**(b) Koleksi Khas**

Pemilihan bahan berasaskan pengkhususan koleksi adalah berdasarkan kepada Dasar Koleksi Khas yang telah ditentukan bagi menepati keperluan khusus program Universiti.

Bagi koleksi Pertanian Malaysia, dua (2) naskhah akan diperoleh bagi setiap judul dan beberapa naskhah akan diletakkan di rak terbuka.

**(c) Koleksi Arkib**

PSAS akan memperoleh semua bahan yang berkaitan dengan sejarah dan perkembangan UPM. Dua (2) naskhah akan diperoleh bagi bahan yang diterbitkan.

**Jenis-Jenis Bahan yang Diperoleh**

**1. Bahan-bahan Am**

Bahan-bahan am mengandungi buku-buku yang bercorak umum untuk memenuhi minat seseorang, hobi dan bacaan ringan.

**2. Bahan-bahan Rujukan**

Bahan-bahan rujukan terdiri dari bahan-bahan rujukan asas seperti kamus, ensiklopedia, abstrak, indeks, bibliografi, perangkaan dan lain-lain.

**3. Buku-buku Teks**

Buku-buku teks terbahagi kepada dua jenis:-

i) Teks asas

Buku yang dicadangkan oleh pegawai akademik untuk menyokong program-program di Universiti ini. Buku-buku berkenaan adalah berbeza dari semester ke semester.

Bagi buku teks asas yang tiada dalam pasaran/cetakan (*out of print/stock*), perolehan akan dilakukan dengan mendapatkan salinan foto dari perpustakaan universiti lain. Naskhah salinan foto akan dilupuskan setelah naskhah asal diperoleh.

ii. Bacaan tambahan

Buku yang dicadangkan untuk bacaan tambahan bagi menyokong program-program di Universiti ini. Hanya 1 naskhah sahaja akan dibeli melainkan jika mendapat permohonan daripada pegawai akademik untuk membeli naskhah tambahan.

#### **4. Penerbitan Kerajaan**

Penerbitan kerajaan seperti laporan statistik, laporan tahunan, risalah-risalah yang diterbitkan oleh jabatan-jabatan kerajaan di peringkat persekutuan dan negeri akan diperoleh oleh Perpustakaan. Penerbitan kerajaan di peringkat antarabangsa yang ada kaitan dengan program-program Universiti juga akan diperoleh.

#### **5. Kertas kerja Persidangan/Seminar**

- i. Semua kertas kerja dan prosiding persidangan dan seminar yang diadakan di Malaysia yang ada kaitannya dengan program-program Universiti akan diperoleh.
- ii. Wakil Universiti Putra Malaysia yang membentang kertas kerja atau menghadiri persidangan/seminar, perlu menyerahkan satu (1) set kertas kerja/prosiding kepada PSAS.

#### **6. Penerbitan Pegawai**

Merujuk kepada hasil penulisan pegawai Universiti sama ada diterbitkan atau tidak diterbitkan. Satu salinan hasil penulisan mereka perlu diserahkan kepada PSAS agar maklumat yang terkandung dapat dipelihara sebagai harta intelek Universiti.

#### **7. Bacaan Ringan**

Terdiri daripada bahan-bahan bacaan fiksi seperti novel dan cerpen dalam Bahasa Malaysia dan Bahasa Inggeris sahaja. Perpustakaan akan memperoleh satu naskhah bagi setiap judul yang dimohon.

#### **8. Tesis, Disertasi dan Laporan Projek**

PSAS perlu memperoleh 2 naskhah (1 naskhah bercetak, 1 naskhah dalam bentuk CD) dari fakulti, Sekolah Pengajian Siswazah, Putra Business School (PBS dan lain-lain Pusat Tanggungjawab Universiti).

#### **9. Bahan Nadir Pertanian Malaysia**

Bahan berkaitan dengan pertanian Malaysia yang telah diterbitkan melebihi 50 tahun dan sukar diperoleh ataupun tidak lagi didapati di pasaran.

#### **10. Piawaian dan Paten**

Perpustakaan akan memperoleh semua piawaian Malaysia. Piawaian dan paten negara-negara lain boleh juga diperoleh atas permohonan pegawai akademik dan penyelidik.

#### **11. Bahan Media**

Bahan-bahan media seperti CD-ROM, DVD, VCD, Audio CD, pita audio, pita video, kaset, slaid, carta, mikrofilem, mikrofis, transparensi, gambar foto, filem jalur, kits,



disket akan diperoleh oleh Perpustakaan berdasarkan permohonan pegawai akademik dan Pustakawan.

## 12. Peta dan Foto Udara Bercetak/Digital

Bagi melengkapkan koleksi peta, perolehan adalah berdasarkan kepada permohonan pegawai akademik dan Pustakawan dengan mendapat kelulusan Ketua Pustakawan.

## 13. Bahan Arkib

PSAS berperanan untuk menyimpan bahan-bahan penting yang berkaitan dengan sejarah dan perkembangan Universiti seperti berikut:

### Penerbitan Universiti:

- (a) teks ucapan Pegawai Utama Universiti, syarahan inaugural.
- (b) tesis, disertasi dan laporan projek.
- (c) terbitan berkala, buku panduan, buku program, brosur.
- (d) penerbitan-penerbitan jabatan, fakulti, pentadbiran dan pertubuhan-pertubuhan Universiti.
- (e) penerbitan persatuan-persatuan pelajar.
- (f) gambar/video/CD.
- (g) maklumat tokoh universiti.
- (h) artikel/rencana mengenai Universiti yang diterbitkan dalam surat khabar, jurnal dan sumber-sumber lain.

### **Sumber rujukan untuk pemilihan bahan-bahan (*Selection Sources*)**

Sumber rujukan untuk pemilihan bahan-bahan perpustakaan yang digunakan ialah seperti berikut:-

1. Laman sesawang universiti, institusi dan organisasi tempatan dan luar negara seperti Universiti Putra Malaysia, Arkib Negara Malaysia, Perpustakaan Negara Malaysia dan Library of Congress.
2. Katalog penerbit dan pengumuman daripada penerbit-penerbit tempatan dan luar negara, seperti Dewan Bahasa dan Pustaka, McGraw-Hill, Elsevier, Prentice-Hall, John Wiley dan lain-lain.
3. Katalog dan pengumuman penerbit-penerbit universiti, institusi dan organisasi tempatan dan luar negara.
4. Pangkalan Data ITSMARC ([www.itsmarc.com](http://www.itsmarc.com)).
5. Senarai penerbitan-penerbitan jabatan-jabatan kerajaan tempatan dan badan-badan berkanun seperti Kementerian Pertanian, Jabatan Perangkaan Malaysia, Institut Penyelidikan Getah, MARDI dan sebagainya.
6. Senarai penerbitan-penerbitan daripada pertubuhan antarabangsa seperti UNESCO, FAO, CABI, WHO, ILO.

7. Ulrich Periodicals Directory.
8. Pengumuman daripada badan-badan penganjur dan penerbit-penerbit dari dalam dan luar negara untuk kertas kerja/prosiding seminar dan persidangan.
9. Senarai peta daripada Jabatan Ukur dan Pemetaan Malaysia untuk peta topografi Malaysia, foto udara dan peta digital.
10. MS Online untuk piawaian tempatan.

### **Keluasan dan Peringkat Pengumpulan Bahan-Bahan Perpustakaan.**

Rujuk Lampiran 1

### **Penggantian Bahan-Bahan Perpustakaan**

Buku-buku yang dikeluarkan daripada rak dan yang dilaporkan hilang, tidak semestinya diganti. Faktor-faktor berikut diambilkira dalam membuat penilaian untuk penggantian bahan:

1. Bilangan naskhah yang terdapat di Perpustakaan.
2. Kekerapan bahan dipinjam sekurang-kurangnya 5 kali setahun.
3. Liputan bidang perkara dalam koleksi Perpustakaan.
4. Edisi terkini dalam koleksi/pasaran.
5. Terdapat permohonan bagi sesuatu judul yang hilang, rosak dan lusuh.



## **KAEDAH PEROLEHAN**

### **1. Pembelian**

Buku dan terbitan bersiri yang tidak dapat diperoleh melalui hadiah akan dibeli melalui pembekal buku kontrak kerajaan yang telah berdaftar dengan Kementerian Kewangan Malaysia (Rujuk Pekeliling Kontrak Perbendaharaan yang terkini pada Lampiran 2). Manakala perolehan bagi bahan media, peta dan bahan terbitan tempatan tidak tertakluk kepada pekeling tersebut.

### **2. Hadiah dan Pertukaran**

Perpustakaan juga menerima bahan melalui hadiah dan pertukaran dari kementerian-kementerian, jabatan-jabatan kerajaan, institusi-institusi dan pertubuhan-pertubuhan dalam dan luar negara.

PSAS tidak boleh menerima bahan hadiah jika terdapat sebarang syarat yang ditentukan oleh pihak luar. PSAS berhak untuk memilih bahan hadiah yang difikirkan sesuai untuk tujuan pembelajaran, pengajaran, penyelidikan dan perundingan serta berdasarkan kegunaan dan kepentingan, kekinian, kesesuaian dan keadaan fizikal bahan.

### **3. Penyerahan Penerbitan FAO (FAO Depository)**

PSAS telah menjadi Pusat Penyerahan Penerbitan FAO (FAO Depository Center) sejak tahun 1970an. Sehubungan dengan itu, Perpustakaan menerima 1 naskhah percuma bagi semua penerbitan FAO.

### **4. Rakaman Rancangan/Program Media Elektronik**

PSAS akan membuat rakaman rancangan/ program seperti dokumentari, rencana, bual bicara, program motivasi, bajet dan lain-lain yang menyokong pembelajaran, pengajaran, penyelidikan dan perundingan Universiti.



# DASAR PEROLEHAN BAHAN TERBITAN BERSIRI

## Pengenalan

Bahan terbitan bersiri (*serials*) terdiri daripada bahan bercetak dan elektronik. Bahan bercetak meliputi jurnal, majalah, penerbitan tahunan (laporan tahunan, laporan statistik, buku tahunan) dan suratkhobar. Bahan elektronik pula meliputi e-jurnal dan e-buku serta pangkalan data komersial.

## Takrif

AACR2, 2<sup>nd</sup> ed. 2002 mentakrifkan bahan terbitan bersiri (serials) seperti berikut:

*“Any publication in any medium issued in successive parts being numeric or chronological designations and intended to be indefinitely”.*

Manakala sumber elektronik (electronic resources) pula ditakrifkan seperti berikut:

*“As material encoded for manipulation by a computerized device. This material may require the use of a peripheral directly connected to a computerized device (e.g. CD-ROM drive) or a connection to a computer network (e.g. the internet)”.*

“Pemilihan” merujuk kepada keputusan yang harus dibuat untuk melanggan sesuatu judul bahan terbitan bersiri.

“Pegawai akademik” merujuk kepada pensyarah sepenuh masa.

## Garis Panduan Perolehan Bahan Terbitan Bersiri

1. Pihak-pihak berikut boleh mengemukakan cadangan untuk perolehan bahan terbitan bersiri:-
  - i) Pegawai Akademik
  - ii) Pelajar Pasca Siswazah
  - iii) Pegawai Kumpulan Pengurusan dan Profesional (Bukan Akademik)
2. Permohonan perlu dibuat dengan mengisi “Borang Permohonan Langganan Bahan Terbitan Bersiri”. Setiap permohonan hendaklah disahkan oleh Dekan / Timbalan Dekan / Ketua Jabatan /Penyelia / Pustakawan Penghubung dan dimajukan kepada Ketua Bahagian Terbitan Bersiri.
3. Senarai permohonan akan dibawa ke Mesyuarat Jawatankuasa Penilaian Perolehan Bahan Terbitan Bersiri untuk cadangan perolehan. Keputusan akan dimaklumkan kepada Ketua Pustakawan untuk kelulusan. Sebarang keputusan langganan secara umumnya bergantung kepada status kewangan atau/dan keperluan.
4. Panduan dan kriteria pemilihan

(a) Jurnal bercetak

- i) Kaitan dan hubungannya dengan keperluan pembelajaran, pengajaran, penyelidikan dan perundingan Universiti.
- ii) Kandungan meliputi bidang khusus / pelbagai bidang.
- iii) Bilangan pengguna
- iv) Harga langganan
- v) Jurnal berimpak (*impact factor*) dan berwasit (*cited*)
- vi) Kredibiliti penerbit
- vii) Kekserapan keluaran penerbitan

b) Bahan elektronik

- i) Bidang perkara
- ii) Tahun liputan sama ada terdapat ‘*moving wall*’/ “*embargo*”
- iii) Jumlah judul
- iv) Teks penuh atau abstraks sahaja atau kedua-keduanya
- v) Harga konsortium atau tidak
- vi) Kemudahan untuk arkib atau ‘*back-up*’ yang diberikan.
- vii) Kaedah akses yang disediakan, rangkaian atau ‘*remote access*’, sama ada melalui IP atau katalaluan atau kedua-keduanya
- viii) Had dan syarat penggunaan yang ditetapkan oleh pembekal, iaitu jumlah pengguna serentak, perkongsian sumber dan jenis lesen
- ix) Latihan dan perkhidmatan selepas langganan.
- x) Pembekal yang mengendalikan perkhidmatan, sama ada terdapat ejen tempatan atau serantau atau sebaliknya.

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## KAEDAH PEROLEHAN

1. Langganan jurnal bercetak tertakluk kepada arahan Kementerian Kewangan Malaysia yang terkandung dalam Pekeliling Kontrak Perbendaharaan terkini.
2. Bagi bahan elektronik, langganan boleh dibuat terus kepada penerbit atau melalui ejen tempatan yang telah dilantik oleh penerbit. Walau bagaimanapun ia tertakluk kepada arahan Kementerian Kewangan Malaysia yang terkandung dalam Surat Pekeliling Perbendaharaan terkini.
3. Pembaharuan / Pembatalan Langganan
  - i) Jurnal bercetak
    - (a) Pembaharuan langganan berpandukan kepada senarai semak (*check list*) yang dikeluarkan oleh pembekal pada akhir setiap tahun.
    - (b) Langganan tidak akan diperbaharui jika sesuatu judul telah dilanggan dengan teks penuh secara atas talian kecuali pihak penerbit mengenakan syarat untuk mengekalkan langganan bercetak.
    - (c) Pembatalan judul langganan perlu dimaklumkan secara bertulis kepada semua Ketua Bahagian dan Mesyuarat Jawatankuasa Penilaian Perolehan Bahan Terbitan Bersiri.
  - ii) Bahan elektronik
    - (a) Statistik penggunaan pangkalan data atas talian boleh diambil kira sebagai kriteria untuk pembaharuan / pembatalan langganan.
    - (b) Penilaian semula pangkalan data yang sedang dilanggan akan diadakan dari semasa kesemasa bergantung kepada keperluan. Hasil penilaian akan dibincang dalam Mesyuarat Jawatankuasa Penilaian Perolehan Bahan Terbitan Bersiri dan akan dikemukakan kepada Ketua Pustakawan untuk pembatalan langganan.

## TARIKH KUATKUASA

Dasar Perkembangan Koleksi Perpustakaan Sultan Abdul Samad berkuatkuasa mulai tarikh ia diluluskan.

Disahkan oleh : Ketua Pustakawan

Tarikh : 5 Ogos 2021

## Keluasan dan Peringkat Pengumpulan Bahan-Bahan Perpustakaan

Peringkat keluasan dan pengumpulan adalah dinyatakan mengikut bidang-bidang perkara sebagaimana yang tersenarai di Jadual Pengkelasan Perpustakaan Kongres dan disusun mengikut nombor kelas dalam jadual tersebut. Bagi tiap-tiap perkara satu kod diberi untuk menunjukkan keutamaan peringkat pengumpulan, misalnya:

|                                |                           |   |
|--------------------------------|---------------------------|---|
| (Nombor Kelas)<br>SD 391 - 409 | (Perkara)<br>Silvikultura | (Peringkat Keutamaan<br>Pengumpulan)<br>Com |
|--------------------------------|---------------------------|---|

Terdapat empat peringkat keutamaan pengumpulan bahan-bahan perpustakaan dan peringkat-peringkatnya adalah seperti berikut:-

1. Peringkat Am (Kod-Gen)

Peringkat pengumpulan ini adalah bertujuan untuk menyokong bidang-bidang perkara di mana tiada program akademik secara formal diberi, tetapi meliputi sebahagian dari bidang-bidang perkara di mana program akademik ada berkaitan. Bahan-bahan yang dikumpul termasuk bahan rujukan, terbitan bersiri, monograf dan juga bahan-bahan untuk pengetahuan am dan rekreasi.

2. Peringkat Pengajaran dan Pengajian (Kod-TS)

Peringkat ini terdiri daripada koleksi yang meliputi bacaan asas dan juga bahan-bahan untuk menyokong dengan berkesan kursus-kursus ijazah, ijazah lanjutan, dan pendidikan jarak jauh. Ini termasuk teks asas, jurnal-jurnal terpilih dan bahan-bahan rujukan yang berkaitan dengan perkara tertentu.

3. Peringkat Penyelidikan (Kod-Res)

Peringkat ini terdiri daripada koleksi bahan tertentu untuk menyokong penyelidikan fakulti, dan penyelidikan ijazah lanjutan. Ini merangkumi monograf yang khusus, bahan rujukan, koleksi jurnal yang luas, indeks dan abstrak yang utama.

4. Peringkat Menyeluruh (Kod-Com)

Peringkat ini terdiri daripada koleksi bahan yang dikumpul di peringkat pembelajaran, pengajaran, penyelidikan dan pengembangan. Ini bertujuan untuk mewujudkan satu koleksi yang lengkap, mantap dan khusus dalam sesuatu bidang secara menyeluruh.

## Scope and Collecting Levels of Library Materials

Scope and collecting levels are expressed in terms of subject fields as given in the Library of Congress Classification Schedules and is arranged by the classification numbers from the schedules. For each subject, a code is given to indicate the level of collecting intensity e.g.:

| (Class no.)  | (subject)    | (Collecting Intensity) |
|--------------|--------------|------------------------|
| SD 391 - 409 | Silviculture | Com                    |

There are four levels of collecting intensity and they are as follows:-

1. General Level (Code-Gen)

This collecting level is intended to support subject areas in which no formal academic program is offered, but which overlaps with subject areas in which academic programs are available. Materials collected include basic reference works, periodicals and monographs as well as those materials for recreational interests.

2. Teaching and Study Level (Code-TS)

This level maintains a collection which covers basic reading as well as additional materials to support effectively the undergraduate courses offered. It includes a wide range of basic monographs, a selection of representative journals and the reference tools and fundamental bibliographical apparatus pertaining to the subject.

3. Research Level (Code-Res)

This level maintains a collection of specialised materials to support faculty research, doctoral and post-doctoral research. It includes a wide selection of specialized monographs, reference works, as well as an extensive collection of journals and major indexing and abstracting journals in the field.

4. Comprehensive Level (Code-Com)

This level maintains a collection of materials at the Teaching & Study level, Research level as well as extensive collection of works in the field. The aim is exhaustiveness.





## Kod untuk Fakulti

Berikut ialah kod-kod yang diberi kepada Fakulti-Fakulti dan Institut-Institut:

|     | <b>Fakulti</b>                                | <b>Kod</b> |
|-----|---|------------|
| 1.  | Fakulti Pertanian                             | A          |
| 2.  | Fakulti Perubatan Veterinar                   | B          |
| 3.  | Fakulti Perhutanan & Pengajian Alam Sekitar   | C          |
| 4.  | Fakulti Sains                                 | D          |
| 5.  | Fakulti Pengajian Pendidikan                  | J          |
| 6.  | Sekolah Perniagaan dan Ekonomi UPM            | L          |
| 7.  | Fakulti Kejuruteraan                          | N          |
| 8.  | Fakulti Bahasa Moden dan Komunikasi           | Q          |
| 9.  | Fakulti Sains dan Teknologi Makanan           | R          |
| 10. | Fakulti Perubatan dan Sains Kesihatan         | S          |
| 11. | Fakulti Ekologi Manusia                       | U          |
| 12. | Fakulti Rekabentuk dan Senibina               | V          |
| 13. | Fakulti Sains Komputer dan Teknologi Maklumat | T          |
| 14. | Fakulti Bioteknologi dan Sains Biomolekul     | E          |
| 15. | Institut Teknologi Maju                       | N          |
| 16. | Institut Biosains                             | D          |
| 17. | Institut Pengajian Sains Sosial               | U          |
| 18. | Institut Penyelidikan Matematik               | D          |
| 19. | Institut Penyelidikan Penuan Malaysia         | U          |
| 20. | Institut Pertanian Tropika                    | A          |

- |     |  |   |
|-----|--|---|
| 21. | Institut Perhutanan Tropika dan Produk Hutan       | C |
| 22. | Institut Kajian Perladangan                        | A |
| 23. | Institut Penyelidikan Produk Halal                 | R |
| 24. | Institut Antarabangsa Akuakultur dan Sains Akuatik | A |



**Susunan Peringkat Keluasan dan Pengumpulan Dalam Bidang-Bidang Perkara Seperti Yang Telah Dinyatakan Oleh Fakulti-Fakulti Mengikut Jadual Pengkelasan Perpustakaan Kongres**

|           |  | Peringkat untuk diperolehi |           |            |            | Catitan                     |
|-----------|--|----------------------------|-----------|------------|------------|-----------------------------|
|           |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                             |
| <b>A</b>  | <b>GENERAL WORKS</b>                           |                            |           |            |            |                             |
| AE        | Encyclopedia (general)                         | all                        |           |            |            | all = ABCD<br>EJLN<br>QRSTU |
| AG        | Dictionaries and other general reference books | all                        |           |            |            |                             |
| AS        | Academic and learned societies                 | all                        |           |            |            |                             |
| AY        | Yearbooks, almanacs, directories (general)     | all                        |           |            |            |                             |
| AZ        | History of scholarship and learning            | all                        | J         |            |            |                             |
| <b>B</b>  | <b>PHILOSOPHY.<br/>PSYCHOLOGY, RELIGION</b>    |                            |           |            |            |                             |
| B         | Philosophy (General)                           |                            | all       |            | U          | all = ABCDJL<br>NQRTU       |
| BF        | Psychology.<br>Parapsychology. Occult Sciences | all                        |           |            | JU         |                             |
| BH        | Aesthetics                                     |                            |           |            | JU         |                             |
| BJ        | Ethics. Social Usages. Etiquette               |                            | all       |            |            |                             |
| BL        | Religions. Mythology.<br>Rationalism           | all                        |           |            |            | all = ABCDJL<br>NQRTU       |
| BP        | Islam. Bahaim. Theosophy etc.                  |                            | all       |            |            |                             |
| <b>DS</b> | <b>HISTORY – Asia</b>                          |                            |           |            |            |                             |
|           | Description & travel                           | AJL                        | AL        | L          |            |                             |
| 501-935   | Eastern Asia – S.E. Asia The Far East          | AJL                        | AL        | L          |            |                             |

|           |   | Peringkat untuk diperolehi |           |            |            | Catitan                |
|-----------|---|----------------------------|-----------|------------|------------|------------------------|
|           |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| <b>G</b>  | <b>GEOGRAPHY</b>  |                            |           |            |            |                        |
| 1.56      | Geography (general) Periodicals. Societies, Congresses                                  | AC                         | AC        |            |            |                        |
| 101-108   | Gazetteers. Dictionaries. Geographic names. Geographic terms.                           | AC                         | AC        |            |            |                        |
| 1001-3102 | Atlases   | AC                         | AC        |            |            |                        |
| GA        | <b>Mathematical Geography</b>   | A                          | A         |            |            |                        |
| GB        | <b>Physical Geography (general)</b>   | ADN                        | AND       |            |            |                        |
| GC        | <b>Oceanography</b><br>[Seawater, Marine sediments, Marine resources, Marine pollution] |                            | C         | C          | DC         |                        |
| GF        | <b>Human Ecology</b>  | N                          | N         |            | JU         |                        |
| GN        | <b>Anthropology</b>   |                            |           |            | JU         |                        |
| GR        | <b>Folklore</b>   |                            |           |            | JU         |                        |
| GT        | <b>Manners and Customs</b>  |                            |           |            | JU         |                        |
| GV        | <b>Recreation. Leisure.</b>   |                            |           |            |            |                        |
| 1-200.66  | Recreation. Leisure general and outdoor   | AL                         | L         |            | JU         |                        |
| 201-547   | Physical education and training   |                            |           |            | JU         |                        |
| 561-1198  | Sport   |                            | U         | U          | J          |                        |
| <b>H</b>  | <b>SOCIAL SCIENCES</b>  |                            |           |            |            |                        |
| H         | Social Sciences (General)   |                            |           |            | all        | all=ABCDEJL<br>NQRSTUV |
| HA        | <b>Statistics</b>   |                            |           |            |            |                        |
| 1-35      | Statistics (general) and general theory   |                            | all       |            |            | all=ABCDEJL<br>NQRSTUV |

|           |  | Peringkat untuk diperolehi |           |            |            | Catitan                |
|-----------|--|----------------------------|-----------|------------|------------|------------------------|
|           |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| 36-4026   | Statistical data in general. For statistics, see the subjects concerned.   |                            | all       |            |            | all=ABCDEJL<br>NQRSTUV |
| HB        | <b>Economic Theory. Demography.</b>  |                            |           | all        | L          | all = ABCDJL<br>NRU    |
| HC-HD     | <b>Economic history and conditions.</b><br>(Including economic of natural resource)<br><br>[Land, Agriculture, Industry, Special industries and trade] |                            | all       | all        | L          | all= ABCDEJ<br>LNQRU   |
| HE        | <b>Transportation and Communication</b>  |                            | CN        | N          | L          |                        |
| 148.5     | Transportation in underdeveloped areas   |                            | CN        | N          | L          |                        |
| 149       | Transportation and agriculture   |                            | A         |            | L          |                        |
| 199.5     | Freight. Special commodities. Agricultural commodities only.   |                            | A         |            | L          |                        |
| 331-380   | Traffic engineering. Road and highway.   |                            | N         | NL         |            |                        |
| 381-971   | Water transportation   |                            | CN        |            |            |                        |
| 1001-5600 | Rail transportation  |                            | CN        |            |            |                        |
| 5601-5720 | Automotive transportation  |                            | N         | NL         |            |                        |
| 7601-8688 | Telecommunication. Telegraph   |                            | N         | NL         |            |                        |
| 8689-8700 | Radio and television   |                            | JU        |            |            |                        |
| 9701-9715 | Telephone  | N                          |           |            |            |                        |
| 9761-9900 | Air transportation   | L                          | C         | L          |            |                        |

|          |   | Peringkat untuk diperolehi |           |            |            | Catitan   |
|----------|---|----------------------------|-----------|------------|------------|---|
|          |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |   |
| HF       | <b>Commerce</b><br>[Including Business organization & administration, personnel & employment management, accounting, advertising] |                            | U         | U          | L          |   |
| HG       | <b>Finance</b><br>[Money, banking, credit, foreign exchange, corporate finance, stocks, investment, insurance]                    |                            |           |            | L          |   |
| HJ       | <b>Public Finance</b><br>[Income & expenditure, revenue, taxation, customs, tariff, loans, local finance, public accounting]      |                            |           |            | L          |   |
| HM       | <b>Sociology</b><br>[Including social psychology]   |                            | all       | U          | U          | all = ABCDJL<br>NQRSU   |
| HN       | <b>Social History. Social Problems. Social Reform</b>   |                            |           |            | U          |   |
| HQ       | <b>Social Groups</b><br>The family. Marriage Women.   |                            |           |            | U          |   |
| HT       | <b>Communities. Classes. Races</b><br>[Urban sociology, regional planning, rural sociology]                                       |                            | AL        | AL         | U          |   |
| HV       | <b>Social Pathology. Social and Public Welfare</b>  |                            | L         | L          | U          | = Community Development, Human Services, Extension Services, Community Health |
| <b>J</b> | <b>POLITICL SCIENCE</b>   |                            |           |            |            |   |
| JA       | <b>Political Science</b><br>Theory, method, scope. General  |                            | L         | L          | U          |   |
| JC       | <b>Political theory. Theory of the state</b>  |                            |           |            | U          |   |

|        |  | Peringkat untuk diperolehi |           |            |            | Catitan                  |
|--------|--|----------------------------|-----------|------------|------------|--------------------------|
|        |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                          |
| JF     | <b>Political institutions and administration. General. Comparative</b>                                   | L                          |           |            | U          |                          |
| JK     | <b>Political institutions and administration. United States</b>  | LU                         |           |            |            |                          |
| JN     | <b>Political institutions and administration. Great Britain and Europe</b>                               | LU                         |           |            |            |                          |
| JQ     | <b>Political institutions and administration. Asia, Africa, Australia, etc.</b>                          | L                          |           |            | U          | U = Khas untuk Malaysia. |
| JS     | <b>Local government. In general. Municipal government United States and other countries</b>              | LU                         |           |            |            |                          |
| JV     | <b>Colonies and Colonization. General. United States and other countries. Emigration and immigration</b> | U                          |           |            |            |                          |
| JX     | <b>International Law</b>   | L                          | U         |            |            |                          |
| K      | <b>LAW</b><br>Law (General)  |                            | L         |            |            |                          |
| KD     | <b>Law of the United Kingdom and Ireland</b>   |                            | L         |            |            |                          |
| KF     | <b>Law of the United States</b>  |                            | L         |            |            |                          |
| KJ-KKZ | <b>Law of Europe</b>   |                            | L         |            |            |                          |
| KL-KWX | <b>Law of Asia and Eurasia, Africa, Pacific, Pacific Area and Antarctica</b>                             |                            | L         |            |            |                          |

|          |  | Peringkat untuk diperolehi |           |            |            | Catitan |
|----------|--|----------------------------|-----------|------------|------------|---------|
|          |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |         |
| <b>L</b> | <b>EDUCATION</b><br>Educational (General)  |                            | L         |            | J          |         |
| LA       | <b>History of Education</b>  |                            |           |            | J          |         |
| LB       | <b>Theory and practice of education</b><br>[Teaching principles and practice, educational psychology, child study, preschool, primary, elementary, secondary and higher education] |                            | LU        | LU         | J          |         |
| LC       | <b>Special Aspects of Education</b><br>[Forms of education, social aspects of education, education of special classes of persons, adult education]                                 |                            |           | U          | J          |         |
| LD-LG    | <b>Individual institutions: universities, colleges and schools. Here are collected University calendars, catalogs annual report</b>  |                            |           |            | J          |         |
| <b>M</b> | <b>MUSIC</b><br>[Collections of musical scores. Collected works of individual composes. Instrumental music. Vocal music]   |                            |           |            | U          |         |
| ML       | <b>Literature of music</b>   |                            |           |            | U          |         |
| MT       | <b>Musical instruction and study</b>   |                            |           |            | U          |         |
| <b>N</b> | <b>FINE ARTS</b>   |                            |           |            |            |         |
| NA       | <b>Architecture</b><br>[Aesthetics and cities: city planning and beautification]   | NU                         | V         | V          | V          |         |
| NK       | <b>Decorative arts. Applied arts. Decoration and ornament</b>  |                            | J         |            |            |         |



|          |   | Peringkat untuk diperolehi |           |            |            | Catitan                |
|----------|---|----------------------------|-----------|------------|------------|------------------------|
|          |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| <b>P</b> | <b>LANGUAGE AND LITERATURE</b>  |                            |           |            |            |                        |
| P-PL     | <b>PHILOLOGY. LINGUISTICS</b>   |                            | Q         | Q          | JQ         |                        |
|          | <b>Comparative Philology. Linguistics. Indo-European Comparative Philology. Modern Language, Romanic Philology and Language. English, Oriental Philology and Literature, Languages of Eastern Asia, Oceania, Africa</b> |                            |           |            |            |                        |
| PN-PZ    | <b>Literary History. Literature</b>   |                            |           |            |            |                        |
| PN       | <b>Literature (General)</b>   |                            | JQ        |            |            |                        |
| PQ       | <b>Romanic Literatures</b>  |                            | Q         |            |            |                        |
| PR       | <b>English Literature</b>   |                            |           |            | Q          |                        |
| PS       | <b>American Literature</b>  |                            | Q         |            |            |                        |
| PZ       | <b>Fiction in English. Juvenile Belles Letters</b>  |                            | Q         |            |            |                        |
| <b>Q</b> | <b>SCIENCE</b><br>[Science (general)]   |                            | all       |            | D          | all= ABCDEJ<br>LNRSTUV |
| QA       | <b>Mathematics</b>  |                            |           |            |            |                        |
| 9-10     | Mathematical logic  |                            |           |            | D          |                        |
| 76       | Computer science. Electronic data processing  |                            | all       |            | D          | all= ABCDEJ<br>LNRSTUV |
| 101-141  | Elementary mathematics. Arithmetic  |                            | all       |            | D          | all = ABCDJL<br>NRSTUV |
| 152-271  | Algebra, Including machine theory, game theory  |                            |           |            | D          |                        |
| 273-274  | Probabilities   |                            | LN        |            | D          |                        |

|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>         |
|-----------|---|-----------------------------------|------------------|-------------------|-------------------|------------------------|
|           |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                        |
| 276-280   | Mathematical statistics   |                                   | all              |                   | D                 | all = ABCDJL<br>NRSTUV |
| 297-299   | Numerical analysis  |                                   | AN               |                   | DE                |                        |
| 299.8-433 | Analysis, Including analytical methods connected with physical problems                                     |                                   | LU               |                   | D                 |                        |
| 440-699   | Geometry, Trigonometry. Topology  |                                   | C                | C                 | D                 |                        |
| 801-939   | Analytic mechanics  |                                   | N                |                   | D                 |                        |
| <b>QB</b> | <b>Astronomy</b>  |                                   |                  |                   |                   |                        |
| 1-139     | General   | DC                                |                  |                   |                   |                        |
| 140-237   | Practical and spherical astronomy   | D                                 |                  |                   |                   |                        |
| 275-343   | Geodesy   | D                                 |                  |                   |                   |                        |
| 349-421   | Theoretical astronomy and celestial mechanics including perturbations, tides                                | D                                 |                  |                   |                   |                        |
| 495-903   | Descriptive astronomy   | D                                 |                  |                   |                   |                        |
| 500.5-785 | Solar system. Solar energy  |                                   | AN               | AN                | DC                |                        |
| 980-991   | Cosmogony, Cosmology  | D                                 |                  |                   |                   |                        |
| <b>QC</b> | <b>Physics</b>  |                                   |                  |                   |                   |                        |
| 1-197     | General, Mathematical physics, Weights and measures, Descriptive and experimental mechanics, Atomic physics |                                   |                  |                   | D                 |                        |
| 220-246   | Acoustics. Sound  | N                                 | U                |                   | D                 |                        |
| 251-338   | Heat and thermodynamics   |                                   | N                |                   | DE                |                        |
| 350-467   | Optics Light  |                                   | N                |                   | DE                |                        |

|         |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|---------|---|-----------------------------------|------------------|-------------------|-------------------|----------------|
|         |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| 474-496 | Radiation physics. (general)  |                                   |                  |                   | DE                |                |
| 501-766 | Electricity and magnetism   |                                   | N                |                   | D                 |                |
| 770-798 | Nuclear and particle physics.<br>Atomic energy radioactivity  |                                   |                  |                   | DE                |                |
| 801-809 | Geophysics. Cosmic physics  |                                   |                  |                   | DC                |                |
| 811-849 | Geomagnetism  |                                   |                  |                   | D                 |                |
| 851-999 | Meteorology. Climatology  |                                   | AC               |                   | DC                |                |
| QD      | <b>Chemistry</b>  |                                   |                  |                   |                   |                |
| 1-441   | General (including alchemy).<br>Analytical chemistry. Inorganic<br>chemistry. Organic chemistry.  |                                   | E                | E                 | D                 |                |
| 380-388 | Polymers. Macromolecules  |                                   | ENR              | E                 | D                 |                |
| 415-441 | Biological chemistry. Natural<br>products   |                                   | R                |                   | DEC               |                |
| 450-731 | Physical and theoretical chemistry.<br>Including quantum chemistry<br>stereo-chemistry, chemistry<br>reactions, surface chemistry,<br>thermo-chemistry, solution<br>chemistry, electro-chemistry, radio-<br>chemistry, radiation chemistry,<br>photochemistry |                                   |                  |                   | DE                |                |
| 501-505 | Conditions and laws of chemical<br>reactions  |                                   | E                |                   | D                 |                |
| 504     | Thermodynamics  |                                   | N                |                   | DE                |                |
| 506-508 | Surface chemistry   |                                   | E                |                   | D                 |                |
| 540-549 | Theory of solution  |                                   |                  |                   | D                 |                |
| 551-571 | Electro chemistry. Electrolysis   |                                   |                  |                   | D                 |                |

|          |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>  |
|----------|---|-----------------------------------|------------------|-------------------|-------------------|---|
|          |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |   |
| 591      | Magnetochemistry                          |                                   |                  |                   | D                 |   |
| 901-999  | Crystallography                           |                                   | R                | R                 | D                 |   |
| QE       | <b>Geology</b>                            |                                   |                  |                   |                   |   |
| 1-350.62 | General                                   | C                                 | C                | A                 |                   |   |
| 351-399  | Mineralogy                                |                                   | C                | ACN               |                   |   |
| 420-499  | Petrology                                 |                                   | C                | CN                |                   |   |
| 500-625  | Dynamic and structural geology            | AN                                |                  |                   | C                 |   |
| 640-699  | Stratigraphic geology                     | A                                 |                  |                   | C                 |   |
| QH       | <b>Natural History</b> (general)          |                                   | AB               |                   |                   |   |
| 75-77    | Nature conservation. Landscape protection |                                   | ABC              | AC                |                   |   |
| 91-100   | Aquatic biology. (Marine freshwater)      |                                   | DC               | DC                |                   | Fishes, plankton, benthic organisms, aquatic plants, pollution, management biology of lakes, seas, rivers |
| 201-278  | Microscopy                                |                                   | DER              | E                 |                   |   |
| 301-705  | General biology                           |                                   | all              |                   | D                 | all= ABCDEJ<br>KLNQRSTU   |
| 426-470  | Genetics                                  |                                   | BS               | AR                | DE                | Plant genetics, annual genetics, cytogenetics, population & biochemical genetics. Evolution               |
| 471-489  | Reproduction                              |                                   | BS               |                   | D                 |   |

|           |   | <b>Peringkat untuk diperoleh</b> |                  |                   |                   | <b>Catitan</b>  |
|-----------|---|----------------------------------|------------------|-------------------|-------------------|---|
|           |   | <b><u>Gen</u></b>                | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |   |
| 501-531   | Life  |                                  | BS               |                   | D                 |   |
| 540-549   | Ecology. Including general and animal ecology |                                  | BDE              | BDE               |                   |   |
| 573-671   | Cytology                                      |                                  | BRS              | BRS               | DE                | Chromosomes, cytological techniques, staining                                       |
| QK        | <b>Botany</b>                                 |                                  |                  |                   |                   |   |
| 641-673   | Plant anatomy                                 |                                  | ADEC             | ADE               |                   | Germination, photosynthesis, phytochroms, hormones, waterstress, growth & flowering |
| 710-899   | Plant physiology                              |                                  |                  | AD                | AD                | Mensuration population dynamics, micro-climate, plant geography.                    |
| 901-997.5 | Plant ecology                                 |                                  | EC               | ADE               | AD                |   |
| QL        | <b>Zoology</b>                                |                                  |                  |                   |                   |   |
| 386-391   | Nematology                                    |                                  | A                | A                 |                   |   |
| 461-599   | Entomology                                    |                                  |                  |                   | A                 |   |
| 614-639   | Fisheries                                     |                                  |                  |                   | A                 |   |
| 750-795   | Animal behavior and psychology                | E                                | B                | B                 |                   |   |
| 757       | Parasitology                                  |                                  | BES              | BE                | A                 |   |
| 801-950   | Anatomy                                       |                                  | BE               | BE                |                   |   |
| 951-999   | Embryology                                    |                                  | BES              | BE                |                   |   |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|-----------|--|-----------------------------------|------------------|-------------------|-------------------|----------------|
|           |  | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| <b>QM</b> | <b>Human Anatomy</b>                             |                                   |                  |                   |                   |                |
| 1-511     | General  | EUS                               | BES              | BES               |                   |                |
| 550-577.8 | Human and comparative histology                  | US                                | BS               | BS                |                   |                |
| 601-695   | Human embryology                                 | EUS                               | BES              | BES               |                   |                |
| <b>QP</b> | <b>Physiology</b>                                |                                   |                  |                   |                   |                |
| 1-345     | General. Including influences of the environment | USC                               | C                | C                 |                   |                |
| 501-801   | Animal biochemistry                              |                                   | BEF              | E                 | B                 |                |
| 901-981   | Experimental pharmacology                        |                                   | ES               | ES                |                   |                |
| <b>QR</b> | <b>Microbiology</b>                              |                                   |                  |                   |                   |                |
| 46        | Medical microbiology                             |                                   | BDES             | BDES              |                   |                |
| 49        | Veterinary microbiology                          |                                   | BDE              | BDE               |                   |                |
| 51        | Agricultural microbiology                        |                                   | ADE              | ADE               |                   |                |
| 53        | Industrial microbiology                          |                                   | DREC             | DREC              |                   |                |
| 75-99     | Bacteria   |                                   | ABDERS           | ABDERS            |                   |                |
| 100-130   | Food microbiology, Microbial ecology             |                                   | DEU              | DEU               | R                 |                |
| 151       | Micro-organisms of fermentation. Yeast, etc.     |                                   | ES               | ES                | R                 |                |
| 180-189   | Immunology                                       |                                   | BDES             | BDES              |                   |                |
| 301-327   | Micro-organisms of animals                       |                                   | BDE              | BDE               |                   |                |
| 355-484   | Virology   |                                   | DES              | DES               | AB                |                |
| <b>R</b>  | <b>MEDICINE</b>                                  |                                   |                  |                   |                   |                |
| 5-920     | Medicine (general)                               | BU                                | ES               |                   |                   |                |

|          |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|----------|--|-----------------------------------|------------------|-------------------|-------------------|----------------|
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| RA       | <b>Public Aspect of Medicine</b>                 | BU                                |                  |                   | S                 |                |
| RB       | <b>Pathology</b>                                 | BU                                |                  |                   | S                 |                |
| RC       | <b>Internal medicine</b><br>Practice of medicine | BU                                |                  |                   | S                 |                |
| RD       | <b>Surgery</b>                                   |                                   |                  |                   | S                 |                |
| RE       | <b>Ophthalmology</b>                             | B                                 |                  |                   | S                 |                |
| RF       | <b>Otorhinolaryngology</b>                       | B                                 |                  |                   | S                 |                |
| RG       | <b>Gynecology &amp; obstetrics</b>               | BU                                |                  |                   | S                 |                |
| RJ       | <b>Pediatrics</b>                                | U                                 |                  |                   | S                 |                |
| RL       | <b>Dermatology</b>                               | B                                 |                  |                   | S                 |                |
| RM       | <b>Therapeutics. Pharmacology</b>                | BDES                              | BES              | B                 |                   |                |
| RS       | <b>Pharmacy &amp; Materia Medica</b>             | B                                 | ES               | ADR               |                   |                |
| RT       | <b>Nursing</b>                                   | BU                                | S                |                   |                   |                |
| RV       | <b>Botanic, Thomsonian and Eclectic Medicine</b> | BE                                | ES               | ADE               |                   |                |
| RX       | <b>Homeopathy</b>                                |                                   | S                | S                 |                   |                |
| RZ       | <b>Other Systems of Medicine</b>                 |                                   | S                | S                 |                   |                |
| <b>S</b> | <b>AGRICULTURE</b>                               |                                   |                  |                   |                   |                |
| 531-545  | Agriculture education                            |                                   | AL               | L                 |                   |                |
| 560-575  | Farm economics and management                    |                                   | AL               | AL                |                   |                |
| 583-589  | Agricultural chemistry and physics               |                                   |                  |                   | A                 |                |
| 590-599  | Soils  |                                   | DL               |                   | AC                |                |

|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>                         |
|-----------|---|-----------------------------------|------------------|-------------------|-------------------|--|
|           |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |  |
| 600-621   | Agricultural meteorology.<br>Agricultural ecology. Crops and<br>pollution. Crop rotation tillage<br>reclamation and irrigation of<br>farm lands |                                   | DEC              | E                 | A                 |  |
| 622-667   | Soil conservation. Fertilizers.<br>Soil improvement   |                                   | C                | C                 | AC                |  |
| 671-760   | Farm machinery and<br>engineering   |                                   | N                | N                 | A                 |  |
| 900-972   | Conservation of natural<br>resources  |                                   | DCL              | DCL               | A                 | = Agricultural/<br>Forest<br>Resources |
| 950-954   | Land conservation   |                                   | C                | CL                | AC                |  |
| 960-964   | Wild life conservation  |                                   | BDF              | BDL               |                   |  |
| 970-972   | Recreational resources<br>conservation  |                                   | ACL              | AL                |                   |  |
| <b>SB</b> | <b>Plant Culture</b>  |                                   |                  |                   |                   |  |
| 1-109     | Plant culture (general)   |                                   | LU               |                   | A                 |  |
| 110-112   | Methods for special areas<br>including dryland and tropical<br>agriculture irrigation farming   |                                   |                  |                   | A                 |  |
| 114-118   | Seeds   |                                   |                  |                   | A                 |  |
| 119-125   | Propagation, training and<br>pruning  |                                   |                  |                   | A                 |  |
| 126-139   | Artificial light gardening,<br>hydroponics, growth regulators,<br>harvesting storage,<br>miscellaneous  |                                   |                  |                   | A                 |  |
| 175-176   | Food crops  |                                   |                  |                   | A                 |  |
| 183-317   | Field crops   |                                   |                  |                   | A                 |  |



|         |   | Peringkat untuk diperolehi |           |            |            | Catitan                |
|---------|---|----------------------------|-----------|------------|------------|------------------------|
|         |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| 318-450 | Horticultural crops. Flower arrangement and decoration                        |                            | LU        |            | A          |                        |
| 451-466 | Gardens and gardening   |                            |           |            | A          |                        |
| 469-479 | Landscape gardening   |                            | LU        |            | A          |                        |
| 481-485 | Parks and public reservations   |                            | AL        | AL         |            |                        |
| 599-999 | Diseases and pests, including treatment and control                           |                            | E         | E          | A          |                        |
| SD      | <b>Forestry</b>   |                            |           |            |            |                        |
| 1-390   | Forestry (general)  | C                          |           |            | C          |                        |
| 390     | Forest soils  | C                          |           |            | C          |                        |
| 391-409 | Sylviculture  |                            |           |            | C          |                        |
| 411-428 | Conservation and protection including forest reserves                         |                            |           |            | C          |                        |
| 430-557 | Exploitation and utilization, timber tress, logging transportation, valuation |                            |           |            | C          |                        |
| 561-668 | Forest policy and administration  |                            |           |            | C          |                        |
| SF      | <b>Animal Culture</b>   |                            |           |            |            |                        |
| 1-83    | Animal culture/husbandry. (general)   |                            |           |            | AB         |                        |
| 84-99   | Ranges, housing, environmental control, feeds, nutrition                      |                            |           |            | AB         | = Tropical environment |
| 101-121 | Brands, breeds, exhibition.   |                            |           |            | AB         |                        |
| 191-275 | Cattle dairying products  |                            | R         | R          | AB         |                        |
| 277-359 | Horses, shows, racing, breeds and breeding                                    |                            |           |            | AB         |                        |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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|           |  | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| 361-362   | Donkeys, mules   |                                   |                  |                   | AB                |                |
| 371-401   | Sheep, goats, swine  |                                   |                  |                   | AB                |                |
| 402-405   | Fur-bearing animals  | B                                 |                  |                   |                   |                |
| 405-407   | Laboratory animals   |                                   |                  |                   | B                 |                |
| 411-459   | Pets – dogs, cat, rabbits  |                                   |                  |                   | B                 |                |
| 461-473   | Birds  |                                   |                  |                   | AB                |                |
| 481-507   | Poultry  |                                   |                  |                   | AB                |                |
| 521-593   | Insects. Bee culture, silk culture   |                                   |                  |                   | A                 |                |
| 600-1100  | Veterinary medicine  |                                   |                  |                   | B                 |                |
| 761-910.5 | Anatomy, physiology, pathology, diagnosis, diseases, orthopedics                 |                                   |                  |                   | B                 |                |
| 911-919   | Surgery, materia medica and pharmacy   |                                   |                  |                   | B                 |                |
| 951-997   | Diseases of special classes of animals including pets, wild animals              |                                   |                  |                   | B                 |                |
| 988       | Quarantine, inspection   |                                   | B                | B                 |                   |                |
| SH        | <b>Fish Culture. Fisheries</b>   |                                   |                  |                   |                   |                |
| 21-191    | Fish culture   |                                   |                  | A                 |                   |                |
| 201-334   | Fisheries  |                                   |                  | A                 |                   |                |
| 335-337   | Preparation of fishery products for use, processing of fish and fishery products |                                   | ER               | R                 |                   |                |
| 346-351   | Fishery for individual species   |                                   |                  |                   |                   |                |
| 401-691   | Angling  |                                   |                  |                   |                   |                |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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| <b>SK</b> | <b>Hunting Sports</b>  |                                   |                  |                   |                   |                |
| 351-579   | Wildlife management, game protection   |                                   | L                | L                 | B                 |                |
| <b>T</b>  | <b>TECHNOLOGY</b>  |                                   |                  |                   |                   |                |
| 1-54      | Technology (general)   |                                   | NT               |                   |                   |                |
| 55-55.3   | Industrial safety  |                                   | N                |                   |                   |                |
| 55.4-60   | Industrial engineering, including operations research, systems analysis, management information systems, production efficiency, human engineering in industry, work measurement, methods engineering |                                   | DL               | L                 | N                 |                |
| 201-339   | Patents. Trademarks  | LN                                |                  |                   |                   |                |
| 351-385   | Engineering graphics mechanical drawing  |                                   | NV               |                   |                   |                |
| <b>TA</b> | <b>Civil Engineering</b>   |                                   |                  |                   |                   |                |
| 165-170   | Engineering instruments. Human engineering. Systems engineering. Environmental engineering   |                                   | DNU              |                   |                   |                |
| 117.4-185 | Engineering economy  | LN                                | N                | L                 |                   |                |
| 239-348   | Engineering mathematics. Engineering analysis  | D                                 |                  |                   | N                 |                |
| 349-360   | Mechanics of engineering. Applied mechanics  |                                   |                  |                   | N                 |                |
| 401-492   | Materials of engineering and construction including strength of materials, testing and properties of materials   |                                   |                  |                   | N                 |                |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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| 501-625   | Surveying  |                                   | AN               | N                 |                   |                |
| 630-695   | Structural engineering (general)                         |                                   | N                | N                 |                   |                |
| 705-710   | Engineering geology. Rock/soil mechanics.                |                                   | AC               |                   | N                 |                |
| 715-787   | Earthwork. Foundation                                    |                                   | C                |                   | N                 |                |
| 800-820   | Tunneling. Tunnels                                       | N                                 |                  |                   |                   |                |
| 900       | Protection of structures                                 |                                   |                  |                   | N                 |                |
| 1001-1280 | Transportation engineering (general)                     |                                   | N                | N                 |                   |                |
| TC        | <b>Hydraulic Engineering</b>                             |                                   |                  |                   |                   |                |
| 171-179   | Hydrodynamics  |                                   | D                |                   | N                 |                |
| 401-526   | River, lake and water supply engineering (general)       |                                   | C                |                   | N                 |                |
| 530       | River protective works. Flood control. Tree planting     |                                   | DC               |                   | N                 |                |
| 970-978   | Drainage   |                                   | DC               |                   | N                 |                |
| 1501-1645 | Ocean engineering  | N                                 |                  |                   |                   |                |
| TD        | <b>Environmental Technology, Sanitary Engineering</b>    |                                   |                  |                   |                   |                |
| 1-158     | Environmental technology. Sanitary engineering (general) |                                   |                  |                   | N                 |                |
| 170       | Environmental protection                                 | L                                 | DC               | DC                | N                 |                |
| 172-192   | Environmental pollution                                  | L                                 | DC               | DC                | N                 |                |

|         |   | Peringkat untuk diperolehi |           |            |            | Catitan |
|---------|---|----------------------------|-----------|------------|------------|---------|
|         |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |         |
| 201-500 | Water supply for domestic and industrial purposes including water quality and pollution, treatment, saline water conversion distribution systems  | ADC                        |           |            | N          |         |
| 511-780 | Sewage collection and disposal systems. Sewage  | N                          |           | N          |            |         |
| 878-893 | Special types of pollution including soil, air, noise pollution   | AC                         | DC        |            | N          |         |
| 895-899 | Industrial sanitation. Industrial wastes  |                            | N         | N          |            |         |
| 920-949 | Rural sanitary engineering  | N                          |           |            |            |         |
| 930     | Agricultural waste engineering  | DC                         |           |            | N          |         |
| TE      | <b>Highway Engineering. Roads and Pavement</b>  |                            |           |            |            |         |
| 178     | Roadside development. Landscaping   | A                          | N         | N          |            |         |
| 200-298 | Construction details [Country roads, farm roads, forest roads, streets, pedestrian facilities]  | N                          |           |            |            |         |
| TF      | <b>Railroad Engineering and Operation Including Street Railways and Subways</b>   | N                          |           |            |            |         |
| TG      | <b>Bridge Engineering</b>   | N                          |           |            |            |         |
| TH      | <b>Building Construction</b>  |                            | N         | N          | N          |         |
| TJ      | <b>Mechanical Engineering and Machinery</b><br>[Mechanical engineering, Robotics, Steam engineering, Solar engines, Machine shops and machine shop practice, Agricultural and farm machinery] |                            |           | N          | N          |         |

|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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| TK        | <b>Electrical Engineering.<br/>Electronic. Nuclear<br/>Engineering</b>  |                                   |                  |                   | N                 |                |
| 1001-4399 | Production of electric energy,<br>Dynamoelectric machinery,<br>Distribution or transmission of<br>electric power, Electric lighting |                                   |                  |                   | N                 |                |
| 5101-6720 | Telecommunication   |                                   |                  |                   | NT                |                |
| 7800-8360 | Electronics   |                                   |                  |                   | NT                |                |
| 7855-7895 | Computer engineering  |                                   |                  |                   | NT                |                |
| 9001-8401 | Nuclear engineering. Atomic<br>power  | N                                 |                  |                   |                   |                |
| TL        | <b>Motor Vehicles. Aeronautics.<br/>Astronautics</b>  |                                   |                  |                   |                   |                |
| 1-480     | Motor vehicles  |                                   |                  |                   | N                 |                |
| 500-777   | Aeronautics   |                                   | N                | N                 |                   |                |
| TN        | <b>Mining Engineering<br/>Metallurgy Including The<br/>Mineral Industries</b>   | DN                                | E                |                   |                   |                |
| TP        | <b>Chemical Technology</b>  |                                   |                  |                   |                   |                |
| 155-156   | Chemical engineering  |                                   |                  |                   | N                 |                |
| 368-659   | Food processing and<br>manufacture. Including<br>refrigeration, fermentation<br>industries, beverages                               |                                   |                  |                   | NR                |                |
| 670-699   | Oils, fats and waxes  |                                   |                  |                   | NR                |                |
| 690-692   | Petroleum refining and products   | N                                 |                  |                   |                   |                |
| 785-888   | Clay industries. Ceramics.<br>Glass. Cement industries  | N                                 |                  |                   |                   |                |

|           |  | <b>Peringkat untuk diperoleh</b> |                  |                   |                   | <b>Catitan</b> |
|-----------|--|----------------------------------|------------------|-------------------|-------------------|----------------|
|           |  | <b><u>Gen</u></b>                | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| 890-933   | Textile bleaching dyeing and printing  |                                  | JU               | JU                |                   |                |
| 934-944   | Paints, pigments, varnishes, etc.  | N                                |                  |                   |                   |                |
| 1080-1185 | Polymers, plastics and their manufactures  | D                                |                  | N                 |                   |                |
| TR        | <b>Photography</b>   |                                  |                  |                   |                   |                |
| TS        | <b>Manufactures</b>  |                                  |                  |                   |                   |                |
| 155-193   | Production management. Including quality control, production control, inventory control, product engineering, process engineering, plant engineering | L                                |                  | L                 | N                 |                |
| 195-198   | Packaging  | R                                |                  |                   | N                 |                |
| 200-770   | Metal manufactures. Metal-working. Including forging, casting, stamping, instrument making, firearms, clocks, metal finishing, jewelry               | N                                |                  |                   |                   |                |
| 800-937   | Wood technology. Including lumber, furniture chemical processing of wood   | N                                |                  |                   |                   |                |
| 940-1070  | Leather industries. Tanning  | N                                |                  |                   |                   |                |
| 1080-1268 | Paper manufacture. Wood pulp industry  | N                                |                  |                   |                   |                |
| 1300-1865 | Textile industries   | J                                | U                | U                 |                   |                |
| 1870-1935 | Rubber industry. (Technology)  | A                                | N                |                   |                   |                |
| 1950-1982 | Animal products  |                                  | ENR              | NR                |                   |                |
| 2120-2159 | Cereals and flour. Milling industry  |                                  | NR               | NR                |                   |                |
| 2220-2283 | Tobacco Industry   | ANR                              |                  |                   |                   |                |

|             |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>   |
|-------------|---|-----------------------------------|------------------|-------------------|-------------------|--|
|             |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |  |
| TT          | <b>Handicrafts. Arts and Crafts</b>               |                                   | J                | J                 |                   |  |
| TX          | <b>Home Economics</b>                             |                                   |                  |                   |                   |  |
| 301-339     | The house, including arrangement, care, servants  | J                                 |                  |                   | U                 |  |
| 341-641     | Nutrition. Foods and food supply                  |                                   | ES               | ES                | ERU               |  |
| 645-840     | Cookery   |                                   | JU               |                   |                   |  |
| 901-953     | Hotels, restaurants, taverns. Catering            | LU                                | J                | JL                |                   |  |
| 955-985     | Building operation and housekeeping               | J                                 |                  |                   |                   |  |
| 1110-1107   | Mobile home living                                | J                                 |                  |                   |                   |  |
| <b>U</b>    | <b>MILITARY SCIENCE</b>                           |                                   |                  |                   |                   |  |
| <b>V-VG</b> | <b>NAVAL SCIENCE</b>                              |                                   |                  |                   |                   |  |
| <b>Z</b>    | <b>BIBLIOGRAPHY.<br/>LIBRARY SCIENCE</b>          |                                   |                  |                   |                   |  |
| 40-115      | Writing   |                                   | all              |                   |                   | = Techniques, science writing, technical report journalism |
| 116-549     | Printing, Bookbinding, Bookselling and Publishing | J                                 |                  |                   |                   | all= ABCDJL<br>NQRSTUV                                     |
| 551-661     | Copyright. Intellectual property                  | J                                 |                  |                   |                   |  |
| 662-677     | Library science (general)                         |                                   | J                | J                 |                   |  |
| 678-4980    | Library administration and organization           |                                   | J                | J                 |                   |  |



**Susunan Peringkat Keluasan dan Pengumpulan Dalam Bidang-Bidang Perkara Seperti Yang Telah Dinyatakan Oleh Fakulti-Fakulti Mengikut Jadual Pengkelasan “National Library of Medicine”.**

|  |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|--|---|-----------------------------------|------------------|-------------------|-------------------|----------------|
|  |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| <b>Preclinical Sciences</b>            |   |                                   |                  |                   |                   |                |
| QS                                     | <b>Human Anatomy</b>                        | U                                 | S                | S                 |                   |                |
| QT                                     | <b>Physiology</b>                           | U                                 | S                | S                 |                   |                |
| QU                                     | <b>Biochemistry</b>                         |                                   | S                | S                 |                   |                |
| QV                                     | <b>Pharmacology</b>                         | US                                | S                | S                 |                   |                |
| QW                                     | <b>Microbiology and Immunology</b>          |                                   | S                | S                 |                   |                |
| QX                                     | <b>Parasitology</b>                         |                                   | S                | S                 | S                 |                |
| QY                                     | <b>Clinical Pathology</b>                   | U                                 | S                | S                 | S                 |                |
| QZ                                     | <b>Pathology</b>                            | U                                 | S                | S                 | S                 |                |
| <b>Medicine &amp; related subjects</b> |   |                                   |                  |                   |                   |                |
| W                                      | <b>General Medicine. Health Professions</b> | U                                 | S                | S                 |                   |                |
| WA                                     | <b>Public Health</b>                        | U                                 | S                | US                | S                 |                |

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| WB | <b>Practice of Medicine</b>   | S | S | S |   |
| WC | <b>Communicable Diseases</b>  | U | S | S | S |
| WD | <b>Disorder of Systemic, Metabolic, or Environmental Origin, etc.</b> | U | S | S | S |
| WE | <b>Musculoskeletal System</b>   | U | S | S | S |
| WF | <b>Respiratory System</b>   | U | S | S | S |
| WG | <b>Cardiovascular System</b>  | U | S | S | S |
| WH | <b>Hemic and Lymphatic Systems</b>                                    | U | S | S | S |



|    |                                      | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|----|--------------------------------------|-----------------------------------|------------------|-------------------|-------------------|----------------|
|    |                                      | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| WI | <b>Digestive System</b>              | U                                 | S                | S                 | S                 |                |
| WJ | <b>Urogenital System</b>             | U                                 | S                | S                 | S                 |                |
| WK | <b>Endocrine System</b>              | U                                 | S                | S                 | S                 |                |
| WL | <b>Nervous System</b>                | U                                 | S                | S                 | S                 |                |
| WM | <b>Psychiatry</b>                    | U                                 | S                | S                 | S                 |                |
| WN | <b>Radiology. Diagnostic Imaging</b> |                                   | S                | S                 | S                 |                |
| WO | <b>Surgery</b>                       |                                   | S                | S                 | S                 |                |
| WP | <b>Gynecology</b>                    | U                                 | S                | S                 | S                 |                |
| WQ | <b>Obstetrics</b>                    | U                                 | S                | S                 | S                 |                |
| WR | <b>Dermatology</b>                   | U                                 | S                | S                 | S                 |                |
| WS | <b>Pediatrics</b>                    |                                   | S                | S                 | S                 |                |
| WT | <b>Geriatrics. Chronic Disease</b>   | S                                 |                  | US                | US                |                |
| WU | <b>Dentistry. Oral Surgery</b>       | S                                 |                  |                   |                   |                |
| WV | <b>Otolaryngology</b>                | U                                 | S                | S                 | S                 |                |
| WW | <b>Ophthalmology</b>                 | U                                 | S                | S                 | S                 |                |
| WY | <b>Nursing</b>                       | U                                 | S                | S                 | S                 |                |
| WZ | <b>History of Medicine</b>           | S                                 | S                |                   |                   |                |

**Susunan Peringkat Keluasan dan Pengumpulan Dalam Bidang-Bidang Perkara Seperti Yang Telah Dinyatakan Oleh Fakulti-Fakulti Mengikut Jadual Pengkelasan Perpustakaan Kongres**

|           |  | Peringkat untuk diperolehi |           |            |            | Catitan                     |
|-----------|--|----------------------------|-----------|------------|------------|-----------------------------|
|           |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                             |
| <b>A</b>  | <b>GENERAL WORKS</b>                           |                            |           |            |            |                             |
| AE        | Encyclopedia (general)                         | all                        |           |            |            | all = ABCD<br>EJLN<br>QRSTU |
| AG        | Dictionaries and other general reference books | all                        |           |            |            |                             |
| AS        | Academic and learned societies                 | all                        |           |            |            |                             |
| AY        | Yearbooks, almanacs, directories (general)     | all                        |           |            |            |                             |
| AZ        | History of scholarship and learning            | all                        | J         |            |            |                             |
| <b>B</b>  | <b>PHILOSOPHY.<br/>PSYCHOLOGY, RELIGION</b>    |                            |           |            |            |                             |
| B         | Philosophy (General)                           |                            | all       |            | U          | all = ABCDJL<br>NQRTU       |
| BF        | Psychology.<br>Parapsychology. Occult Sciences | all                        |           |            | JU         |                             |
| BH        | Aesthetics                                     |                            |           |            | JU         |                             |
| BJ        | Ethics. Social Usages. Etiquette               |                            | all       |            |            | all = ABCDJL<br>NQRTU       |
| BL        | Religions. Mythology.<br>Rationalism           | all                        |           |            |            |                             |
| BP        | Islam. Bahaim. Theosophy etc.                  |                            | all       |            |            |                             |
| <b>DS</b> | <b>HISTORY – Asia</b>                          |                            |           |            |            |                             |
|           | Description & travel                           | AJL                        | AL        | L          |            |                             |
| 501-935   | Eastern Asia – S.E. Asia The Far East          | AJL                        | AL        | L          |            |                             |

|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>         |
|-----------|---|-----------------------------------|------------------|-------------------|-------------------|------------------------|
|           |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                        |
| <b>G</b>  | <b>GEOGRAPHY</b>  |                                   |                  |                   |                   |                        |
| 1.56      | Geography (general) Periodicals. Societies, Congresses                                  | AC                                | AC               |                   |                   |                        |
| 101-108   | Gazetteers. Dictionaries. Geographic names. Geographic terms.                           | AC                                | AC               |                   |                   |                        |
| 1001-3102 | Atlases   | AC                                | AC               |                   |                   |                        |
| GA        | <b>Mathematical Geography</b>   | A                                 | A                |                   |                   |                        |
| GB        | <b>Physical Geography (general)</b>   | ADN                               | AND              |                   |                   |                        |
| GC        | <b>Oceanography</b><br>[Seawater, Marine sediments, Marine resources, Marine pollution] |                                   | C                | C                 | DC                |                        |
| GF        | <b>Human Ecology</b>  | N                                 | N                |                   | JU                |                        |
| GN        | <b>Anthropology</b>   |                                   |                  |                   | JU                |                        |
| GR        | <b>Folklore</b>   |                                   |                  |                   | JU                |                        |
| GT        | <b>Manners and Customs</b>  |                                   |                  |                   | JU                |                        |
| GV        | <b>Recreation. Leisure.</b>   |                                   |                  |                   |                   |                        |
| 1-200.66  | Recreation. Leisure general and outdoor   | AL                                | L                |                   | JU                |                        |
| 201-547   | Physical education and training   |                                   |                  |                   | JU                |                        |
| 561-1198  | Sport   |                                   | U                | U                 | J                 |                        |
| <b>H</b>  | <b>SOCIAL SCIENCES</b>  |                                   |                  |                   |                   |                        |
| H         | Social Sciences (General)   |                                   |                  |                   | all               | all=ABCDEJL<br>NQRSTUV |
| HA        | <b>Statistics</b>   |                                   |                  |                   |                   |                        |
| 1-35      | Statistics (general) and general theory   |                                   | all              |                   |                   | all=ABCDEJL<br>NQRSTUV |

|           |  | Peringkat untuk diperolehi |           |            |            | Catitan                |
|-----------|--|----------------------------|-----------|------------|------------|------------------------|
|           |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| 36-4026   | Statistical data in general. For statistics, see the subjects concerned.   |                            | all       |            |            | all=ABCDEJL<br>NQRSTUV |
| HB        | <b>Economic Theory. Demography.</b>  |                            |           | all        | L          | all = ABCDJL<br>NRU    |
| HC-HD     | <b>Economic history and conditions.</b><br>(Including economic of natural resource)<br><br>[Land, Agriculture, Industry, Special industries and trade] |                            | all       | all        | L          | all= ABCDEJ<br>LNQRU   |
| HE        | <b>Transportation and Communication</b>  |                            | CN        | N          | L          |                        |
| 148.5     | Transportation in underdeveloped areas   |                            | CN        | N          | L          |                        |
| 149       | Transportation and agriculture   |                            | A         |            | L          |                        |
| 199.5     | Freight. Special commodities. Agricultural commodities only.   |                            | A         |            | L          |                        |
| 331-380   | Traffic engineering. Road and highway.   |                            | N         | NL         |            |                        |
| 381-971   | Water transportation   |                            | CN        |            |            |                        |
| 1001-5600 | Rail transportation  |                            | CN        |            |            |                        |
| 5601-5720 | Automotive transportation  |                            | N         | NL         |            |                        |
| 7601-8688 | Telecommunication. Telegraph   |                            | N         | NL         |            |                        |
| 8689-8700 | Radio and television   |                            | JU        |            |            |                        |
| 9701-9715 | Telephone  | N                          |           |            |            |                        |
| 9761-9900 | Air transportation   | L                          | C         | L          |            |                        |

|          |   | Peringkat untuk diperolehi |           |            |            | Catitan   |
|----------|---|----------------------------|-----------|------------|------------|---|
|          |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |   |
| HF       | <b>Commerce</b><br>[Including Business organization & administration, personnel & employment management, accounting, advertising] |                            | U         | U          | L          |   |
| HG       | <b>Finance</b><br>[Money, banking, credit, foreign exchange, corporate finance, stocks, investment, insurance]                    |                            |           |            | L          |   |
| HJ       | <b>Public Finance</b><br>[Income & expenditure, revenue, taxation, customs, tariff, loans, local finance, public accounting]      |                            |           |            | L          |   |
| HM       | <b>Sociology</b><br>[Including social psychology]   |                            | all       | U          | U          | all = ABCDJL<br>NQRSU   |
| HN       | <b>Social History. Social Problems. Social Reform</b>   |                            |           |            | U          |   |
| HQ       | <b>Social Groups</b><br>The family. Marriage Women.   |                            |           |            | U          |   |
| HT       | <b>Communities. Classes. Races</b><br>[Urban sociology, regional planning, rural sociology]                                       |                            | AL        | AL         | U          |   |
| HV       | <b>Social Pathology. Social and Public Welfare</b>  |                            | L         | L          | U          | = Community Development, Human Services, Extension Services, Community Health |
| <b>J</b> | <b>POLITICAL SCIENCE</b>  |                            |           |            |            |   |
| JA       | <b>Political Science</b><br>Theory, method, scope. General  |                            | L         | L          | U          |   |
| JC       | <b>Political theory. Theory of the state</b>  |                            |           |            | U          |   |

|        |  | Peringkat untuk diperolehi |           |            |            | Catitan                  |
|--------|--|----------------------------|-----------|------------|------------|--------------------------|
|        |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                          |
| JF     | <b>Political institutions and administration. General. Comparative</b>                                   | L                          |           |            | U          |                          |
| JK     | <b>Political institutions and administration. United States</b>  | LU                         |           |            |            |                          |
| JN     | <b>Political institutions and administration. Great Britain and Europe</b>                               | LU                         |           |            |            |                          |
| JQ     | <b>Political institutions and administration. Asia, Africa, Australia, etc.</b>                          | L                          |           |            | U          | U = Khas untuk Malaysia. |
| JS     | <b>Local government. In general. Municipal government United States and other countries</b>              | LU                         |           |            |            |                          |
| JV     | <b>Colonies and Colonization. General. United States and other countries. Emigration and immigration</b> | U                          |           |            |            |                          |
| JX     | <b>International Law</b>   | L                          | U         |            |            |                          |
| K      | <b>LAW</b><br>Law (General)  |                            | L         |            |            |                          |
| KD     | <b>Law of the United Kingdom and Ireland</b>   |                            | L         |            |            |                          |
| KF     | <b>Law of the United States</b>  |                            | L         |            |            |                          |
| KJ-KKZ | <b>Law of Europe</b>   |                            | L         |            |            |                          |
| KL-KWX | <b>Law of Asia and Eurasia, Africa, Pacific, Pacific Area and Antarctica</b>                             |                            | L         |            |            |                          |



|          |  | Peringkat untuk diperolehi |           |            |            | Catitan |
|----------|--|----------------------------|-----------|------------|------------|---------|
|          |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |         |
| <b>L</b> | <b>EDUCATION</b><br>Educational (General)  |                            | L         |            | J          |         |
| LA       | <b>History of Education</b>  |                            |           |            | J          |         |
| LB       | <b>Theory and practice of education</b><br>[Teaching principles and practice, educational psychology, child study, preschool, primary, elementary, secondary and higher education] |                            | LU        | LU         | J          |         |
| LC       | <b>Special Aspects of Education</b><br>[Forms of education, social aspects of education, education of special classes of persons, adult education]                                 |                            |           | U          | J          |         |
| LD-LG    | <b>Individual institutions: universities, colleges and schools. Here are collected University calendars, catalogs annual report</b>  |                            |           |            | J          |         |
| <b>M</b> | <b>MUSIC</b><br>[Collections of musical scores. Collected works of individual composes. Instrumental music. Vocal music]   |                            |           |            | U          |         |
| ML       | <b>Literature of music</b>   |                            |           |            | U          |         |
| MT       | <b>Musical instruction and study</b>   |                            |           |            | U          |         |
| <b>N</b> | <b>FINE ARTS</b>   |                            |           |            |            |         |
| NA       | <b>Architecture</b><br>[Aesthetics and cities: city planning and beautification]   | NU                         | V         | V          | V          |         |
| NK       | <b>Decorative arts. Applied arts. Decoration and ornament</b>  |                            | J         |            |            |         |

|          |   | Peringkat untuk diperolehi |           |            |            | Catitan                |
|----------|---|----------------------------|-----------|------------|------------|------------------------|
|          |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| <b>P</b> | <b>LANGUAGE AND LITERATURE</b>  |                            |           |            |            |                        |
| P-PL     | <b>PHILOLOGY. LINGUISTICS</b>   |                            | Q         | Q          | JQ         |                        |
|          | <b>Comparative Philology. Linguistics. Indo-European Comparative Philology. Modern Language, Romanic Philology and Language. English, Oriental Philology and Literature, Languages of Eastern Asia, Oceania, Africa</b> |                            |           |            |            |                        |
| PN-PZ    | <b>Literary History. Literature</b>   |                            |           |            |            |                        |
| PN       | <b>Literature (General)</b>   |                            | JQ        |            |            |                        |
| PQ       | <b>Romanic Literatures</b>  |                            | Q         |            |            |                        |
| PR       | <b>English Literature</b>   |                            |           |            | Q          |                        |
| PS       | <b>American Literature</b>  |                            | Q         |            |            |                        |
| PZ       | <b>Fiction in English. Juvenile Belles Letters</b>  |                            | Q         |            |            |                        |
| <b>Q</b> | <b>SCIENCE</b><br>[Science (general)]   |                            | all       |            | D          | all= ABCDEJ<br>LNRSTUV |
| QA       | <b>Mathematics</b>  |                            |           |            |            |                        |
| 9-10     | Mathematical logic  |                            |           |            | D          |                        |
| 76       | Computer science. Electronic data processing  |                            | all       |            | D          | all= ABCDEJ<br>LNRSTUV |
| 101-141  | Elementary mathematics. Arithmetic  |                            | all       |            | D          | all = ABCDJL<br>NRSTUV |
| 152-271  | Algebra, Including machine theory, game theory  |                            |           |            | D          |                        |
| 273-274  | Probabilities   |                            | LN        |            | D          |                        |

|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>         |
|-----------|---|-----------------------------------|------------------|-------------------|-------------------|------------------------|
|           |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                        |
| 276-280   | Mathematical statistics   |                                   | all              |                   | D                 | all = ABCDJL<br>NRSTUV |
| 297-299   | Numerical analysis  |                                   | AN               |                   | DE                |                        |
| 299.8-433 | Analysis, Including analytical methods connected with physical problems                                     |                                   | LU               |                   | D                 |                        |
| 440-699   | Geometry, Trigonometry. Topology  |                                   | C                | C                 | D                 |                        |
| 801-939   | Analytic mechanics  |                                   | N                |                   | D                 |                        |
| <b>QB</b> | <b>Astronomy</b>  |                                   |                  |                   |                   |                        |
| 1-139     | General   | DF                                |                  |                   |                   |                        |
| 140-237   | Practical and spherical astronomy   | D                                 |                  |                   |                   |                        |
| 275-343   | Geodesy   | D                                 |                  |                   |                   |                        |
| 349-421   | Theoretical astronomy and celestial mechanics including perturbations, tides                                | D                                 |                  |                   |                   |                        |
| 495-903   | Descriptive astronomy   | D                                 |                  |                   |                   |                        |
| 500.5-785 | Solar system. Solar energy  |                                   | AN               | AN                | DC                |                        |
| 980-991   | Cosmogony, Cosmology  | D                                 |                  |                   |                   |                        |
| <b>QC</b> | <b>Physics</b>  |                                   |                  |                   |                   |                        |
| 1-197     | General, Mathematical physics, Weights and measures, Descriptive and experimental mechanics, Atomic physics |                                   |                  |                   | D                 |                        |
| 220-246   | Acoustics. Sound  | N                                 | U                |                   | D                 |                        |
| 251-338   | Heat and thermodynamics   |                                   | N                |                   | DE                |                        |
| 350-467   | Optics Light  |                                   | N                |                   | DE                |                        |

|         |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|---------|---|-----------------------------------|------------------|-------------------|-------------------|----------------|
|         |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| 474-496 | Radiation physics. (general)  |                                   |                  |                   | DE                |                |
| 501-766 | Electricity and magnetism   |                                   | N                |                   | D                 |                |
| 770-798 | Nuclear and particle physics.<br>Atomic energy radioactivity  |                                   |                  |                   | DE                |                |
| 801-809 | Geophysics. Cosmic physics  |                                   |                  |                   | DC                |                |
| 811-849 | Geomagnetism  |                                   |                  |                   | D                 |                |
| 851-999 | Meteorology. Climatology  |                                   | AC               |                   | DC                |                |
| QD      | <b>Chemistry</b>  |                                   |                  |                   |                   |                |
| 1-441   | General (including alchemy).<br>Analytical chemistry. Inorganic<br>chemistry. Organic chemistry.  |                                   | E                | E                 | D                 |                |
| 380-388 | Polymers. Macromolecules  |                                   | ENR              | E                 | D                 |                |
| 415-441 | Biological chemistry. Natural<br>products   |                                   | R                |                   | DEC               |                |
| 450-731 | Physical and theoretical chemistry.<br>Including quantum chemistry<br>stereo-chemistry, chemistry<br>reactions, surface chemistry,<br>thermo-chemistry, solution<br>chemistry, electro-chemistry, radio-<br>chemistry, radiation chemistry,<br>photochemistry |                                   |                  |                   | DE                |                |
| 501-505 | Conditions and laws of chemical<br>reactions  |                                   | E                |                   | D                 |                |
| 504     | Thermodynamics  |                                   | N                |                   | DE                |                |
| 506-508 | Surface chemistry   |                                   | E                |                   | D                 |                |
| 540-549 | Theory of solution  |                                   |                  |                   | D                 |                |
| 551-571 | Electro chemistry. Electrolysis   |                                   |                  |                   | D                 |                |

|          |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>  |
|----------|---|-----------------------------------|------------------|-------------------|-------------------|---|
|          |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |   |
| 591      | Magnetochemistry                          |                                   |                  |                   | D                 |   |
| 901-999  | Crystallography                           |                                   | R                | R                 | D                 |   |
| QE       | <b>Geology</b>                            |                                   |                  |                   |                   |   |
| 1-350.62 | General                                   | C                                 | C                | A                 |                   |   |
| 351-399  | Mineralogy                                |                                   | C                | ACN               |                   |   |
| 420-499  | Petrology                                 |                                   | C                | CN                |                   |   |
| 500-625  | Dynamic and structural geology            | AN                                |                  |                   | C                 |   |
| 640-699  | Stratigraphic geology                     | A                                 |                  |                   | C                 |   |
| QH       | <b>Natural History</b> (general)          |                                   | AB               |                   |                   |   |
| 75-77    | Nature conservation. Landscape protection |                                   | ABC              | AC                |                   |   |
| 91-100   | Aquatic biology. (Marine freshwater)      |                                   | DC               | DC                |                   | Fishes, plankton, benthic organisms, aquatic plants, pollution, management biology of lakes, seas, rivers |
| 201-278  | Microscopy                                |                                   | DER              | E                 |                   |   |
| 301-705  | General biology                           |                                   | all              |                   | D                 | all= ABCDEJ<br>KLNQRSTU   |
| 426-470  | Genetics                                  |                                   | BS               | AR                | DE                | Plant genetics, annual genetics, cytogenetics, population & biochemical genetics. Evolution               |
| 471-489  | Reproduction                              |                                   | BS               |                   | D                 |   |

|           |   | <b>Peringkat untuk diperoleh</b> |                  |                   |                   | <b>Catitan</b>  |
|-----------|---|----------------------------------|------------------|-------------------|-------------------|---|
|           |   | <b><u>Gen</u></b>                | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |   |
| 501-531   | Life  |                                  | BS               |                   | D                 |   |
| 540-549   | Ecology. Including general and animal ecology |                                  | BDE              | BDE               |                   |   |
| 573-671   | Cytology                                      |                                  | BRS              | BRS               | DE                | Chromosomes, cytological techniques, staining                                       |
| QK        | <b>Botany</b>                                 |                                  |                  |                   |                   |   |
| 641-673   | Plant anatomy                                 |                                  | ADEC             | ADE               |                   | Germination, photosynthesis, phytochroms, hormones, waterstress, growth & flowering |
| 710-899   | Plant physiology                              |                                  |                  | AD                | AD                | Mensuration population dynamics, micro-climate, plant geography.                    |
| 901-997.5 | Plant ecology                                 |                                  | EF               | ADE               | AD                |   |
| QL        | <b>Zoology</b>                                |                                  |                  |                   |                   |   |
| 386-391   | Nematology                                    |                                  | A                | A                 |                   |   |
| 461-599   | Entomology                                    |                                  |                  |                   | A                 |   |
| 614-639   | Fisheries                                     |                                  |                  |                   | A                 |   |
| 750-795   | Animal behavior and psychology                | E                                | B                | B                 |                   |   |
| 757       | Parasitology                                  |                                  | BES              | BE                | A                 |   |
| 801-950   | Anatomy                                       |                                  | BE               | BE                |                   |   |
| 951-999   | Embryology                                    |                                  | BES              | BE                |                   |   |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|-----------|--|-----------------------------------|------------------|-------------------|-------------------|----------------|
|           |  | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| <b>QM</b> | <b>Human Anatomy</b>                             |                                   |                  |                   |                   |                |
| 1-511     | General  | EUS                               | BES              | BES               |                   |                |
| 550-577.8 | Human and comparative histology                  | US                                | BS               | BS                |                   |                |
| 601-695   | Human embryology                                 | EUS                               | BES              | BES               |                   |                |
| <b>QP</b> | <b>Physiology</b>                                |                                   |                  |                   |                   |                |
| 1-345     | General. Including influences of the environment | USC                               | C                | C                 |                   |                |
| 501-801   | Animal biochemistry                              |                                   | BEF              | E                 | B                 |                |
| 901-981   | Experimental pharmacology                        |                                   | ES               | ES                |                   |                |
| <b>QR</b> | <b>Microbiology</b>                              |                                   |                  |                   |                   |                |
| 46        | Medical microbiology                             |                                   | BDES             | BDES              |                   |                |
| 49        | Veterinary microbiology                          |                                   | BDE              | BDE               |                   |                |
| 51        | Agricultural microbiology                        |                                   | ADE              | ADE               |                   |                |
| 53        | Industrial microbiology                          |                                   | DREC             | DREC              |                   |                |
| 75-99     | Bacteria   |                                   | ABDERS           | ABDERS            |                   |                |
| 100-130   | Food microbiology, Microbial ecology             |                                   | DEU              | DEU               | R                 |                |
| 151       | Micro-organisms of fermentation. Yeast, etc.     |                                   | ES               | ES                | R                 |                |
| 180-189   | Immunology                                       |                                   | BDES             | BDES              |                   |                |
| 301-327   | Micro-organisms of animals                       |                                   | BDE              | BDE               |                   |                |
| 355-484   | Virology   |                                   | DES              | DES               | AB                |                |
| <b>R</b>  | <b>MEDICINE</b>                                  |                                   |                  |                   |                   |                |
| 5-920     | Medicine (general)                               | BU                                | ES               |                   |                   |                |

|          |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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|          |  | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| RA       | <b>Public Aspect of Medicine</b>                 | BU                                |                  |                   | S                 |                |
| RB       | <b>Pathology</b>                                 | BU                                |                  |                   | S                 |                |
| RC       | <b>Internal medicine</b><br>Practice of medicine | BU                                |                  |                   | S                 |                |
| RD       | <b>Surgery</b>                                   |                                   |                  |                   | S                 |                |
| RE       | <b>Ophthalmology</b>                             | B                                 |                  |                   | S                 |                |
| RF       | <b>Otorhinolaryngology</b>                       | B                                 |                  |                   | S                 |                |
| RG       | <b>Gynecology &amp; obstetrics</b>               | BU                                |                  |                   | S                 |                |
| RJ       | <b>Pediatrics</b>                                | U                                 |                  |                   | S                 |                |
| RL       | <b>Dermatology</b>                               | B                                 |                  |                   | S                 |                |
| RM       | <b>Therapeutics. Pharmacology</b>                | BDES                              | BES              | B                 |                   |                |
| RS       | <b>Pharmacy &amp; Materia Medica</b>             | B                                 | ES               | ADR               |                   |                |
| RT       | <b>Nursing</b>                                   | BU                                | S                |                   |                   |                |
| RV       | <b>Botanic, Thomsonian and Eclectic Medicine</b> | BE                                | ES               | ADE               |                   |                |
| RX       | <b>Homeopathy</b>                                |                                   | S                | S                 |                   |                |
| RZ       | <b>Other Systems of Medicine</b>                 |                                   | S                | S                 |                   |                |
| <b>S</b> | <b>AGRICULTURE</b>                               |                                   |                  |                   |                   |                |
| 531-545  | Agriculture education                            |                                   | AL               | L                 |                   |                |
| 560-575  | Farm economics and management                    |                                   | AL               | AL                |                   |                |
| 583-589  | Agricultural chemistry and physics               |                                   |                  |                   | A                 |                |
| 590-599  | Soils  |                                   | DL               |                   | AC                |                |



|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>                         |
|-----------|---|-----------------------------------|------------------|-------------------|-------------------|--|
|           |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |  |
| 600-621   | Agricultural meteorology.<br>Agricultural ecology. Crops and<br>pollution. Crop rotation tillage<br>reclamation and irrigation of<br>farm lands |                                   | DEC              | E                 | A                 |  |
| 622-667   | Soil conservation. Fertilizers.<br>Soil improvement   |                                   | C                | C                 | AC                |  |
| 671-760   | Farm machinery and<br>engineering   |                                   | N                | N                 | A                 |  |
| 900-972   | Conservation of natural<br>resources  |                                   | DCL              | DCL               | A                 | = Agricultural/<br>Forest<br>Resources |
| 950-954   | Land conservation   |                                   | C                | CL                | AC                |  |
| 960-964   | Wild life conservation  |                                   | BDC              | BDL               |                   |  |
| 970-972   | Recreational resources<br>conservation  |                                   | ACL              | AL                |                   |  |
| <b>SB</b> | <b>Plant Culture</b>  |                                   |                  |                   |                   |  |
| 1-109     | Plant culture (general)   |                                   | LU               |                   | A                 |  |
| 110-112   | Methods for special areas<br>including dryland and tropical<br>agriculture irrigation farming   |                                   |                  |                   | A                 |  |
| 114-118   | Seeds   |                                   |                  |                   | A                 |  |
| 119-125   | Propagation, training and<br>pruning  |                                   |                  |                   | A                 |  |
| 126-139   | Artificial light gardening,<br>hydroponics, growth regulators,<br>harvesting storage,<br>miscellaneous  |                                   |                  |                   | A                 |  |
| 175-176   | Food crops  |                                   |                  |                   | A                 |  |
| 183-317   | Field crops   |                                   |                  |                   | A                 |  |

|         |   | Peringkat untuk diperolehi |           |            |            | Catitan                |
|---------|---|----------------------------|-----------|------------|------------|------------------------|
|         |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |                        |
| 318-450 | Horticultural crops. Flower arrangement and decoration                        |                            | LU        |            | A          |                        |
| 451-466 | Gardens and gardening   |                            |           |            | A          |                        |
| 469-479 | Landscape gardening   |                            | LU        |            | A          |                        |
| 481-485 | Parks and public reservations   |                            | AL        | AL         |            |                        |
| 599-999 | Diseases and pests, including treatment and control                           |                            | E         | E          | A          |                        |
| SD      | <b>Forestry</b>   |                            |           |            |            |                        |
| 1-390   | Forestry (general)  | C                          |           |            | C          |                        |
| 390     | Forest soils  | C                          |           |            | C          |                        |
| 391-409 | Sylviculture  |                            |           |            | C          |                        |
| 411-428 | Conservation and protection including forest reserves                         |                            |           |            | C          |                        |
| 430-557 | Exploitation and utilization, timber tress, logging transportation, valuation |                            |           |            | C          |                        |
| 561-668 | Forest policy and administration  |                            |           |            | C          |                        |
| SF      | <b>Animal Culture</b>   |                            |           |            |            |                        |
| 1-83    | Animal culture/husbandry. (general)   |                            |           |            | AB         |                        |
| 84-99   | Ranges, housing, environmental control, feeds, nutrition                      |                            |           |            | AB         | = Tropical environment |
| 101-121 | Brands, breeds, exhibition.   |                            |           |            | AB         |                        |
| 191-275 | Cattle dairying products  |                            | R         | R          | AB         |                        |
| 277-359 | Horses, shows, racing, breeds and breeding                                    |                            |           |            | AB         |                        |

|           |  | Peringkat untuk diperolehi |           |            |            | Catitan |
|-----------|--|----------------------------|-----------|------------|------------|---------|
|           |  | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |         |
| 361-362   | Donkeys, mules   |                            |           |            | AB         |         |
| 371-401   | Sheep, goats, swine  |                            |           |            | AB         |         |
| 402-405   | Fur-bearing animals  | B                          |           |            |            |         |
| 405-407   | Laboratory animals   |                            |           |            | B          |         |
| 411-459   | Pets – dogs, cat, rabbits  |                            |           |            | B          |         |
| 461-473   | Birds  |                            |           |            | AB         |         |
| 481-507   | Poultry  |                            |           |            | AB         |         |
| 521-593   | Insects. Bee culture, silk culture   |                            |           |            | A          |         |
| 600-1100  | Veterinary medicine  |                            |           |            | B          |         |
| 761-910.5 | Anatomy, physiology, pathology, diagnosis, diseases, orthopedics                 |                            |           |            | B          |         |
| 911-919   | Surgery, materia medica and pharmacy   |                            |           |            | B          |         |
| 951-997   | Diseases of special classes of animals including pets, wild animals              |                            |           |            | B          |         |
| 988       | Quarantine, inspection   |                            | B         | B          |            |         |
| SH        | <b>Fish Culture. Fisheries</b>   |                            |           |            |            |         |
| 21-191    | Fish culture   |                            |           | A          |            |         |
| 201-334   | Fisheries  |                            |           | A          |            |         |
| 335-337   | Preparation of fishery products for use, processing of fish and fishery products |                            | ER        | R          |            |         |
| 346-351   | Fishery for individual species   |                            |           |            |            |         |
| 401-691   | Angling  |                            |           |            |            |         |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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|           |  | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| <b>SK</b> | <b>Hunting Sports</b>  |                                   |                  |                   |                   |                |
| 351-579   | Wildlife management, game protection   |                                   | L                | L                 | B                 |                |
| <b>T</b>  | <b>TECHNOLOGY</b>  |                                   |                  |                   |                   |                |
| 1-54      | Technology (general)   |                                   | NT               |                   |                   |                |
| 55-55.3   | Industrial safety  |                                   | N                |                   |                   |                |
| 55.4-60   | Industrial engineering, including operations research, systems analysis, management information systems, production efficiency, human engineering in industry, work measurement, methods engineering |                                   | DL               | L                 | N                 |                |
| 201-339   | Patents. Trademarks  | LN                                |                  |                   |                   |                |
| 351-385   | Engineering graphics mechanical drawing  |                                   | NV               |                   |                   |                |
| <b>TA</b> | <b>Civil Engineering</b>   |                                   |                  |                   |                   |                |
| 165-170   | Engineering instruments. Human engineering. Systems engineering. Environmental engineering   |                                   | DNU              |                   |                   |                |
| 117.4-185 | Engineering economy  | LN                                | N                | L                 |                   |                |
| 239-348   | Engineering mathematics. Engineering analysis  | D                                 |                  |                   | N                 |                |
| 349-360   | Mechanics of engineering. Applied mechanics  |                                   |                  |                   | N                 |                |
| 401-492   | Materials of engineering and construction including strength of materials, testing and properties of materials   |                                   |                  |                   | N                 |                |

|           |  | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
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|           |  | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| 501-625   | Surveying  |                                   | AN               | N                 |                   |                |
| 630-695   | Structural engineering (general)                         |                                   | N                | N                 |                   |                |
| 705-710   | Engineering geology. Rock/soil mechanics.                |                                   | AC               |                   | N                 |                |
| 715-787   | Earthwork. Foundation                                    |                                   | C                |                   | N                 |                |
| 800-820   | Tunneling. Tunnels                                       | N                                 |                  |                   |                   |                |
| 900       | Protection of structures                                 |                                   |                  |                   | N                 |                |
| 1001-1280 | Transportation engineering (general)                     |                                   | N                | N                 |                   |                |
| TC        | <b>Hydraulic Engineering</b>                             |                                   |                  |                   |                   |                |
| 171-179   | Hydrodynamics  |                                   | D                |                   | N                 |                |
| 401-526   | River, lake and water supply engineering (general)       |                                   | C                |                   | N                 |                |
| 530       | River protective works. Flood control. Tree planting     |                                   | DC               |                   | N                 |                |
| 970-978   | Drainage   |                                   | DC               |                   | N                 |                |
| 1501-1645 | Ocean engineering  | N                                 |                  |                   |                   |                |
| TD        | <b>Environmental Technology, Sanitary Engineering</b>    |                                   |                  |                   |                   |                |
| 1-158     | Environmental technology. Sanitary engineering (general) |                                   |                  |                   | N                 |                |
| 170       | Environmental protection                                 | L                                 | DC               | DC                | N                 |                |
| 172-192   | Environmental pollution                                  | L                                 | DC               | DC                | N                 |                |

|         |   | Peringkat untuk diperolehi |           |            |            | Catitan |
|---------|---|----------------------------|-----------|------------|------------|---------|
|         |   | <u>Gen</u>                 | <u>Ts</u> | <u>Res</u> | <u>Com</u> |         |
| 201-500 | Water supply for domestic and industrial purposes including water quality and pollution, treatment, saline water conversion distribution systems  | ADF                        |           |            | N          |         |
| 511-780 | Sewage collection and disposal systems. Sewage  | N                          |           | N          |            |         |
| 878-893 | Special types of pollution including soil, air, noise pollution   | AC                         | DC        |            | N          |         |
| 895-899 | Industrial sanitation. Industrial wastes  |                            | N         | N          |            |         |
| 920-949 | Rural sanitary engineering  | N                          |           |            |            |         |
| 930     | Agricultural waste engineering  | DC                         |           |            | N          |         |
| TE      | <b>Highway Engineering. Roads and Pavement</b>  |                            |           |            |            |         |
| 178     | Roadside development. Landscaping   | A                          | N         | N          |            |         |
| 200-298 | Construction details [Country roads, farm roads, forest roads, streets, pedestrian facilities]  | N                          |           |            |            |         |
| TF      | <b>Railroad Engineering and Operation Including Street Railways and Subways</b>   | N                          |           |            |            |         |
| TG      | <b>Bridge Engineering</b>   | N                          |           |            |            |         |
| TH      | <b>Building Construction</b>  |                            | N         | N          | N          |         |
| TJ      | <b>Mechanical Engineering and Machinery</b><br>[Mechanical engineering, Robotics, Steam engineering, Solar engines, Machine shops and machine shop practice, Agricultural and farm machinery] |                            |           | N          | N          |         |

|           |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|-----------|---|-----------------------------------|------------------|-------------------|-------------------|----------------|
|           |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| TK        | <b>Electrical Engineering.<br/>Electronic. Nuclear<br/>Engineering</b>  |                                   |                  |                   | N                 |                |
| 1001-4399 | Production of electric energy,<br>Dynamoelectric machinery,<br>Distribution or transmission of<br>electric power, Electric lighting |                                   |                  |                   | N                 |                |
| 5101-6720 | Telecommunication   |                                   |                  |                   | NT                |                |
| 7800-8360 | Electronics   |                                   |                  |                   | NT                |                |
| 7855-7895 | Computer engineering  |                                   |                  |                   | NT                |                |
| 9001-8401 | Nuclear engineering. Atomic<br>power  | N                                 |                  |                   |                   |                |
| TL        | <b>Motor Vehicles. Aeronautics.<br/>Astronautics</b>  |                                   |                  |                   |                   |                |
| 1-480     | Motor vehicles  |                                   |                  |                   | N                 |                |
| 500-777   | Aeronautics   |                                   | N                | N                 |                   |                |
| TN        | <b>Mining Engineering<br/>Metallurgy Including The<br/>Mineral Industries</b>   | DN                                | E                |                   |                   |                |
| TP        | <b>Chemical Technology</b>  |                                   |                  |                   |                   |                |
| 155-156   | Chemical engineering  |                                   |                  |                   | N                 |                |
| 368-659   | Food processing and<br>manufacture. Including<br>refrigeration, fermentation<br>industries, beverages                               |                                   |                  |                   | NR                |                |
| 670-699   | Oils, fats and waxes  |                                   |                  |                   | NR                |                |
| 690-692   | Petroleum refining and products   | N                                 |                  |                   |                   |                |
| 785-888   | Clay industries. Ceramics.<br>Glass. Cement industries  | N                                 |                  |                   |                   |                |

|           |  | Peringkat untuk diperoleh |           |            |            | Catitan |
|-----------|--|---------------------------|-----------|------------|------------|---------|
|           |  | <u>Gen</u>                | <u>Ts</u> | <u>Res</u> | <u>Com</u> |         |
| 890-933   | Textile bleaching dyeing and printing  |                           | JU        | JU         |            |         |
| 934-944   | Paints, pigments, varnishes, etc.  | N                         |           |            |            |         |
| 1080-1185 | Polymers, plastics and their manufactures  | D                         |           | N          |            |         |
| TR        | <b>Photography</b>   |                           |           |            |            |         |
| TS        | <b>Manufactures</b>  |                           |           |            |            |         |
| 155-193   | Production management. Including quality control, production control, inventory control, product engineering, process engineering, plant engineering | L                         |           | L          |            | N       |
| 195-198   | Packaging  | R                         |           |            |            | N       |
| 200-770   | Metal manufactures. Metal-working. Including forging, casting, stamping, instrument making, firearms, clocks, metal finishing, jewelry               | N                         |           |            |            |         |
| 800-937   | Wood technology. Including lumber, furniture chemical processing of wood   | N                         |           |            |            |         |
| 940-1070  | Leather industries. Tanning  | N                         |           |            |            |         |
| 1080-1268 | Paper manufacture. Wood pulp industry  | N                         |           |            |            |         |
| 1300-1865 | Textile industries   | J                         | U         | U          |            |         |
| 1870-1935 | Rubber industry. (Technology)  | A                         | N         |            |            |         |
| 1950-1982 | Animal products  |                           | ENR       | NR         |            |         |
| 2120-2159 | Cereals and flour. Milling industry  |                           | NR        | NR         |            |         |
| 2220-2283 | Tobacco Industry   | ANR                       |           |            |            |         |



|             |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b>   |
|-------------|---|-----------------------------------|------------------|-------------------|-------------------|--|
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| TT          | <b>Handicrafts. Arts and Crafts</b>               |                                   | J                | J                 |                   |  |
| TX          | <b>Home Economics</b>                             |                                   |                  |                   |                   |  |
| 301-339     | The house, including arrangement, care, servants  | J                                 |                  |                   | U                 |  |
| 341-641     | Nutrition. Foods and food supply                  |                                   | ES               | ES                | ERU               |  |
| 645-840     | Cookery   |                                   | JU               |                   |                   |  |
| 901-953     | Hotels, restaurants, taverns. Catering            | LU                                | J                | JL                |                   |  |
| 955-985     | Building operation and housekeeping               | J                                 |                  |                   |                   |  |
| 1110-1107   | Mobile home living                                | J                                 |                  |                   |                   |  |
| <b>U</b>    | <b>MILITARY SCIENCE</b>                           |                                   |                  |                   |                   |  |
| <b>V-VG</b> | <b>NAVAL SCIENCE</b>                              |                                   |                  |                   |                   |  |
| <b>Z</b>    | <b>BIBLIOGRAPHY.<br/>LIBRARY SCIENCE</b>          |                                   |                  |                   |                   |  |
| 40-115      | Writing   |                                   | all              |                   |                   | = Techniques, science writing, technical report journalism |
| 116-549     | Printing, Bookbinding, Bookselling and Publishing | J                                 |                  |                   |                   | all= ABCDJL<br>NQRSTUV                                     |
| 551-661     | Copyright. Intellectual property                  | J                                 |                  |                   |                   |  |
| 662-677     | Library science (general)                         |                                   | J                | J                 |                   |  |
| 678-4980    | Library administration and organization           |                                   | J                | J                 |                   |  |

**Susunan Peringkat Keluasan dan Pengumpulan Dalam Bidang-Bidang Perkara Seperti Yang Telah Dinyatakan Oleh Fakulti-Fakulti Mengikut Jadual Pengkelasan “National Library of Medicine”.**

|  |   | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|--|---|-----------------------------------|------------------|-------------------|-------------------|----------------|
|  |   | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| <b>Preclinical Sciences</b>            |   |                                   |                  |                   |                   |                |
| QS                                     | <b>Human Anatomy</b>                        | U                                 | S                | S                 |                   |                |
| QT                                     | <b>Physiology</b>                           | U                                 | S                | S                 |                   |                |
| QU                                     | <b>Biochemistry</b>                         |                                   | S                | S                 |                   |                |
| QV                                     | <b>Pharmacology</b>                         | US                                | S                | S                 |                   |                |
| QW                                     | <b>Microbiology and Immunology</b>          |                                   | S                | S                 |                   |                |
| QX                                     | <b>Parasitology</b>                         |                                   | S                | S                 | S                 |                |
| QY                                     | <b>Clinical Pathology</b>                   | U                                 | S                | S                 | S                 |                |
| QZ                                     | <b>Pathology</b>                            | U                                 | S                | S                 | S                 |                |
| <b>Medicine &amp; related subjects</b> |   |                                   |                  |                   |                   |                |
| W                                      | <b>General Medicine. Health Professions</b> | U                                 | S                | S                 |                   |                |
| WA                                     | <b>Public Health</b>                        | U                                 | S                | US                | S                 |                |

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| WB | <b>Practice of Medicine</b>   | S | S | S |   |
| WC | <b>Communicable Diseases</b>  | U | S | S | S |
| WD | <b>Disorder of Systemic, Metabolic, or Environmental Origin, etc.</b> | U | S | S | S |
| WE | <b>Musculoskeletal System</b>   | U | S | S | S |
| WF | <b>Respiratory System</b>   | U | S | S | S |
| WG | <b>Cardiovascular System</b>  | U | S | S | S |
| WH | <b>Hemic and Lymphatic Systems</b>                                    | U | S | S | S |



|    |                                      | <b>Peringkat untuk diperolehi</b> |                  |                   |                   | <b>Catitan</b> |
|----|--------------------------------------|-----------------------------------|------------------|-------------------|-------------------|----------------|
|    |                                      | <b><u>Gen</u></b>                 | <b><u>Ts</u></b> | <b><u>Res</u></b> | <b><u>Com</u></b> |                |
| WI | <b>Digestive System</b>              | U                                 | S                | S                 | S                 |                |
| WJ | <b>Urogenital System</b>             | U                                 | S                | S                 | S                 |                |
| WK | <b>Endocrine System</b>              | U                                 | S                | S                 | S                 |                |
| WL | <b>Nervous System</b>                | U                                 | S                | S                 | S                 |                |
| WM | <b>Psychiatry</b>                    | U                                 | S                | S                 | S                 |                |
| WN | <b>Radiology. Diagnostic Imaging</b> |                                   | S                | S                 | S                 |                |
| WO | <b>Surgery</b>                       |                                   | S                | S                 | S                 |                |
| WP | <b>Gynecology</b>                    | U                                 | S                | S                 | S                 |                |
| WQ | <b>Obstetrics</b>                    | U                                 | S                | S                 | S                 |                |
| WR | <b>Dermatology</b>                   | U                                 | S                | S                 | S                 |                |
| WS | <b>Pediatrics</b>                    |                                   | S                | S                 | S                 |                |
| WT | <b>Geriatrics. Chronic Disease</b>   | S                                 |                  | US                | US                |                |
| WU | <b>Dentistry. Oral Surgery</b>       | S                                 |                  |                   |                   |                |
| WV | <b>Otolaryngology</b>                | U                                 | S                | S                 | S                 |                |
| WW | <b>Ophthalmology</b>                 | U                                 | S                | S                 | S                 |                |
| WY | <b>Nursing</b>                       | U                                 | S                | S                 | S                 |                |
| WZ | <b>History of Medicine</b>           | S                                 | S                |                   |                   |                |